



# DARÁNYI IGNÁC TERV

## New Hungary Rural Development Programme Annexes

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Európai Mezőgazdasági Vidékfejlesztési Alap:  
a vidéki területekbe beruházó Európa

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## Annex 1: Additional information on the farm structure and on the rural areas in Hungary

### Number and land area of land-owner private farms and agricultural enterprises, by size, 2000-2005

Item	Farms		Land area		Average area of a farm, ha
	number	share, %	hectare	share, %	
2000					
Private farms					
below 10 ha	874040	94,5	928387	35,5	1,06
10-50 ha	43630	4,7	898187	34,4	20,59
50-100 ha	4654	0,5	317613	12,1	68,25
100-300 ha	2218	0,2	351598	13,4	158,52
above 300 ha	249	0,0	118533	4,5	476,04
Total	924791	100,0	2614318	100,0	2,83
Business associations					
below 10 ha	787	14,6	3067	0,1	3,90
10-50 ha	1356	25,1	40640	1,1	29,97
50-100 ha	593	11,0	45625	1,2	76,94
100-300 ha	1101	20,4	232724	6,1	211,38
above 300 ha	1555	28,8	3511944	91,6	2258,48
Total	5392	100,0	3834000	100,0	711,05
Total farms					
below 10 ha	874824	94,0	893996	13,9	1,02
10-50 ha	44986	4,8	957165	14,8	21,30
50-100 ha	5246	0,6	370579	5,7	70,64
100-300 ha	3320	0,4	592952	9,2	178,60
above 300 ha	1804	0,2	3633495	56,4	2014,13
Total	930180	100,0	6448000	100,0	6,9
2005					
Private farms					
below 10 ha	616070	93,45	574154	25,3	0,93
10-50 ha	34149	5,18	699147	30,8	20,47
50-100 ha	5340	0,81	369990	16,3	69,29
100-300 ha	3494	0,53	556913	24,6	159,39
above 300 ha	198	0,03	68281	3,0	345,25
Total	659251	100,00	2268486	100,0	3,44
Business associations					
below 10 ha	1193	16,83	4474	0,1	3,75
10-50 ha	1784	25,17	46803	1,4	26,24
50-100 ha	918	12,96	65042	1,9	70,83
100-300 ha	1486	20,97	282194	8,2	189,91

above 300 ha	1706	24,07	3042874	88,4	1784,05
<b>Total</b>	<b>7086</b>	<b>100,00</b>	<b>3441386</b>	<b>100,0</b>	<b>485,66</b>
<b>Total farms</b>					
below 10 ha	617161	92,62	578981	10,1	0,94
10-50 ha	35982	5,40	745709	13,1	20,72
50-100 ha	6264	0,94	435092	7,6	69,46
100-300 ha	4998	0,75	838780	14,7	167,84
above 300 ha	1932	0,29	3111309	54,5	1610,09
<b>Total</b>	<b>666337</b>	<b>100,00</b>	<b>5709872</b>	<b>100,0</b>	<b>8,57</b>

Source: General Agricultural Census (2000) – Data by region, CSO 2000.; Agriculture of Hungary, 2003 (Survey on the economic structure) – Volume I., CSO 2004, Agriculture of Hungary, 2005 (Survey on the economic structure) – Volume I., CSO 2006.

### **Distribution of farms by size (ESU)**

Size categories (ESU)	Private farms		Business associations		All farms			
	number	Agricultural area, ha	number	Agricultural area, ha	number	Share, %	Agricultural area, ha	Share, %
below 2,0	625863	399429	2197	6720	628060	87,9	406149	9,5
2,1-3,0	24092	129146	210	2358	24302	3,4	131504	3,1
3,1-4,0	13855	114928	181	2885	14036	2,0	117813	2,8
4,1-5,0	8574	93689	134	2594	8708	1,2	96283	2,3
5,1-6,0	6406	87730	145	2437	6551	0,9	90167	2,1
6,1-8,0	7576	130704	245	5942	7820	1,1	136647	3,2
8,1-12,0	7826	193422	386	12040	8212	1,1	205462	4,8
12,1-16,0	3764	146443	354	15132	4118	0,6	161575	3,8
16,1-40,0	6995	488418	1087	83184	8082	1,1	571602	13,4
40,1-100,0	1795	303213	1195	232864	2990	0,4	536077	12,6
100,1-250,0	125	19105	841	383804	966	0,1	402909	9,4
above 250	24	4313	963	1406048	987	0,1	1410361	33,1
<b>Total</b>	<b>706895</b>	<b>2110540</b>	<b>7938</b>	<b>2156008</b>	<b>714832</b>	<b>100,0</b>	<b>4266549</b>	<b>100,0</b>

Source: Agriculture of Hungary, 2005. Survey on the economic structure, CSO 2006.

**Distribution of business associations and individual farms  
engaged in agriculture by size category, according to their main  
activities, 2005**

Denomination	Agricultural enterprise					Private holding				
	Distribution by size unit (ESU) %									
	-2	2-4	4-8	8-40	40-	-2	2-4	4-8	8-40	40-
Arable crop production	7,4	6,9	8,6	28,9	48,2	69,3	12,4	9,0	8,4	0,9
Of which: production of cereals, oil-seeds, protein plant	7,4	6,9	8,9	29,6	47,2	67,3	12,7	9,5	9,5	1,1
Horticulture	3,4	6,3	8,7	46,4	35,3	41,1	24,2	17,2	15,7	1,8
Permanent cultures	13,8	8,0	12,1	41,5	24,6	88,7	5,7	3,4	2,1	0,1
<b>Specialized in crop production, total</b>	9,0	7,2	9,5	33,1	41,2	77,0	9,8	6,8	5,8	0,6
Grazing	38,5	8,6	7,2	15,4	30,3	80,0	8,1	6,3	5,3	0,3
Of which: dairy farming	0,0	0,0	2,0	13,6	84,4	32,3	27,5	21,3	17,1	1,9
cattle rearing, fattening	34,0	7,5	17,0	22,6	18,9	93,3	4,3	1,2	1,2	0,0
grazing of sheep, goat or other animals	58,6	13,0	8,5	15,3	4,5	90,0	3,9	3,2	2,9	0,0
Foddered animal	2,8	2,5	5,2	32,3	57,1	98,0	1,1	0,4	0,4	0,2
Of which: pig rearing and fattening	4,4	3,3	6,6	26,2	59,4	96,5	2,0	0,7	0,6	0,2
poultry rearing	1,1	2,2	4,6	36,3	55,8	97,1	1,0	0,7	0,8	0,4
<b>Specialized in animal husbandry, total</b>	20,5	5,5	6,2	24,0	43,8	96,0	1,9	1,1	0,9	0,2
Mixed crop production	4,7	5,6	5,6	25,6	58,5	87,2	7,0	3,5	2,2	0,1
Mixed animal husbandry	3,2	4,8	6,5	24,2	61,3	97,4	1,8	0,6	0,2	0,0
Mixed crop production and animal husbandry	6,5	4,3	3,0	18,1	68,0	93,2	4,2	1,6	0,9	0,1
<b>Mixed farm-type</b>	5,6	4,8	4,2	21,2	64,2	92,9	4,2	1,8	1,0	0,1
<b>Total</b>	11,0	6,6	8,3	29,9	44,2	88,6	5,4	3,2	2,5	0,3

## Output of plant farming by main sectors, 2000-2005

Item	Gross output at current prices (in billion HUF)						Share in gross output (%)					
	2000	2001	2002	2003	2004	2005	2000	2001	2002	2003	2004	2005
Crops	272,5	284,3	286,9	278,1	450,1	399,2	44,0	41,6	42,0	39,7	46,5	47,8
Wheat	102,6	112,8	97,4	94,8	160	123,9	16,6	16,5	14,2	13,5	16,5	14,8
Corn	131,4	128,2	147,7	144,5	221,4	221,4	21,2	18,8	21,6	20,6	22,9	26,5
Other	38,5	43,3	41,8	38,8	68,7	53,9	6,2	6,3	6,1	5,5	7,1	6,4
Industrial plants	60,9	91,8	103,9	96,8	157,7	141,2	9,8	13,4	15,2	13,8	16,3	16,9
Fodder crops	25	31,6	31,1	29,3	40,2	34,9	4,0	4,6	4,5	4,2	4,2	4,2
Horticultural products	127,8	145,4	150,4	153,7	162,1	142	20,6	21,3	22,0	21,9	16,7	17,0
Potato	28	29,8	27,3	25,5	28,5	20	4,5	4,4	4,0	3,6	2,9	2,4
Fruits	95,2	94,6	79,7	112,8	117	90,6	15,4	13,8	11,7	16,1	12,1	10,8
Other plant products	10	5,7	4,3	4,6	12,3	7,6	1,6	0,8	0,6	0,7	1,3	0,9
<b>Crop farming</b>	<b>619,5</b>	<b>683,1</b>	<b>683,8</b>	<b>700,8</b>	<b>967,9</b>	<b>835,8</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

Source: Agricultural Statistical Almanac 2003, 2005, KSH [Hungarian Central Statistical Office] 2004, 2006



## Output of animal husbandry by main sectors, 2000-2005

Item	Gross output at current prices (in billion HUF)						Share in gross output (%)					
	2000	2001	2002	2003	2004	2005	2000	2001	2002	2003	2004	2005
Animals	354,5	447,7	436,5	369,6	362,8	371,5	65,1	67,7	66,1	62,9	67,0	66,7
Of which: cattle	26,2	25,4	24,6	21,8	26,7	31,7	4,8	3,8	3,7	3,7	4,9	5,7
pigs	184,1	249	231,8	181	173	169,6	33,8	37,7	35,1	30,8	31,9	30,5
sheep and goat	9,7	12	9,5	10,9	13,1	13,6	1,8	1,8	1,4	1,9	2,4	2,4
poultry	126,1	149,9	160,4	143,2	140	144,4	23,2	22,7	24,3	24,4	25,8	25,9
other animals	8,5	11,4	10,2	12,7	10	12,2	1,6	1,7	1,5	2,2	1,8	2,2
Animal products	190,2	213,1	223,7	217,7	178,9	185,3	34,9	32,2	33,9	37,1	33,0	33,3
Of which: milk	128,9	142,5	147,2	144,3	117,3	127	23,7	21,6	22,3	24,6	21,7	22,8
eggs	47,6	53,4	51,1	42,2	41,8	37,3	8,7	8,1	7,7	7,2	7,7	6,7
other animal products	13,7	17,3	25,4	28,1	19,8	21	2,5	2,6	3,8	4,8	3,7	3,8
<b>Animal husbandry total</b>	<b>544,7</b>	<b>660,9</b>	<b>660,2</b>	<b>587,3</b>	<b>541,7</b>	<b>556,9</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

Source: Agricultural Statistical Almanac 2003, 2005, KSH [Hungarian Central Statistical Office] 2004, 2006

### Central Statistical Office data series (2004)

	Number of active enterprises	Enterprise density: number of active enterprises / 1000 inhabitants	Number of enterprises that employ 0 or an unknown number of employees	Number of active enterprises employing 1-9 employees	Number of active enterprises employing 10-19 employees	Number of active enterprises employing 20-49 employees	Number of active enterprises employing 50-249 employees	Number of active enterprises employing 250 or more employees
Hungary (total)	871 595	86	229 247	608 535	18 028	9 897	4 947	941
100 persons/km <sup>2</sup> or 5000 inhabitants, excluding the agglomeration of Budapest	213 533	46	47 374	158 305	4 031	2 497	1 211	115
Central-Hungary	340199	122	103040	223620	7357	3940	1880	362
Central Transdanubia	89893	79	20659	65794	1829	989	495	127
Western-Transdanubia	88178	85	20846	63942	1789	948	524	129
Southern-Transdanubia	78141	76	19959	55464	1421	826	415	56
Northern-Hungary	78463	60	18671	56902	1524	849	429	88
Northern Great Plains	100614	65	24293	72455	1977	1191	606	92
Southern Great Plains	96107	73	21779	70358	2131	1154	598	87

### Central Statistical Office data series (2004)

	<b>Number of active enterprises in agriculture, game management, forestry, and fisheries</b>	<b>Number of active enterprises in mining industry, processing industry, electricity production, gas-, steam-, and water supply</b>	<b>Number of active enterprises in commerce, maintenance and repairs</b>	<b>Number of active enterprises in hospitality, catering, and service industries</b>	<b>Number of active enterprises in freight, storage, postal services and telecommunications</b>	<b>Number of active enterprises in the construction industry</b>	<b>Number of active enterprises in property and economic service industries</b>
Hungary (total)	39 143	76 292	183 630	40 060	41 872	82 291	270 137
100 persons/km2 or 5000 inhabitants, excluding the agglomeration of Budapest	26 317	20 412	47 407	14 695	12 265	26 380	38 116
Central-Hungary	4381	29709	67352	10831	16888	28298	131606
Central Transdanubia	4420	8415	17676	4612	4475	10901	25114
Western-Transdanubia	5277	7662	18138	5199	4090	8948	24050
Southern-Transdanubia	5858	6504	16626	4783	3513	7849	20488
Northern-Hungary	4364	6961	17013	4708	3616	7845	20402
Northern Great Plains	7242	8332	24823	5265	4835	9774	24105
Southern Great Plains	7601	8709	22002	4662	4455	8676	24372

## Central Statistical Office data series (2004)

	<b>Total domestic income 2000 (settlement)</b>	<b>Population of settlements 2000 (settlement)</b>	<b>Average per capita domestic income 2000</b>	<b>Total domestic income 2004 (Ft)</b>	<b>Population of settlements 2004 (settlement)</b>	<b>Average per capita domestic income 2004 (Ft)</b>
Hungary (total)	3 608 933 642 589	10 328 942	349 400	5 621 998 298 460	10206405	550 830
100 persons/km2 or 5000 inhabitants, excluding the agglomeration of Budapest	949 486 342 758	4006935	236 961	1 533 545 405 609	3991136	384 238
Central-Hungary	1 345 772 498 931	2858750	470 756	2 077 745 520 765	2831973	733 674
Central Transdanubia	427 068 534 176	1128571	378 415	660 248 990 620	1123519	587 662
Western-Transdanubia	383 331 717 937	1012738	378 510	589 114 128 230	1002942	587 386
Southern-Transdanubia	293 839 098 741	1014225	289 718	455 187 061 019	997591	456 286
Northern-Hungary	371 040 452 041	1323700	280 306	580 428 970 962	1299002	446 827
Northern Great Plains	404 144 992 571	1592247	253 821	651 506 636 258	1574688	413 737
Southern Great Plains	383 736 348 192	1398711	274 350	607 766 990 606	1376690	441 470

## Census (2001)

	<b>Number of people in employment</b>	<b>Number of people aged 15-59</b>	<b>Employment rate</b>	<b>Number of households with only inactive wage earners (excluding dependants)</b>	<b>Number of families with only inactive wage earners (excluding dependants)</b>
Hungary (total)	3690269	6498139	56.79	1364687	731626
100 persons/km2 or 5000 inhabitants, excluding the agglomeration of Budapest	1219975	2466180	49.47	565471	328009
Central-Hungary	1162651	1799786	64.60	379262	179995
Central Transdanubia	445215	724870	61.42	133646	74010
Western-Transdanubia	416522	648243	64.25	114364	63281
Southern-Transdanubia	337778	638723	52.88	132597	77761
Northern-Hungary	391496	817352	47.90	188396	105889
Northern Great Plains	465674	997465	46.69	213924	124962
Southern Great Plains	470933	871700	54.02	203373	106283

## Central Statistical Office data series (2005)

2005 male				2005 female			2005 total		
	Number of male citizens registered unemployed (total, 2005)	Age 15-59	Unemployment rate (registered unemployed/ /population aged 15-59) % 2005	Number of female citizens registered unemployed (total, 2005)	Age 15-59	Unemployment rate (registered unemployed/ /population aged 15-59) % 2005	Total number of registered unemploed (2005)	Age 15-59	Unemployment rate (registered unemployed/ /population aged 15-59) % 2005
Hungary (total)	213650	3237697	6.60	196999	3249603	6.06	410649	6487300	6.33
100 persons/km2 or 5000 inhabitants, excluding the agglomeration of Budapest	127373	1283259	9.93	107671	1211637	8.89	235044	2494896	9.42
Central-Hungary	18393	883074	2.08	22251	926478	2.40	40644	1809552	2.25
Central Transdanubia	18208	368585	4.94	18301	359287	5.09	36509	727872	5.02
Western-Transdanubia	16286	326428	4.99	15630	320985	4.87	31916	647413	4.93
Southern-Transdanubia	29235	317073	9.22	26954	315780	8.54	56189	632853	8.88
Northern-Hungary	48134	406145	11.85	39426	400307	9.85	87560	806452	10.86
Northern Great Plains	51551	503714	10.23	43675	495740	8.81	95226	999454	9.53
Southern Great Plains	31843	432678	7.36	30762	431026	7.14	62605	863704	7.25

## Central Statistical Office data series (2005)

	Number of unemployed registered in excess of 180 days, male 2005	Number of unemployed registered in excess of 180 days,female 2005	Number of unemployed registered in excess of 180 days, total 2005	Ratio within the total population (%)	Ratio within the population registered as unemployed (%)
Hungary (total)	96989	101906	198895	1.95	48.434308
100 persons/km2 or 5000 inhabitants, excluding the agglomeration of Budapest	57820	57031	114851	2.89073	48.863617
Central- Hungary			28465		45.50
Central Transdanubia			27893		49.70
Western- Transdanubia			48890		51.25
Southern- Transdanubia			47972		54.72
Northern- Hungary			15178		41.53
Northern Great Plains			16967		41.81
Southern Great Plains			13530		42.58

## **Annex 2: Background document for the justification of investment measures**

### **Grounds and reasons for the modernisation efforts to be realised by using grants from the rural development measures**

This document consists of three main parts.

The first part contains a series of sectoral analyses, focusing on the main sectors that are the target areas of investment measures of the Rural Development Programme of Hungary.

The second part is a summary of the interventions of the Programme.

The third part of the document is the market-based justification of the interventions in the certain sectors.

## Sectoral studies

### Arable crop production

A dominant portion of agricultural products serves, directly or indirectly (forage), as basic material for the food industry, therefore, in arable crop production, production of basic materials satisfying special needs is of prime importance. As a consequence, market-oriented programmes aimed at the improvement of quality and the forwarding to R&D results to rural communities, farmers, would have a special role to play.

In the costs of crop production, machine operation costs represent a large portion. Their reduction would mean a solution for the implementation of optimal machine systems. Through the development of the infrastructure background, not only quality production, and so, the competitiveness of the products can be improved, but the maintenance of an appropriate environment situation also becomes possible.

In Hungary, arable land represents 4.5 million hectares, its share of the agricultural area is 78%. Arable crops account for 71% of the gross production value of crop production and horticulture products, and 43% of the gross production value of all agricultural products.

The number of plants operating in arable areas (as well) is close to 416,000. The number of business associations is less than 5,000, but they use 42% of the total arable area. The numbers of crop producing and mixed profile entities are almost the same, but the latter carry out their activities on an 8% larger arable area.

77% of the farms have an arable area of less than 1 hectare, they carry out their business on 2% of the total arable area. Farms with less than 10 hectares of cropland cultivate barely 10% of total cropland.

In Hungary, the largest group of arable crops are cereals, where the decisive cultures are, at the same time, the most important products for exports are wheat and corn. The aggregate area of these two crops is 2.2-2.4 million hectares. Oil crops rank second, with an aggregate area of 550-680,000 hectares for sunflower and rape.

**Subject matter 1:** Requirements of processors/consumers in terms of quality and special basic materials represent an important factor of cost increase. Not only the lack of crop security, but also the non homogeneity of produce represents problems, caused basically by the fragmented structure of land, the extreme variety of the cultivated species and a small share of sealed seed. Many times, a separation and storage of harvested crops is not solved, because the items with different parameters are usually mixed.



To maintain their marketability, proper handling and tracking of the goods are required. The quality of the stored crops is largely dependent on storage circumstances (e.g. cleanliness, humidity, manoeuvrability, ventilation etc.).

- *Solution*: Support to the development of a quality assortment, its large-scale application, of investments into special buildings and technology equipment (such as ventilation), machinery (for cleaning, drying, manoeuvring) required for an improvement of goods handling from rural development funds, creation of producer groups in order to ensure homogeneous quality of the crops.
- *Expected impact*: Production of quality goods, reduction of losses in storage, easier sale, improvement of competitiveness.

**Subject matter 2:** For the reduction of the soil load, protection of the soil structure, modernisation of nutrient provision and the application of energy-saving technologies, the development of technology is required. This statement is particularly valid for the about 20-30,000 farms, using an arable area in excess of 10 hectares. Mechanisation levels of farms with arable areas below 1 hectare are very low, these farms typically use machinery services. In spite of a continuous development of the technical background, investments lag far behind the desired levels. Within the costs of arable crop production in Hungary, machine operation costs represent a significant portion. When a machinery park is created, in addition to ability to function, reliability and durability, energy saving is extremely important.

- *Solution*: Support for investments in modern soil cultivation tools, material-saving spraying machinery, easy-to-regulate machinery for the spreading of chemical fertilisers, small volume power machines, but with appropriate performance, from the rural development funds.
- *Expected impact*: Protection of the soil structure, reduction in soil load, provision of nutrient supply, reduction in environmental load (unfavourable impacts of pesticides, chemical fertilisers), energy-saving farm operation.

**Subject matter 3:** Distances from the target markets, available infrastructure and the development of transport fees have a profound influence in Hungary on the competitiveness of agricultural produce. Accessibility of the farms, due to the quality of service roads, is often inadequate. For the improvement of transportation, it is essential to cut costs and provide efficient forwarding.

Safe storage of pesticides and other hazardous inputs, collection and neutralisation of packaging materials in line with the provisions of Good Farming Practice, are not ensured yet.

- *Solution*: Construction of hard cover service roads in the outlying areas and support for investments into infrastructure background ensuring proper storage of agrochemicals, in line with the provisions, from funds for rural development.
- *Expected impact*: Expansion of sales opportunities, improvement in the indicators of competitiveness and environmental load.

**Subject matter 4:** For a reduction in yield fluctuations, for more predictable production, irrigation is as important for arable crops, as any other agrotechnical operation. A proof for the necessity of creating and modernising water management facilities is that the number farms using irrigation on arable land is 10,860 (within that, the shares of the crop producing and mixed profile farms are almost identical). The size of arable land irrigated once a year is below 69,000 hectares, or less than 2% of total arable area. Even in the case of cultures requiring irrigation most (e.g. potatoes, sugar beet, etc.), only 15-20% of the area is irrigated.

Melioration interventions, as well as the regulation of water regime, soil amelioration, soil protection and spatial planning represent not only preconditions for the production of high quality basic materials, but also serve the maintenance of appropriate environmental situations (by the reduction of soil erosion, preservation and improvement of the organic matters in soil, etc.). Due to the lack of funds, such interventions were strongly reduced, in 2005, melioration works were performed on merely 11,000 hectares.

Due to excess waters and floods, increasingly often in recent years, arable land farmers have suffered substantial losses. 3-5% of the stock from the autumn planting was lost, the agricultural area covered by floods or excess waters was close to 350,000 hectares in 2006.

- **Solution:** Support for the development of irrigation systems, the creation or modernisation of water management facilities, construction of drainage ditches, to the regulation of water-regime, soil amelioration, soil protection and spatial planning.
- **Expected impact:** Reduction in yield fluctuations, a more predictable production, more predictable income, environment-protecting farming practice.

**Subject matter 5:** Integrated plant protection, as an alternative way of reducing environmental loads. To correlate to EU average pesticides are used by business associations less by 40-60% of the cultivated areas for eared cereals, moreover less by 10-20% on the cultivated land of oil plants and corn.

Professional supply of nutrients will be adjusted to the characteristics of the production area, in order to avoid an excessive use of nitrogen and phosphorus. The annual nitrogen accumulation was an average of 100-200 kg/ hectare for the EU-15, while in Hungary, it was 10-30 kg/ hectare between 2000 and 2004. In order to comply with the provisions of the “Nitrate Directive”, the application of a professional consulting system for environment-friendly fertilisation is particularly justified.

- **Solution:** Support for the farmers, for their participation in theoretical and practical training courses on the implementation of sustainable farming. Support for the application of innovative technologies and dissemination of information on cross-compliance, from the rural development funds.
- **Expected impact:** Environment-conscious farming, improvement in competitiveness.

## Fruit and vegetable production

**Fruit and vegetables may become one of the important and promising sectors in Hungarian agriculture, subject to a renewal of the product pattern and target-oriented development projects, aimed at making use of the ecological opportunities. The point is that in Hungary today, in spite of our endowments, there is a lack of products in the quantities and of the quality required to meet the market needs. A key question in market-oriented production development is whether or not we will be able to create a concordance between technical and technological development, structural transformation, education and culture and professional consulting, with the availability of the funds required for that.**

Fruit and vegetables account for 20% of the gross production value of crops and horticulture products, and 11% of the gross production value of all agricultural products. Based on export sales (751 million USD in 2005), the sector has a share of 19-20% in total agricultural exports. In Hungary, fruit and vegetable production represents a living, a basic or supplementary source of income for 150-200,000 families. It plays an important role in the utilisation of ecological endowments and in local employment of the rural population.

Hungary's fruit production is 0.7-1 million tons per annum. The area of fruit plantations amounts to 103,000 hectares, with basically no changes in recent years. The dominant fruit variety is apples, representing 70% of total fruit production.

Hungary's vegetable production is 1.7-2 million tons per annum. The harvested area of arable vegetables was 95,000 hectares on average, in the years 2000-2005, the cultivated area amounted to 4-5,000 hectares. Even though the potential endowments of vegetable production are favourable in the Central and East-European area, due to the lack of organisation of producers, we cannot speak about a homogeneous, good quality range of products. In Hungary, the per capita consumption of fruit and vegetables (211 kg/ capita/ year in the year 2004) is below the European average.

**Subject matter 1:** The main problem for fruit production in Hungary is the structure of plantations. The age mix and the species structures of the productive plantations are unfavourable: in the case of most fruit species, the share of old plantations reaches 30-50%; the situation is the worst in respect of apples. The modernisation rate of plantations is inappropriate, we have only few competitive plantations (the share of plantation renewals is favourable only in the case of sour cherries).

- **Solution:** Ongoing modernisation of the plantations, improvement of the species and genus structure, support for the creation of 2-3,000 hectares of new, modern plantations per year, from rural development funds. In 10 years, this means the replacement of 30,000 ha of plantations, or one-third of the total fruit production

area. For the liquidation of uneconomical plantations, a plantation cutting programme will be created.

- Expected impact: Modern, productive plantations, providing quality goods, a commodity structure adjusted to the market, more foreseeable income, job creation and a possibility to retain rural population locally.

**Subject matter 2:** Production of quality goods shall be promoted by innovation, technical and technological development. In the sector, primarily on the family farms, a drop in mechanisation, and the decrease of the usability of machines in the last decade created a critical situation. This is particularly true for machinery used for crop cultivation, harvesting and refrigerated storage. At the same time, in intensive pomology, the available capacity of power machinery cannot be fully used, and this implies a cost increase.

- Solution: Acquisition and use of the expensive, special machinery based on collaboration between producers, with joint purchase. In this respect, associations (producers' organisations, machine circles) can be useful, and they can get support. A prime development direction is the application of intensive, as well as the integrated and environment-friendly technologies (bioproduction). These became tools for keeping markets, but Hungary is not prepared for their introduction yet. For the transfer of the newest information, technologies and their practical application, fresh-minded, modern consulting and the training of farmers are also required.

Renewal of the basic and special machinery (such as power machinery, general machinery for the preparation of soil, machinery for nutrient management, spraying machinery; machines for pruning, harvesting, transportation and loading machinery helping the harvest, such as machinery for the harvesting of vegetables [green peas, string beans, tomato, sweet corn, cucumber, onion, etc.], shaker machinery [plum, sour cherry, cherry, apricot] etc. can be supported from rural development funds.

- Expected impact: Good quality crop, safe commodity basis for sales, higher yields, higher sales, higher revenues, more economical use of the machinery, cost and energy savings, smaller environmental pollution.

**Subject matter 3:** One of the conditions for large and secure crops is irrigation. In a continental climate, the development of irrigation is an important task. In Hungary, the total area of land equipped for irrigation is 320,000 hectares, within that, the area of irrigated fruit plantations is merely 5%. Only 30% of the area for arable vegetables is irrigated, as opposed to the desired level of 60-80%. Water demand is different by species. Water demand is high in the case of apples, pears and berries, and lower in the case of stone fruits. Among vegetables, irrigation covers 80% of the cultivated land of sweet corn, 40-60% for green peas and string beans, 30-40% in the case of tomatoes and green peppers.

Extreme weather events experienced in the last decade (drought or excess of precipitation) resulted in serious production losses and loss-making in the production of fruits and vegetables.

- **Solution:** Support for the development of irrigation, the modernisation of irrigation systems, the application of methods for mini-irrigation (dripping, dribbling and solutions using spreaders) from rural development funds.
- **Expected impact:** With the use of dripping, dribbling and spreading irrigation, the volumes of irrigation water can be diminished by 40-60% in a comparison with rain-like irrigation; more favourable harvest results, better product quality, more predictable production and, by means of these, better profitability is the result.

**Subject matter 4:** An increase in the share of supply on the fresh market makes it indispensable to develop modern infrastructure for the handling and packaging of goods, the application of innovative techniques (such as ULO<sup>1</sup> refrigerated storage). Storage capacity is very little, and a large portion of the existing capacities is made up of obsolete ones, unsuitable for quality and economical refrigerated storage.

- **Solution:** In order to keep the markets, the continuous supply of goods is indispensable, which can be achieved with the expansion of the storage capacities and the modernisation of processing (conversion into goods). The integration of the existing storage capacities has to be given more weight in the future. It is recommended to provide support, from rural development funds, for the construction of normal storage facilities, refrigeration buildings, within that, ULO storage tanks, an expansion of investments into refrigeration techniques, construction of building for packaging and manipulation, as well as for the acquisition of machinery for cleaning, selection, classification and packaging (e.g. net packaging, smaller volume outfit, such as plastic plate, stretched foil, foil plates, etc.), labelling and printing machines, carts and loading machines, bin washers, bin emptiers and storage bins.
- **Expected impact:** Maintenance of the quality, aesthetic characteristics of goods for a longer term, sales at acceptable prices also after storage, increase in productivity, faster delivery, expansion of the goods supply, improvement in competitiveness, more favourable market opportunities.

**Subject matter 5:** Security of outdoor arable crop production changes from year to year, therefore, an exact timing, regulated production can be guaranteed only in covered areas (forcing under foils). In Hungary, in the 1970s, a very successful foil development programme was implemented. Since that time, the area covered with foil has dropped to about half of the previous size, in technical terms, it became obsolete and is no longer suitable for competitive production.

In the case of outdoor vegetables for food processing (such as sweet corn, green peas, industrial tomatoes), an important task is to develop production technology and the technical level, in order to achieve higher yields.

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<sup>1</sup> Ultra Low Oxygen.

A special programme is required for the utilisation of Hungarian thermal energy in forcing. There are several hundreds of thermal wells in the country, not used for the time being, but suitable for utilisation.

- *Solution:* Increase of the area covered by foil, promotion of the use of thermal energy with rural development funds.
- *Expected impact:* A better timing of harvest, smaller risks, good quality of the goods, material and cost efficiency in the use of inputs, savings of the heating costs, advantage in ripening in comparison with outdoor cultivation, higher yields, larger sales, improvement in competitiveness, employment, and maintenance of rural population.

## Grape and wine

**The problems of the grape and wine sector originate first of all from a scarcity of capital, an atomised structure and the lack of organisation. It is important to halt the decrease in grape area, in order to avoid the negative social and environmental consequences. In order to maintain standing on a globalising wine market, within the supply, the share of good quality wines with protected origin will be increased.**

In Hungary, grape area represented 93.5 thousand hectares in 2005, its share of the total agricultural area was 1.6%. Within the grape area, the share of wine grapes was 90%, the share of table grapes was 1%, and the share of the other species was 9%. Grape production is 500-800,000 tons per year and wine production fluctuates between 3.3-5.4 million hectolitres. Subject to the output, the production of grapes and wine represents 9-17% in the gross production value of crop production, and 5-9% of the gross production value of agricultural products.

Wine consumption in Hungary is 3.2-3.4 million hectolitres per annum; in weaker vintage years production just covers consumption. Hungarian wine exports represented 570,000 hectolitres (its value was 13.7 billion HUF, or 1.8% of Hungarian food industry exports) in the year 2005. Wine imports are not significant in a comparison with domestic consumption, but in 2006, there was a marked increase, mainly in the imports of red wines. In Hungary, in the wine year 2006/2007, the plantation-cutting programme financed by the Community was announced for a second time, therefore it can be expected that a shortage of wine might appear, even in the longer term, and significant imports might become constant.

**Subject matter 1:** In 2005, there were about 150,000 farms dealing with grape production, 99.6% of these were individual farms, using 86% of the total grape area. 45% of the farms cultivated an area below 1 hectare, the share of farms with areas between 1-2 hectares was 50%, the ones with 2-5 hectares was 3%, and those who cultivated grape areas exceeding 5 hectares was merely 1%. The number of farms growing grapes decreased by almost one quarter in the period 2003-2005.

The share of wine production in production plants is low: in 2003, out of the 195,500 grape producing farms only 10,600 prepared wine and 465 plants dealt with bottling. The number of wine production plants decreased to almost one-third in the period 2000-2003. In the sector, organisation is at low levels, for the operating engrosser-type integrations, rather uncertainty and defencelessness is typical, than correct, long-term contractual relationships.

- **Solution:** Support for the creation of producers' groups, support for the technological development of producers' groups, in grape production and in winery.

- Expected impact: Improvement of the grape and wine quality, uniform, marketable supply, more efficient, competitive structures, higher and more predictable income.

**Subject matter 2:** The territorial effectiveness of grape production in Hungary lags far behind the indicators of the important grape producers in Europe and around the world. Not only yields per hectare are lower, but the fluctuation of production between different years is also the largest in Hungary. In Hungary, grapes are usually not irrigated, in 2005, there were only 114 farms, where additional water provision took place. In connection with the impacts of climate change, we shall calculate with an increase in temperatures and extreme precipitation schemes.

- Solution: Support for the creation and modernisation of irrigation systems, for soil protection and melioration facilities, forecast systems for plant protection allowing reasonable plant production, from rural development funds.
- Expected impact: Increase in the security of harvest, a more efficient, more environment-friendly production, stable income.

**Subject matter 3:** According to the data of a plantation survey in 2001, a very disadvantageous age structure was established. The share of young plantations was very low (13%), but the share of plantations of more than 20 years was above 50%. Together with the ageing of the plantations, an increase in the lack of capital and a drop in productiveness were also observed. For the transformation of the plantations, the restructuring measure of the EU provides assistance, and it is expected to remain in force also after the completion of the wine legislation reform. Plantations with a large number of vines, providing outstanding quality, shall be created first of all in the Class I areas of the production cadaster, most suitable for grape production. In order to make areas higher above sea level, with strong slopes suitable for cultivation, terraces, buttresses, exploration roads and drainage trenches shall be created. For the cultivation of plantations with narrow row spacing, special power machinery (caterpillar tractors, tractors with a three-point hitch) and adapters (modern machinery for plant protection and nutrient management) shall be used. The predictability of seasonal works (such as preliminary cutting, cutting back, harvest) requires the mechanisation of certain production technology elements as well.

- Solution: Support for making the land suitable for intended use, to the acquisition of special, grape cultivation machinery, from rural development funds.
- Expected impact: Plantations providing outstanding quality, satisfaction of special market needs, sustainable, efficient, environment-protecting grape cultivation practice.

**Subject matter 4:** In Hungary, in addition to vine-growing, winemaking is also atomised. The decisive majority of the 13,000 wineries produce less than 80 hectolitres. There are some top wines of superior quality in the supply which are in line with the present fashion trend, but they are available only in limited quantities (representing 5-10% of production). The international markets put Hungarian wines in the lowest price segment. The vast majority of the Hungarian wineries are



technologically backward, but there are some wine regions, where no refrigeration is available for must at all, and the obsolete tanks of reinforced concrete and bolster barrels will be also replaced.

- *Solution:* Support for winery enterprises, producer groups for winery technology development projects and investments in buildings: e.g. crusher machinery, pneumatic, closed system presses, refrigeration systems, must cleaning equipment, new exploration technologies (e.g. equipment for cold maceration), automated systems for the production of red wines, machinery and equipment for the preparation of refined must concentrates, development of storage tanks with refrigeration facilities, with small, medium and large stainless steel tanks, cooling compressors, automated systems for the transportation of liquors, pumps, inert gas supply systems (CO<sub>2</sub>, N<sub>2</sub>), tools for the handling of barrique barrels (e.g. washing machinery) and their transportation, tools for providing hygiene at the plant (large-pressure cleaning systems), filling systems, allowing multifunction packaging, closing (e.g. cap, bag-in-box), systems for the production of kraftliners, palletting, creation of uniform packages, creation of air conditioned storage places for the finished goods, automated records systems (computerised records of excise duties and for the application of the identifier to the bottle, capsule), water cleaning in the winery plants, selective waste management, equipment, machinery for the production of producer champagne (*Vinzersekt*) in small and medium quantities, and comprehensive processing of the by-products.
- *Expected impact:* A major improvement in wine quality, production of new and more marketable products, compliance with EU provisions (e.g. alcohol content of the wines), management, processing of by-products (e.g. colouring materials, preparation of grape seed oil), energy-saving operation.

## **Animal husbandry**

**Development projects in NHRDP offer a solution to the basic problems of animal husbandry, which are as follows: (1) the technology, buildings and machinery of the animal breeding sites are obsolete and worn out; (2) the genetic level of the stock should be developed; (3) manure-handling and breeding technology do not comply with the environmental and animal welfare provisions; (4) energy consumption of the plants is large, due to the obsolete breeding technology.**

**In addition, backwardness is observed in the application of communications and information technologies and in terms of automation. The farmers suffer from infrastructure problems. The competitive position of the producers of animal-origin products is weak. The need for the application of the newest scientific results and technologies, for the production of new, better quality products and the strengthening social control put pressure on the producers.**

In Hungary, animal husbandry represents 37% of the gross output of agriculture. In the production of livestock and animal products, the shares of pig (35%), poultry (34%) and cattle (25%) are the largest ones.

The number of pigs in the country is about 4 million. Half of the fat stock is the production of pigs for slaughter (646,000 tons). The cattle stock is 708,000, the stock of cows is 334,000, cattle for slaughter is 75,000 tons, the production of cow milk is 1,878 million litres per year. The number of sheep is 1.4 million, production of sheep slaughtered is 19,000 tons. The stock of poultry is 32 million, production of poultry slaughtered is 551,000 tons.

In Hungary, consumption per capita is not even close to the EU-25 average, in pork (29 kg per year), beef and veal (4 kg per year) and in milk and dairy products (178 kg per year). Poultry consumption (37 kg per year), on the other hand, is far higher. Since the accession, Hungary has become a net importer of pork and dairy products, but it is still a net exporter of poultry and cattle for slaughter.

A growing social control is experienced by the producers of animal products. The players in the sector do not only have to comply with the standards prescribed by EU legislation, but must also follow the requirements of the consumers, who are environmentally conscious and who are sensitive about the breeding conditions.

There has been a loss of confidence among European consumers, due to food safety scandals. Renewal of food regulations focuses on the responsibility of the producers, the approach to the food chain as a whole, transparency and traceability. In the creation of competitiveness, voluntary quality assurance and the introduction of the systems required for that play a decisive role.

Farmers, as the first players in the production chain, have an important responsibility in the appropriate use of environmental resources. Sustainability is a basic economic, social, ecological challenge and expectation towards agriculture.

**Subject matter 1:** The most important negative environmental impact of the larger animal breeding sites is the obsolete technology of manure handling (collection, storage, use). On the basis of the block-level demarcation of LPIS, nitrate-sensitive areas in Hungary are estimated at 3.9 million hectares, of which 2.64 million hectares represent agricultural areas. Out of a total volume of 7.8 million m<sup>3</sup> of liquid manure, 48% (3.6 million m<sup>3</sup>) originates from nitrate-sensitive areas, in 364 plants. 89% of this quantity (3.2 million m<sup>3</sup>) is deposited, on the basis of authorisations, in agricultural areas. In addition, the treatment and disposal of wastewater is also a problem.

In the case of the pig sector, liquid manure technology was applied in 3,750 buildings, for 1,775,000 accommodation spaces, representing 66% of the 5,880 buildings used for pig farming and 74% of total spaces, according to a survey carried out by the Research Institute for Agricultural Economics (AKI).

In cattle stables, traditional manure handling is general practice. Liquid manure technology is used in 3% of the buildings, a little more than one hundred stables, or 4% of the total livestock.

- **Solution:** For manure-handling (collection, storage, utilisation), leakproof, insulated manure storage facilities will be built (covered basins of concrete, stainless tanks), support is required from rural development funds for the acquisition of special machinery for the appropriate forwarding of the manure. The energy dependence of the sites can be lowered by the utilisation of the manure from the breeding sites, in the quality of biogas, for the production of electricity and heat. For that purpose again rural development funds are required.
- **Expected impact:** The manure handling and management shall comply with the EU standards.

**Subject matter 2:** In Hungary, the technology, infrastructure, buildings and machines of the animal breeding sites are out-of-date, and worn out. The main problems with breeding technologies in the animal breeding sectors are as follows:

a) Energy consumption of the intensive animal breeding plants is excessive, due to the obsolete breeding technology. In the breeding of pigs, on the basis of the status of the insulation, ventilation and heating systems, only about 20% of the buildings included in the survey of AKI can be classified as good. The share of buildings with bad insulation is 1 percentage point higher and in the case of 8% of the buildings, no insulation exists at all. In respect of 23% of the spaces, the ventilation system is in poor condition, this share reached 29% in piggeries.

The survey also covered 279 breeding sites and buildings of 242 broiler chicken farms. Ventilation technology requires urgent reconstruction in the case of 25% of all spaces. In respect of the technical condition of the heating systems, urgent

reconstruction or a replacement of the equipment is needed in the case of 29% of the buildings.

Investigations of the Ministry's Technical Institute for Agriculture (MMI) have shown that the reconstruction of the breeding technologies, resulting in better comfort and more favourable production conditions has a favourable impact on the health conditions of the animals as well. The impact of the climate in the stall on the increase in body mass of pigs depends basically on the design of the building, its ventilation, heating system and flooring.

b) The sires represent one of the guarantees of quality, finished products. In recent years, there has been a dramatic drop in the use of sires in Hungary; the producers provide replacement from their own stock, and that, in most cases, leads to a reduction in natural efficiency. Parallel to that, there is a delay in the practical utilisation of the results from innovative genetics research and development. The decisive majority of producers is unable to create the environmental conditions ensuring that a given species shall provide an adequate performance, in line with its genotype.

c) In technology development, a decisive factor is whether or not the given investment increases the natural and cost efficiency of the farm. An advantage can be obtained most of all in the field of a modernisation of feeding and watering. According to the experimental results of MMI, in the pig sector, with the use of dry forage technology and the introduction of combined self-feeders, the use of forage by porkers improves significantly, the daily increase in body mass rose from 650 grams to 700-782 grams, the use of forage dropped from 3.2-4.3 kg/kg to 2.5-3.6 kg/kg. With the combined self-feeders, savings can be made both in terms of forage and of water.

The status of pig spaces is very heterogeneous. In recent years, usually only the most urgent maintenance works, non-postponable reconstructions were made. Only 23% of the technological equipment can be considered modern. In more than 50% of the accommodation, there is no heating. In the accommodation of sows, fatstock and other pig accommodation, heating equipment is available at barely 10-20%, in the case of piggeries, it is missing in the same proportion.

Even though technology levels of poultry breeding is the best in Hungary from among animal breeding sectors, due to the heterogeneous technical status, modernisation, compliance with EU requirements is urgent in this sector as well.

In the case of cattle breeding, electricity was not available in 17% of the buildings in the survey, while gas was missing in 42% of them.

From a technical-technological point of view, the most obsolete facilities are observed in sheep farming. In almost 25% of the sheep spaces, technical conditions are very poor and an urgent renewal is needed.

Backwardness in the application of communications and information technologies is also very important at the Hungarian animal breeding sites.

- *Solution*: Support shall be given for the use of high genetic level sires, development of the forage and watering systems, transformation of ventilation, heating, insulation, implementation of automation and renovation of service roads from rural development funds.
- *Expected impact*: Development of the genetic bases increases efficiency, and it also contributes to the improvement of the quality of finished products. Technology development projects promote the optimal use of the biological foundations. Reconstruction of breeding technologies has a favourable impact on the health conditions of the animals. Development of the forage administration systems contributes to cost-efficient forage administration. Due to the modernisation of the ventilation and heating systems, there will be drop in the energy use and an improvement in the comfort experienced by the animals. Reconstruction of the service roads contributes to the development of infrastructure and the market placement of the products.

**Subject matter 3:** At the animal breeding sites, in order to comply with the EU requirements in respect of animal welfare/ hygiene, investments shall be made and for that, funds are needed. The sectors are unable to produce such funds.

In poultry farming, a problem is the limitation imposed on breeding of layers in pens, applicable to at least 30% of the spaces for layer spaces in pens.<sup>2</sup> The number of layers per pen shall be reduced by 20%, that is, for the maintenance of the present number of layers, 1.5 million new spaces should be created.

In cow breeding in Hungary, in respect of the animal welfare requirements, the weak points are as follows: the milk cows are kept right through the year in a closed space, bound, without meadow or runner, partial lack of protection against heat stress, frequent crowding in the unbound stables, runners, hurdles in inadequate condition during the autumn and spring periods.

- *Solution*: Transformation or renewal of the pig and milk cow accommodation, transformation of the pens for layers, from rural development funds.
- *Expected impact*: Compliance with the cross-compliance provisions, which is a precondition for direct aid from 2009.

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<sup>2</sup> The minimum requirements for the breeding of layers in pens have been applicable in the EU member states since January 1, 2003. In Hungary, there is a total of 21 plants (representing about 10% of the egg production capacity) that received a grace period for the transformation of the pens, by December 31, 2009.

## Biomass

**In Hungary, the production of motor fuels of an agricultural origin was realised until recently only at experimental levels, production in market volumes will start in the coming years. The development of the sector is of particular importance, because the infrastructure, technological, logistics, professional and organisational conditions have to be created. In the solution of problems in the bioenergy sector, a decisive role will be played in the coming years by the rural development funds, available in the framework of the NHRDP.**

The application of the biomass and of other, alternative energy sources of agricultural origin is more and more in the centre of attention worldwide, due to the increasing environmental problems (greenhouse impact, climate change, drop in the stocks of fossil fuels), particularly in the developed countries. In addition to the protection of the environment and the substitution of fossil fuels, additional advantages of biomass utilisation include the maintenance of rural population, more secure energy supply and, of course, a decrease in dependence on the large energy exporter countries. The energy-purpose use of biomass of agricultural origin offers a solution for a mitigation of crisis situations due to overproduction of cereals, because it diversifies agricultural production and offers a new source of income for the rural population.

Renewable energy sources at present represent less than 5% of total energy consumption in Hungary. Firewood represents about 75% of renewable energy sources. Firewood and forestry by-products are mainly used by power stations. The main and auxiliary products of agriculture represent 57-58 million tons per year in the renewable biomass stock of Hungary.

The present bioethanol production capacity in Hungary (Szabadegyháza and Győr) is about 190,000 tons. The already built plants for bioethanol production (Bánhalma and Mátészalka) have an annual capacity of about 10,000 tons. Biogas plants using agricultural basic materials as well are located at Nyírbátor and Kaposvár. The previous one use animal manure, agricultural and slaughtering house by-products and wastewater sludge, the latter one utilises sugar beet slices, originating from sugar production.

**Subject matter 1:** For the collection and burning of solid biomass (herbaceous energy plants, by-products of arable crops, etc.), an appropriate technology is not available as yet. In arable land areas, the by-products of corn are the most important in quantity: out of the about 12 million tons of by-products, 90% represent stems and leaves, about 10% is the share of corn-cobs. For the utilisation of corn stems, the most prevalent method is its ploughback, which takes place on almost 95% of the cultivated area. In order to avoid the cellulose impact, a large quantity of artificial nitrogen fertiliser has to be administered to the soil, increasing costs significantly, and polluting the environment. The harvest of corn stems is a problem, because the widely used

bailer machinery is designed for ears of corn. In Hungary, there is no appropriate equipment for the burning, and gasification of the stems, with appropriate efficacy.

- *Solution*: Support for the development of and investments in special collection and chopping machinery, burning equipment, from rural development funds.
- *Expected impact*: Reduction in the use of fossil energy sources, improvement in the efficiency of the production of bioenergy, reduction in environmental pollution, improvement in the profitability of agricultural production.

**Subject matter 2:** The by-products of biodiesel production are not suitable as basic materials for forage, their utilisation possibilities are limited (these shall be either burnt or used for the production of biogas). If the investor does not take steps to utilise the by-products, further costs shall be taken into account: provision of disposal, destruction, implying environmental problems. The by-products of bioethanol production – the wet (WDGS) or dried (DDGS) cereal waste – can be well used as animal forage, therefore, it is advantageous if there is animal breeding in the proximity of such plants.

- *Solution*: In the framework of a comprehensive development project of bioethanol plants, support for the acquisition of the machinery, equipment for biogas production, modernisation of the development plans, manure handling and delivery at the animal breeding sites, from rural development funds.
- *Expected impact*: Reduction in environmental load and the forage costs of animal breeding, a more favourable carbon-dioxide and energy balance in the production of biofuel, due to the utilisation of the by-products in biogas production, utilisation of residual heat for the heating of greenhouses and foil tents, use of the resulting bio-manure for the improvement of the cultivated soil.

**Subject matter 3:** The use of the final products (such as biofuels) and of the by-products takes place in many cases not at the location of their production, therefore, their storage and transportation shall be ensured. Deficient infrastructure (lack of service roads, storage capacities etc.) means a limitation of access to the target markets and increases transportation costs. The handling and delivery of the basic materials, of the final and by-products also have an impact on the carbon-dioxide balance of the production. The creation of an adequate infrastructure background is an indispensable condition for the success of the sector.

- *Solution*: Construction of hard cover service roads in the outer areas and support for investments into infrastructure background ensuring proper storage of the finished and by-products, from funds for rural development.
- *Expected impact*: Expansion of sales possibilities, improvement in the indicators of competitiveness and decrease of the environmental load.

**Subject matter 4:** Manure-handling by the breeding sites, utilisation of the liquid manure represents a serious environmental problem, to be tackled by all animal breeders, in line with the EU provisions, implying significant additional costs.

- *Solution*: Support for the creation of biogas plants, from rural development funds.

- Expected impact: Reduction in the environmental load, in the environmental investment costs and energy costs of animal breeders, contribution to the maintenance of the optimal proportions between animal husbandry and crop production.



## **Food industry (food processing)**

**Strengthening the competitiveness of processing industries will be a priority objective, with prime importance from the point of view of timing as well. The most important and most stable market for domestic agricultural production is the domestic food industry. And if the Hungarian food industry is unable to handle the accumulated problems, sometimes exceeding its capabilities, then its importance, its use of domestic basic materials could drop. And a decline in the food industry surely leads to market disturbances, reduction in volumes and income in agriculture as well. The parallel and interrelated weakening of the two sectors threatens the population and landscape retention capacity of the rural regions as early as in the short and medium terms.**

**The NHRDP measures provide assistance first of all to the primary food businesses, processing agricultural basic materials directly. The measures can remedy two problems. External challenges that can be summarised as a difficulty in complying with changes in the expectations of the absorbing market. And from among internal challenges, the ones that are consequences of postponement of investments in cost and energy efficiency and in environmental protection.**

The gross production value of the Hungarian food industry was 1,829 billion HUF in 2005, occupying the third place within industry. The share of the food industry is somewhat declining within the national economy's GDP as well: this share in 2005 was already only 2.6% in 2005. The number of employees in the food industry was 140,000 persons, showing a similar share (3.6%) and dynamics to output and production value (CSO, 2005).

The food industry is classified into 10 sectors and 32 industries. In the food industries of Hungary and of the EU-25 countries, based on sales revenues, almost everywhere the same areas have the largest weights: meat, beverages, milk, to which, in our country, the processing of vegetables and fruits is added. On the basis of the number of businesses, the milling industry and the production of mixed forage are also important. The above listed areas, with the exception of beverages (except for the wine industry), are all primary processors, directly linked to agricultural production.

We examined the economic situation of the different sectors of the food industry on the basis of six indicators: net sales, export sales and ratios, earnings, availability of funds, investments and productivity. From among the industries examined, the good indicators of the vegetable oil industry are outstanding. The medium, but improving trend in the dairy, milling and forage industries gives hopes. This trend materialises in the strengthening concentration, increasing export share and the stable and rising readiness for investments. Parallel to that, however, the dairy and milling industries would have scope to improve productivity and profits. In the period 1997-2004, our two main sectors, meat and the processing of vegetables/fruits, showed medium

performance, with fluctuations and weakening. The performance of the beverages industry and of tobacco production is not any better either. A transformation of the structure of the meat industry, with a strengthening consolidation, is still ongoing. The negative results, low productivity and availability of funds in the meat industry and in the processing of vegetables and fruits, the drop in export orientation and the pulling out of foreign capital from the sector gives few reasons for hope (Orbáné Nagy Mária, 2006).

To sum it up, in the processing sector, the threats uncovered forecast, in the absence of external assistance, a further deterioration of the positions. We assume that without targeted development measures, two negative scenarios can be outlined:

Exactly the sectors of primary processing could face mass closings of plants that could provide a direct and stable market for the local agricultural producers. Even though these play an important role in the employment structure of the sector, we believe that the danger of a further reduction in rural jobs is not negligible.

For the food industry, if the investments to promote competitiveness cannot be implemented, a solution may be to purchase cheaper imported basic materials, as this already happens in the case of some products (even traditional Hungarian goods, such as onions and root crops, but also sour cherries, apples, red peppers, pigs). But this, obviously and clearly has an impact on the production of basic materials as well, and may cause such a decrease in volumes that may already imply serious consequences in employment and in the maintenance of the landscape.

The weak performance of the food industry can only partially be attributed to the shock caused by EU accession; it is rather attributable to a group of problems, consisting of several and elements and accumulating for decades. Based on Narayanan and Gulati (2002), challenges that enterprises will face can be classified into two groups: internal structural problems and external impact, and the government can provide two types of support to the businesses.

It may strengthen their abilities: with the reduction of transaction costs, training, launch of special financing, loan programmes, the increase of their competitiveness, improvement of the vertical coordination abilities.

It may ensure external protection, providing support for cost reduction and insurance systems; with the application of the tools of competition law, by the financing of research and development.

After the presentation of the groups of problems, we outline certain solutions, the measures of NHRDP in connection with the food industry that can be implemented, primarily with the support of submeasure No. 1231, and partially measures Nos. 124 and 132. Our recommendations were prepared on the basis of professional literature on the different sub-areas and the use of views from experts of the sector. The most exact materials could be used for the recommendations aimed at the increase of energy efficiency, because in this field we could rely on the wide-ranging and detailed data of

IAC<sup>3</sup>, operating in the USA. We compared the results of the IAC food industry surveys with the problems mentioned by Hungarian professionals as priority problems. As we have found several correspondences at the sectoral level as well, we decided to disclose our suggestions for savings. Still, we have got to emphasise that the IAC database can only serve as a direction, and by no means is it suitable to narrow the scope of the aids, because the backwardness of the Hungarian food industry in terms of average technology level is far too important in comparison with the American one.

### **External impacts:**

#### **1. Changes in the consumer and commercial requirements towards products and services (downstream buyers)**

**Problem:** Consumers are oriented towards natural, fresh products, prepared with a small amount of additives, with considerate processing, while trade gives priority to food items that can be stored for a long time and are not sensitive for the conditions of storage (National Food Safety Programme of Hungary, 2004). Typical for the Hungarian food industry, and especially for the small and medium business in the rural regions, is that innovation activities are occasional, as opposed to the old member states of the EU, where 60-65% of the companies have an R&D unit of their own, or at least a person in charge (ÉFOSZ, 2006). In our country, the food industry, by spending 5.4 million euro, used less than 0.1% of its value added production in 2004 on research and development, while in the major EU countries with important food industry output, this proportion was between 0.3 and 1.5% (Eurostat 2004). The problem is aggravated by the fact that as a result of the more favourable salaries and working conditions in Western Europe, skilled R&D and industrial experts of the new member states might be lured over there.

- **Solution:** Innovation, providing a solution for the changes in quality expectations is far too expensive for the small and medium businesses, but the funding need for the application of existing results, and of technology transfer is also significant (ÉFOSZ, 2006). This emphasises that support for product development and the adaptation of the development results may mean assistance here.
- **Impact:** Higher profitability and more advantageous market position, due to the increase in value added.

#### **2. Changes in market positions (downstream buyers)**

**Problem:** Ineffectiveness of market power as a result of low concentration, increase of import pressure and the price-cutting policy of the retail chains. On the

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<sup>3</sup> The IAC (Industrial Assessment Centres) programme provides assistance for small and medium-sized processors, where: net sales are below 100 million USD, there are fewer than 500 employees, no energetics engineer is employed, and annual operating costs will be between 100,000 and 2 million dollars. The programme is implemented with the participation of students from 26 universities and professional engineers of energetics. Regarding the food industry, there are 316 surveys in the database, with a total of 1,761 recommendations. The recommendations resulted in average savings of 23,000 USD, and a total of about 63 million USD, with a very short payback period, which was about 1 year.

basis of the net sales of the top ten businesses in the food industry, the cumulative concentration curve is largely similar to the one prepared for retail trade. However, there is a significant difference in the net sales figures of the largest businesses (94 billion HUF, 272 million HUF) and the concentration indicator of the top ten businesses (22%, 89%), showing well the order of magnitude of differences between the three phases (Juhász et al, 2005).

- ***Solution:*** Training, providing special management skills/ knowledge cannot modify the market positions, but can provide an answer for handling the requirements of commerce, to improve the market performance of the businesses.
- ***Impact:*** A better assessment of the market expectations and of the possibilities of the businesses, therefore, there shall be fewer market failures and a more stable situation in the sector.

### **3. Difficulties with supplier connections (upstream suppliers)**

**Problem:** Deficiencies from the point of view of predictable cooperation, appropriate quantity, quality and price in the production of agricultural basic materials.

- ***Solution:*** Vertical connections can be strengthened by the development of the technology and human resources at the connection points of the processors with producers (suppliers) and traders.
- ***Impact:*** Decrease in defencelessness, observed frequently and on changing sides, both for the suppliers and the engrossers.

### **Internal impacts**

#### **4. Structural concerns**

***Problem:*** Low level of available capital, a constantly changing ownership pattern, and behaviour of financial investors resulting in bankruptcies many times. Low productivity and, in some cases, disproportionate capacity allocation.

- ***Solution and impact:*** The development programme can have an impact on this subject matter only to a very limited extent, and indirectly, only through the cost-cutting effect of the technology development projects.

#### **5. Technological backwardness in terms of food safety**

***Problem:*** In terms of diseases connected with food items, the food industry represents a risk factor, mainly in respect of animal-origin products (and the production of forage!). As for plants, the avoidance of the most dangerous factors, like microbiological and chemical contamination can be ensured by soil condition and production technology, as well as the professional management of post-harvest operations. In the case of animal-origin food, however, the risk of microbiological contaminations might be much higher in the processing phase. In an investigation organised by KÉKI (in 2006), the highest share of objections was recorded in the case of poultry-origin products, usually due to the presence of bacteria belonging to the *Salmonella* and *Campylobacter* genera. *Campylobacteriosis* in our country, like in

other countries as well, ranks 2<sup>nd</sup> among the reported infectious diseases. In the examination of the whole of the vertical chain in poultry (site, slaughtering, retail trade), 47% of the poultry stock delivered for slaughtering was infected by *Campylobacter*, and that ratio continuously increased in the course of the operations at the slaughtering house, reaching 100% after the elimination of the innards. In the course of examinations regarding salmonella, the chick age poultry was infected in 3.7% of cases, while the 26-day old stock was infected in 63.5%, where in many cases salmonella infection of the forage could be also demonstrated.

- **Solution**: Support for technological renewal, to respond the food safety problems. Priority shall be given to technology/ construction investments required to comply with the hygienic expectations of the EU. In addition, traceability shall be also given priority, mainly in terms of development programmes needed for labelling/packaging, as well as data recording and forwarding.
- **Impact**: Decrease in the food safety risk of the industry, with a parallel increase in its viability and profitability.

## 6. Technological backwardness in terms of energy use

**Problem**: In 2004, the sector represented 15% of the industry's energy consumption and 3% of that for the whole of the country. From the point of view of energy sources, our country is strongly dependent on gas, with a 61% share, it ranked fifth in the EU (EU average: 48%). Electricity ranked second (21%) and third was oil and derivatives (10%) (Eurostat, 2004). In the use of renewable energy by food processing, the first three EU member states (Greece, Latvia, Portugal), its share is above 15%, the fourth and fifth (Spain and Ireland) show shares close to 10%. All the other countries follow with a substantial lag (with shares below 2%). Only 1.4% of the energy consumption in our food industry was covered from renewable sources. The energy efficiency of the sector is rather poor, it ranks 19<sup>th</sup> in a comparison within the Union, because in 2004, 1 TJ of energy was required for a value added production of 92,000 EUR. The countries at the top (Ireland, United Kingdom, Finland, Germany, Sweden) were able to achieve more than double of that figure, but even the EU-25 average is much higher, at about 154,000 EUR (Eurostat, 2004). In the United States, the "energy footprint" prepared for each sector shows that food industry is explicitly energy-consuming (ranks 5<sup>th</sup> among the industries). And 31% of its total energy consumption represents losses outside the sites, while 24% inside the sites. The largest energy losses were caused by energy transformation (10%), steam production (7%) and energy distribution (7%). The breakdown of net energy use<sup>4</sup>, by operations, is as follows: evaporation/ concentration (25%), drying (22%), cooling, freezing (11%), heat treatment/ pasteurisation (10%) and cooking (10%) (U.S. Department of Energy, 2004).

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<sup>4</sup> The gross energy consumption of the USA food industry is 1685 T Btu, where 31% represented losses outside the production sites, the remaining 69% or 1156 T Btu represent net energy consumption. For further calculations, we used this figure to represent 100%.

- *Solution*: In order to increase eco-efficiency<sup>5</sup>, IAC carries out investigations in three major areas: energy management, waste emission and minimisation of pollution, and the increase of direct production efficiency. Within energy management, they established nine problem areas<sup>6</sup>: the largest number of proposals was prepared in connection with the lighting of buildings and production areas (22%) and in connection with the air compressors (18%). These measures required relatively low cost levels, the payback period is within one year, but annual average savings are smaller (1-15,000 USD). We will not mention the above two groups of recommendations in respect of the sectors, because from the point of view of their frequency and importance, there were no differences observed between the different sectors. But the development projects promising the highest average levels of savings proved to be quite sector-specific, therefore, the following highlights can be generalised only to a limited extent. The first one is the issue of efficiency increase investments, within that, the installation of an automated packaging machinery line and the modernisation replacement of the production equipment. Here, the acquisition costs are much higher (100-350,000 USD), the payback period is very short, about 1 year. The other group consists of recommendations promoting heat recovery and its use, in connection with the heat management systems. With 20-30,000 USD purchase costs, the payback period is even better, about half a year. In the areas described above, in addition to technology development, the need for professional training also emerges, but in this case, instead of the management-level, market-related skills, rather the employee-level technology skills shall increase.

There is a Hungarian organisation (Environment-Conscious Company Management Association, hereafter: KÖVET), with programmes<sup>7</sup> to be used by Hungarian enterprises to measure their situation in terms of eco-efficiency, along the lines used by the Americans. The programme collected 211 investment or projects not requiring investment from 48 organisations, that brought total savings of 11.3 billion forints. The recommended measures were classified into three categories. “Washed fruit in a bowl” = no investment is required, payback is immediate, 69 measures, average savings of 21.8 million HUF. “Fruits hanging low” = payback within 3 years, 90 measures, average savings of 45.1 million HUF. “Fruits hanging high” = payback in more than 3 years, 50 measures, average savings of 113 million HUF annually (KÖVET, 2007). The company

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<sup>5</sup> Required for an increase in eco-efficiency: reduction in the material and energy consumption of the products and services; reduction of the toxic emissions; increase in the recyclability of the materials used; maximisation of the sustainable use of natural resources; increase of the durability of the products; increase in the service requirement levels of the products and services (Verfaillie and Bidwell, 2000)

<sup>6</sup> System for burning, production of heat, electricity, engine systems, industrial design, operations, building and location, supplementary activities, alternative use of energy.

<sup>7</sup> Programme 1: Money thrown in through the window; Programme 2: Eco-mapping - using the plan for the workshop, site or plant, on-site inspection to establish air, water and soil pollution, waste, risks and the problems of energy consumption, together with the potential solutions. In addition, this method can be used as a first step for the introduction of the EMAS or the ISO 14001 environment-focused management systems. The result of Eco-mapping is a list of measures in connection with the problems discovered and the measures recommended, to be ranked, subject to the expected economic and environmental benefits and feasibility.

selects by category each year those that implemented the measure, among them, a food industry example is presented only in the category of “fruits hanging high”, that is, the most costly category – presented among the possible solutions available for the meat industry. The most successful programme became the one of “money thrown in through the window”, the most important elements thereof are summarised in the following table.

Measure	Environmental improvement	Economic benefit
Introduction of selective waste collection	Waste will not be transported to deposits, but recycled	Lower transportation cost, the amount received for recycled waste
Reduction in the use of office paper, two-page printing, re-use of papers, etc.	Less paper used, less waste	Cost cut, due to lower purchases of paper
Development of logistics, rationalisation of transportation routes	Lower use of fuels, emission of less air polluting materials	Reduction of fuel costs
Utilisation of residual heat	Less resources used from the environment	Lower heating costs
Technology innovation, replacement of old, low efficiency equipment	Cleaner technology means less polluting materials emitted, lower energy use, etc.	Lower energy costs, less materials needed, less waste disposal costs etc.

- **Impact:** Decrease in the energy dependence of the industry, with a parallel increase in its viability and profitability.

## 7. Technological backwardness in the field of investments into environment protection

**Problem:** The Hungarian food industry in 2004 spent 3.4 billion forints on environmental protection, only 3% of total capital expenditures. The largest was the share of development projects in wastewater management (51%), followed by air cleanliness (10%). The amounts spent on waste management rank third, but only with 8%, while in the food industry of the other EU Member States, this area usually is the most outstanding one in investments, with a share between 30 and 69% (KSH, Eurostat, 2005).

- **Solution:** With the increase of eco-efficiency, environmental load can be reduced (see section 6). In the IAC database, the proposals for a reduction in environmental load were compiled on the basis of energy efficiency, and not the criteria of environmental protection. At any rate, these measures in the food industry illustrate well that this type of investments may have, in addition to general, social advantages, direct and immediate positive economic impact as well. Most of the proposals covered water management (33%), within that, proposals were approximately equal in number regarding the reduction of water uses and closed-circuit water use/ development suggestions. Recycling ranked second (24%) and waste management was third (14%), where we may particularly mention compression and the burning of waste. If we take into consideration the criterion of average savings, we can consider post-production

handling – including any subsequent reduction of product contamination – to be of prime importance (almost 100,000 USD/ year).

- ***Impact:*** Decrease in the environmental load of the industry, with a parallel increase in its viability and profitability.

### **Problems in the most important sectors of primary processing**

For the domestic agricultural producers, in respect of the 5 most important sectors of primary processing, we took the most important concerns and solutions. Sectors and problems are presented in the order of their importance.

#### **Poultry and meat industry**

### **5. Technological backwardness in terms of food safety**

**Problem:** From among the decisive conditions for food safety, the hygienic provisions of the EU represent the basic condition for operation: meeting the microbiology criteria regarding food, compliance with certain procedures required to achieve the goal of the Regulation, fulfilment of the temperature regulation requirements regarding food, maintenance of the refrigeration chain, sampling and laboratory tests. Compliance with the hygienic requirements and the assurance of traceability, however, means an disproportionately higher burden for the small and micro-enterprises (EESC opinion, 2006).

- ***Solution:*** Support for plants, able to produce good quality, marketable products, meeting the food safety requirements, but for compliance with some of the elements of hygiene regulation, they need investment support for technology/construction. Traceability mainly requires investments for labelling/packaging, as well as for data recording and forwarding. Packaging is one of the most expensive post-production technology phases, the average costs of this type of food industry investments was above 100 USD in the IAC database.
- ***Impact:*** Increase of food safety and traceability, in the industrial segment where the strengthening of the grey economy is the most threatening, as a result of stricter regulation. With the targeted assistance, therefore, parallel to the maintenance of employment, the public health risk of the sector can be also significantly reduced.

### **6 and 7 Technological backwardness in the field of energy consumption and environmental investments**

**Problem:** For the creation of a modern production plant for primary and further processing, the value of environmental investments covering all aspects represents the same order of magnitude as the purchase costs of the basic technology. Without external funds, it is simply impossible to make that economical for an enterprise. In an existing plant, acquisition costs are even higher, because the basic technology itself has to be developed in order to make it compatible with a modern environment management system (Pándi F., 2006). As the energy structure of the Hungarian food



industry is quite similar to that of the United States (54%, 21%, 3%), we believe that the USDA analytical reports on energy consumption at sectoral level can be used by ourselves. According to these, the meat industry does not belong to the sectors with the worst energy intensity in the food industry. Value added is 80,000 USD per 1000 USD of energy costs, and the share of energy in total costs is 2%. Nevertheless, its result is also well below the sectors implementing further processing. According to IAC, among priority sectors, cost savings per business were the second highest in the meat industry (220,000 USD).

- **Solution**: Most of the potential savings were realised in the heat systems (35%), within that, heat recovery (20%) and insulation (9%) proved to be the most effective. Insulation belonged to the category of lower average savings (at about 25,000 USD/ year) and acquisition costs (10,000 USD) and heat recovery to a higher category (at about 65,000 USD). Second, the most important possibility is to make savings with electric systems (19%), including the application of co-generation<sup>8</sup> (18%). It is true that co-generation systems are far more expensive as an investment group (between 100,000 and 1 million USD), but among the ones suggested in the meat industry, even so, there was one where the payback period was less than a year. From among measures reducing environmental load, the field of water management provided the largest overall savings (43%), followed by operational changes (39%). However, even though in the first group a large number of recommendations were made, with relatively low costs and average savings (at about 20,000 USD), in the case of operational changes, focussed mainly on the reduction of waste output, there were few investments only, but larger ones and consisted of measures implying a reduction in costs (of about 50,000 USD).

On the basis of a survey by KOVET, measures taken by a domestic poultry processor were:

Measure	Environmental improvement	Economic impact
Installation of a heat converter into the refrigeration machine building	Savings of 6 MWh thermal heat per day	Investment: 11.9 million HUF
		Operating cost: 0 HUF/ year
		Savings: 4.4 million HUF/ year
		Payback period: 2 years 8 months
Installation of a medium-pressure cleaning system	Savings of 56 m <sup>3</sup> of water per day	Investment: 4.5 million HUF
		Operating cost: 1.5 million HUF/ year
		Savings: 21.2 million HUF/ year
		Payback period: 4 years 6 months
Drilling of own wells (5)	Savings of 128,269 m <sup>3</sup> of	Investment: 128 million HUF

<sup>8</sup> 3 examples for co-generation: steam production using residual heat, to operate a steam turbine generator; joint utilisation of electricity and heat produced by an engine operating with fossil fuel; utilisation of residual heat in a closed-circuit gas turbine generator system, where electricity and heat are produced at the same time.

wells) and installation of water cleaning equipment	potable water	Operating cost: 2.1 million HUF/ year
		Savings: 21.2 million HUF/ year
		Payback period: 6 years 8 months
Installation of a meter for wastewater	Measurable environmental loads: 358,000 m <sup>3</sup> of potable water consumption, 276,000 m <sup>3</sup> of wastewater issue	Investment: 1.9 million HUF
		Operating cost: 0 HUF/ year
		Savings: 16.2 million HUF/ year
Use of recycled toners for laser printers	107 kg less hazardous waste per year	Payback period: 1 year 4 months
		Investment: 0 HUF
		Operating cost: 0 HUF/ year
		Savings: 442,000 HUF/ year
		Payback period: immediate

- **Impact:** Modern technologies, in addition to having a favourable impact on the condition of the environment and the living standards of the rural population, may ensure a significant cost cut as well (+20-30%). In addition, due to the important weight of the sector, a significant reduction can be expected in the energy dependency and the environmental load of the whole food industry.

### Dairy industry

#### **5. Technological backwardness in terms of food safety**

**Problem:** The issue of food safety, primarily from the point of view of compliance with EU hygiene requirements. The concerns are very similar to the issues already discussed in connection with the meat and poultry industries.

- **Solution:** The solutions are also very similar to the issues discussed in connection with the meat and poultry industries.
- **Impact:** Similarly to meat industry, the targeted support can reduce the sector's public health risk and increase consumer confidence.

#### **6. and 7. Technological backwardness in the field of energy consumption and environmental investments**

**Problem:** The issues of energy efficiency and environmental load are very similar to the issues already discussed in connection with the meat and poultry industries. According to the data of USDA, the dairy industry does not belong to the sectors with the worst energy intensity in the food industry. Value added is 73,000 USD per 1000 USD of energy costs, and the share of energy in total costs is 2%, still, its results are still well below the result of sectors with further processing.

- **Solution:** According to the results of the IAC programme, the largest portion of the savings that can be made in the dairy industry were ensured by the development of the burning and heat systems (21-21%). Within the burning systems, proposals were most frequently connected with the operation, maintenance and replacement of the boilers. These represent lower average savings and acquisition costs (at about 10,000 USD), whilst the ones implying a

replacement of the energy source<sup>9</sup> used are less frequent, but more important savings can be made, at higher costs (at about 400,000 USD). In the case of the heat system, heat recovery, with higher savings and cost category (at about 35,000 USD) and the lower-savings insulation (at about 5,000 USD) were the most important ones. In the dairy industry, however, the development needs of refrigeration technology were also at the centre of attention (savings of 12,000 USD/ year). From among measures reducing environmental load, the field of water management provided the largest overall savings (32%), followed by maintenance (29%) and the development of waste management (16%).

- **Impact:** Like in the meat industry, modern technologies, in addition to having a favourable impact on the condition of the environment and the living standards of the rural population, may ensure a significant cost cut as well (+20-30%). In addition, due to the important weight of the sector, a significant reduction can be expected in the energy dependency and the environmental load of the whole food industry.

## **1. Changes in the consumer requirements towards products and services**

**Problem:** Lag of the domestic plants in terms of levels and shares of advanced processed products. Of course, we mean here not the non-annex products, but the product group of milk and cheese. In the absence of unique, innovative products, the domestic dairy industry (in particular, the small and medium businesses) is compelled to compete on the market of low-cost mass products, but usually this is not sufficiently profitable in order to keep long-term competitiveness.

- **Solution:** Support for innovation (product development) and its transformation.
- **Impact:** Within the scope of small and medium businesses, the ones that are able to produce valuable products will increase their viability and profitability. Better satisfaction of consumer needs, with the increase of special segments of the product range.

## **1. Changes in the commercial requirements towards products and services**

**Problem:** We discuss here the issue of packaging among the changing needs of trade, but we have got to note that we can talk about backwardness in terms of food safety and environmental technology as well (Subject matters 5 and 7), because the cost increase impact is also significant. The lack of developed, innovative packaging technology, representing investment needs that are too large for small and medium businesses threatens marketability even in the case of good quality, unique products. Traceability, closely interrelated with packaging, is a basic requirement in the modern commercial environment, and without attractive looks for the customer, the intrinsic values cannot be translated into prices providing sufficient income.

- **Solution:** Support to innovative-unique packaging technologies, ensuring traceability as well.

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<sup>9</sup> For instance, the installation of ovens applicable for the utilisation of residual energy sources.

- **Impact:** Increase in the marketability and traceability of the goods, likely to provide higher profitability, due to the savings made and the higher value added.

### **Processing of vegetables and fruits**

#### **6. Technological backwardness in terms of energy use**

**Problem:** The issue of energy efficiency, where the concerns are very similar to the issues already discussed in connection with the meat and poultry industries. According to the data of USDA, the processing of vegetables and fruit has the second worst energy intensity in the food industry. Value added is 44,000 USD per 1000 USD of energy costs, and the share of energy in total costs is 5%. According to IAC, among priority sectors, cost savings per business was the highest in the processing of vegetables and fruits (240,000 USD).

- **Solution:** The largest portion of the achievable savings came from measures directly increasing efficiency, primarily meaning a development of the production technologies (43%). These investments resulted in very high average savings (at about 200,000 USD) with relatively high acquisition costs (at about 100,000 USD). The change of heat systems, especially development of heat recovery (8%) and insulation (4%) proved to be the most effective. Insulation belonged to the category of lower average savings (at about 10,000 USD) and acquisition costs (at about 5,000 USD) and heat recovery to a higher category (at about 35,000 USD).
- **Impact:** Development projects in energy efficiency can result in costs savings above 30%. In addition, due to the important weight of the sector, a significant reduction can be expected in the energy dependency of the food industry.

#### **3. Difficulties with supplier connections**

**Problem:** In the case of volume products, providing a living for large strata of horticulture producers, critical is the obsolescence/ lack of the (post-harvest) processing phase closest to the producers.

- **Solution:** Among post-harvest operations, most of all the installation of modern preliminary cooling technologies. Technological development of the supplier connection, quality assurance and traceability systems, with harmonised installation and operation at both parties.
- **Impact:** The advantages from high-level production by horticultural producers, excellent goods, quality will not get lost in the post-harvest phase, but will be maintained up to the final consumer, and reflected in prices and market penetration/ maintenance.

#### **1. Changes in consumer demand towards products and services**

**Problem:** Our horticulture production can produce several vegetables and fruits for niche products at high levels, where processing is uneconomical in a large plant, due to the small volumes and the high labour intensity. There is a lack of funds at the

small plants, where capital is scarce, for the innovation and special technology development projects required for the niche products, where markets are demand-driven.

- *Solution*: The plants of this type can be developed for two target markets. If they intend to become suppliers of other food industry sectors, then the most efficient tool is to support technological development required for the production of finished goods meeting the special industrial requirements. On the other hand, if the target of the business is the consumer market, directly, then innovation and market penetration (marketing) will be supported.
- *Impact*: Higher profitability and more advantageous market position, due to the increase in value added.

### **Forage industry**

#### **5. Technological backwardness in terms of food safety**

Problem: Within the two segments of the forage industry, problems are mostly connected with the production of bulk forage, where the company structure is far more fragmented and, accordingly, many general operation problems of the small and medium businesses can be seen. Food safety starts with the appropriate technology conditions. Due to the lack of this and of the traceability systems and due to their obsolescence, it may lead to troubles having impacts outside the sector as well. Here it should be referred to the investigation carried out by KÉKI on poultry stock, where in respect of salmonella infection, a parallelism was demonstrated with the microbiological condition of forage (KÉKI, 2006). Forage supply is the most important input source for animal husbandry. If traceability is not appropriate in forage production, this possible safety risk may have a multiplicative impact on the whole of the vertical chain, producing animal products.

- *Solution*: Support to technology development and the creation and maintenance of traceability systems.
- *Impact*: Reduction in the food safety risks of animal-origin food.

## **7. Technological backwardness in the field of investments in environment protection**

**Problem:** In this industry as well, environmental load is very significant, in particular in respect of air pollution (formation of dust).

- **Solution:** Support to technological developments in dust filtering
- **Impact:** Reduction in environmental load, and so, an improvement of the living standards of the rural population living in the neighbourhood of the mixing plants.

## **4. Structural concerns**

**Problem:** This is where capacity disproportions are the most significant.

- **Solution:** First of all, support for technology developments with an immediate impact on increasing efficiency, that can be implemented in the most effective way by a modernisation of production technologies.
- **Impact:** An improvement of the situation in terms of capacity distribution has a positive impact on rural employment as well.

## **Milling industry**

## **6. Technological backwardness in terms of energy use**

**Problem:** The issue of energy efficiency, where the concerns are very similar to the issues already discussed in connection with the meat and poultry industries. In addition, according to the data of USDA, the milling industry shows the worst energy intensity in the food industry. Value added is 30,000 USD per 1000 USD of energy costs, and the share of energy in total costs is 5%. According to IAC, among priority sectors, cost savings per business were the third highest in the milling industry (205,000 USD).

- **Solution:** According to IAC, the areas bringing about the largest savings are changes resulting in an immediate efficiency increase (47%) and within that, primarily the development of production technologies. As in the case of other sectors, here as well, the acquisition costs of such development projects is relatively high (138,000 USD/year), but the average annual savings are of the same order of magnitude. Important savings were made also with the development of the heat systems (14%) and of engine system (13%). These provided, with much lower acquisition costs, at an average of 5-10,000 USD, savings amounting to almost double of that amount.
- **Impact:** Also in the meat and dairy industries, development projects aimed at energy efficiency ensured cost savings even higher than that, even above 30% of operating costs, reducing in this way the energy dependence of the sector and increasing its profits.

## **4. Structural concerns**

**Problem:** In the milling industry, for the time being, there are only 2-3 plants to be considered in all aspects. The other businesses operate with a very outdated technology level and therefore it cannot satisfy in due quality the needs of the users, primarily of the industries engaged in further processing. This is a serious concern for the sectors processing products of the milling industry. But even more importantly, this fact does not allow a shift in cereals production (the perhaps most important sector of domestic agriculture) towards the quality segment.

- **Solution:** Support given for a modernisation replacement of production technologies is a solution not only for energy considerations, but also for concerns regarding the production of quality products.
- **Impact:** The milling industry, relying on such development projects could become able to absorb the higher quality domestic cereals, maintaining their values. This could increase the profitability of cereals production and reduce the intervention pressure on domestic and EU funds.

## Focus areas of EAFRD investment support

### Main directions (priorities) of the EAFRD investment support and their justification

Prioritised activities, sectors	Reasons	Method of prioritisation
Modernisation of animal breeding, upgrade of the livestock accommodation, breeding technology, the handling system of the manure (cleaning, collection, utilisation) in line with the EU requirements, especially in nitrate-sensitive areas, investments into preventive care in animal health.	Unfavourable impact on environment is exercised by the obsolete technology of manure handling in many of the larger animal breeding farms. The pig and poultry farms are the most affected ones. 48% of the liquid manure originates from nitrate-sensitive areas, on almost 400 pig farms. Increase in cost efficiency also justifies a renewal of the forage technologies in the main sectors of animal breeding (pig, poultry, cattle, sheep).	The maximum aid intensity by Regulation (EC) 1698/2005 is applied in case of support for animal keeping premises. In general, aid intensity in case of purchase of machinery is 25%. Applicants keeping livestock are supported with a higher aid intensity of 35% and are almost unbeatable benefited by scoring of applications.
Development of the production of fruit and vegetables	In addition to a modernisation of the technical and technological background for arable vegetable production, it is important to increase the share of irrigated land, 30% at present (instead of the desirable 60%). Especially effective is to create micro-irrigation systems, reducing the quantity of irrigation water by 40-60%, and an increased utilisation of geothermal energy. In order to ensure the competitiveness of products with excellent taste and aroma on the market, and therefore, it is essential to improve the packaging, product handling, market infrastructure, and the construction of storage facilities. Cooperation among the producers is insufficient, especially rare are joint development projects, which could strengthen their market positions.	<ul style="list-style-type: none"> <li>- aid intensity in the case of vegetable plantation generally is 40%, in the case of young agricultural producers, 50%, increased to not more than 60% for young farmers active in least favoured or NATURA 2000 areas.</li> <li>- a premise for obtaining the aid is that the producer shall be a member of the Hungarian Interprofessional Organisation of Vegetables and Fruits.</li> </ul> <p>If the beneficiary is producing bio-products, or it is member of a production group or it uses renewable- or bio-energy sources for production is going to be prioritized at the scoring. If there was a lack in funding during the implementation, developments in horticulture would be prioritized.</p>
Promotion of restructuring, development of equipment of alternative energy production,	The use of cereals for the production of bioethanol shall reduce the surplus production,	The extent of support to machinery investments is identical with the conditions



technical-technological upgrade of such equipments.	difficult and expensive to place and results in the creation of a new, environment-friendly “industry”, ensuring new economic benefits.	described in respect of arable crop production. We provide priority to crop production for use as alternative energy, through the scoring system.
Deployment of herbaceous energy plantations	As one of the tools for restructuring, it contributes to a reduction of the overweight of cereals (70% of arable land).	Aid intensity is identical with the one for the deployment of plantations.
Modernisation of the fruit and grape plantations	The age and variety mix of the plantations is inappropriate (the share of aged fruit plantations is 30-50%, 50% of the grape plantations is older than 20 years). Taking into account of the market outlook and the given variety mix, annually, 2-3,000 ha of orchests and vineyards shall be planted or modernised. Doing so, an improvement in quality, a market-oriented product structure, an increase in income and job creation impact can be expected. With the exception of power machinery, it is reasonable to modernise the technical and technological background of the farms, especially the family farms (machinery for plant care, for post-harvest phases). It is important to mechanise some elements of the production technology (preliminary and green cuts, harvest).	Special support is provided for the joint investments of the producers’ associations and for bio-production. Aid intensity in the case of fruit plantation generally is 40%, in the case of young agricultural producers, 50%, increased to not more than 60% for young farmers active in LFA or NATURA 2000 areas.
Improvement of an energy-saving, environment-friendly, innovative technical-technological background in arable crop production (cereals, oil seed crops), with a reduction of yield fluctuations	The cost portion of machinery operation is high, which is particularly effecting for the competitiveness of the small-scale family farms. Insufficient available of modern tools for the cultivation of soil, distribution of fertilisers, partial absence of the preconditions for a reduction of high load for soils, the transportation infrastructure is weak, due to the backwardness of produce selection, material handling, storage losses are important. We make use of only a fragment of our potential in irrigation, this is one of the reasons for important	Aid intensity in a general case is 25%, but - in the case of particularly supported machinery (according to a separate list), it is 35%, - in the case of machinery and other investments for the post-harvest phases (drying of the produces, manipulation, storage) it can be up to 40%, but - in the case of investments made by young farmers or in NATURA 2000 or LFA areas, it is 50% and, where the applicant is a young farmer and the

	<p>fluctuations in yields. The average age of the machinery and equipment used in production is 12-15 years. The machinery mix in terms of performance does not harmonise with the structure of land use. In a European comparison, the performance per unit and the density of machinery is low. The use of corn for non-food and non-forage purposes has already started (alternative energy), the market outlook improved, no corn surplus shall be expected even in the medium term.</p>	<p>investment is made in a NATURA 2000 or LFA area, it is 60%!</p> <p>- in the evaluation of the applications, additional scores are given for the procurement of energy-saving and environment-friendly machinery and appliances, to investments into sectors with higher value-added</p> <p>Applicants keeping livestock can obtain higher scores during the scoring phase.</p>
<p>Increase, modernisation of the professional and IT skills of agricultural producers (with improvement of the access), promotion of acquisitions of IT equipment, with connection to networks (GAZDA-net Programme).</p>	<p>Typically, the skill levels of individual farmers are low (78.9% of them have no trade qualifications), especially in terms of expertise in modern information technology.</p>	<p>Incentives shall be ensured for registered producers (above 2 EUME) to purchase IT assets. IT tools purchased in the framework of the GAZDA-net Programme receive a support of 40%.</p>

Activities, sectors with no support	Reasons	
<p>Purchase of power machinery for arable crop production (cereals).</p>	<p>Machinery investments (making use of the SAPARD and ARDOP funds) were oriented towards rapid-return power machinery purchases. At the same time, power machinery supply in Hungary is still lower than the average of the EU. In order to retain the competitiveness it shall be possible to apply for machinery purchase at the aid intensity of 25% for a time period of 2-3 years.</p>	<p>Insufficient funds have been allocated to this measure, which would be committed in 2-3 years. Animal keeping applicants and environmental-friendly machinery would be prioritized. These aspects would be reflected during the scoring.</p>

## **The strategic span of the Programme**

The aim of this summary is to demonstrate that the Hungarian agriculture has a clear view for the future, describe it, and also the way it can be reached by the structural changes, part of which will be financed from the rural development fund.

Improving the competitiveness of the Hungarian agriculture aims at establishing a sector, which, can generate 30% higher added value and slowing down the decrease of the level of employment, and can contribute to the development of Hungary's agriculture and of the rural population's living standard. Although Hungarian agriculture is competitive, the need arises for structural changes. These can to a certain part be financed by the rural development fund.

According to the evaluation of the agricultural sector and the countryside, the Strategy must give answers to two interrelated challenges.

- 1. The basis for generating added value is to develop a product portfolio different from the current situation at two points:**
  - A. there is no structural surplus in any significant product,**
  - B. agricultural growth shifts towards the production of higher added value products**
- 2. The micro-economic competitiveness of agricultural holdings must be improved (in terms of the size of the holding, knowledge, R+D and the supply of assets).**

# 1. A. Establishing the structural balance in agricultural production

## 1.A.1. Analysis of the current situation

**1.A.1.1. In Hungary, the area of cultivatable land, within this the proportion of arable land is large.**

### Comparison of national land-use with the land-use in the EU <sup>1)</sup>

Definition	EU-15	EU-10	EU-25	Hungary
<b>Agricultural area</b>				
- total (1000 ha)	140987	38209	179196	5864
- ratio of the total area, %	43,5	51,7	45,0	63,1
<b>Arable land</b>				
- total (1000 ha)	74125	28663	102788	4513
- ratio of the agricultural area, %	52,6	75,0	57,4	76,9
<b>Employed in agriculture</b>				
- number (1000 persons)	6610	3824	10434	205
- ratio, %	4,0	13,0	5,4	5,2
Land endowment, ha/capita	20,7	10,2	16,7	28,6
Labour force density, capita/100ha	4,8	9,8	6,0	3,5
Territorial productivity* (€/ha)	1074	..	..	349
Work-productivity** (€/f )	22902	..	..	10125

<sup>1)</sup> The data as regards the European Union are related to the year 2002, the data as regards Hungary are related to the years 2004-2005.

\* Gross added value per one hectare of agricultural area

\*\* Gross value added per one person employed in agriculture (1€= 256 HUF)

Source: 15+10 From Rome to Athens Statistical Analysis, CHSO 2003; [www.faostat.fao.org](http://www.faostat.fao.org); Employment in Europe 2003. EUROSTAT, 2004. Hungarian Statistical Year-book

**1.A.1.2. Within the production of arable crops, the production of surplus cereals is dominant due to national production traditions and favourable ecological conditions (see Annex 1.)**

**1.A.1.3. In Hungary, the yield of cereals production is below the average of the EU-15 countries. (See Annex 2, 3 and 4).**

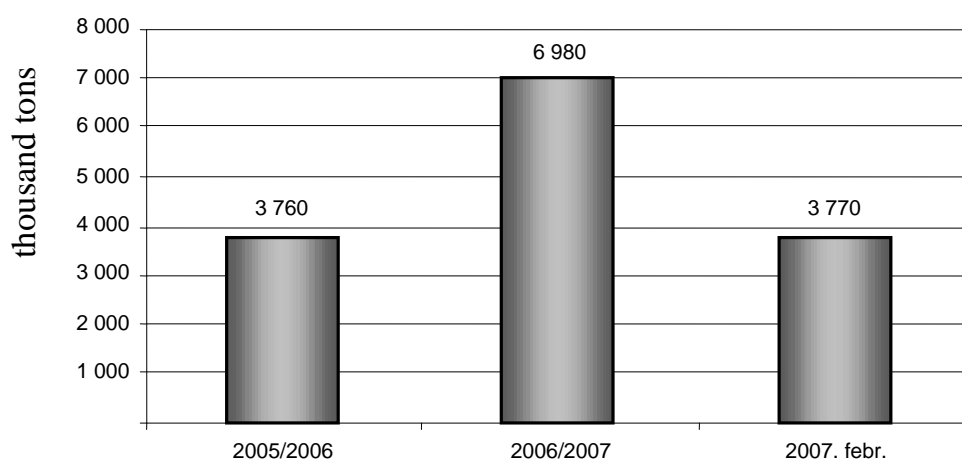
**1.A.1.4. The fact that the yields lagging behind the average of the EU is due to the fact that the technological level is significantly below the average of the EU, and expenditures spent on technological improvement are also lower.**

The indicators for performance endowment and machine density are low compared to other European countries. While in the EU on average 5,2 kW engine power falls on 1 ha, in Hungary this indicator is only 2,1 kW/ha. In Hungary the size of cultivated land by a tractor is 48,7 ha, in the EU it is 19,6 ha.

**1.A.1.5. As a conclusion, it can be stated that under the current structure of cereals production, short-term tension can be experienced on the cereals market in Hungary.**

Description	2004	2005	2006
Harvested crops	8 332	9 050	8 536
Total internal utilisation	4 114	4 178	4 200
Utilisation of fodder	3 572	3 583	3 606
Utilisation of seed	23	36	41
Production of bio ethanol	0	220	260
Other internal utilisation (industry)	519	340	292
Export	1 320	1 880	2 150
Import	24	7	0
Closing inventory	4 985	5 114	6 992

### The fluctuation of the maize intervention stock



Source: MARD

### 1.A.2. One method for reducing the surplus of cereals on the long run is to modify the land use structure

#### 1.A.2.1. Within the framework of the change in land use structure:

- a) 70 thousand ha of forest
- b) 50 thousand ha of short rotation coppice energy plantations
- c) 50 thousand ha of other energy plants (eg. energy cane, energy grass)
- d) 25 thousand ha of vegetables and fruits

will replace arable land with the help of the interventions and measures of the rural development programme.

### Change in land use in the period of 2006-2013

Land use	2006	Planned alignment	2013
<b>Area covered, thousand ha</b>			
<b>Plough-land</b>	<b>4509,6</b>	<b>-95<sup>1)</sup></b>	<b>4414,6</b>
Garden	96,0	-	96,0
Orchards	102,8	+25	127,8

Wineyards	94,3	-	94,3
Grassland	1014,5	-	1014,5
<b>Agricultural area</b>	5817,2	-	5817,2
Forests	<b>1776,7</b>	<b>+70</b>	<b>1846,7</b>
Reed	61,1	-	61,1
Fish pond	34,2	-	34,2
<b>Cultivable area</b>	7689,2	-	7689,2
Area removed from cultivation	1614,2	-	1614,2
<b>Total</b>	9303,4	-	9303,4
<b>Share in total (%)</b>			
<b>Plough-land</b>	<b>48,5</b>	-	<b>47,5</b>
Garden	1,0	-	1,0
Orchards	<b>1,1</b>	-	<b>1,4</b>
Wineyards	1,0	-	1,0
Grassland	10,9	-	10,9
<b>Agricultural area</b>	62,5	-	62,5
Forest	<b>19,1</b>	-	<b>19,8</b>
Reed	0,7	-	0,7
Fish pond	0,4	-	0,4
<b>Cultivable area</b>	82,6	-	82,6
Area removed from cultivation	17,4	-	17,4
<b>Total</b>	100,0	-	100,0

Source: Agricultural Statistical Yearbook 2005, CSO

**Measures promoting the changes in land use structure within the framework  
of the New Hungary Rural Development Programme**

Direction of the change in land use	Measure / article	Target value (change) for 2013	The impact on the reduction of surplus cereals coming from the decrease in cultivated land for 2013 (thousand tons)
The afforestation of short rotation coppice energy plants will increase	Modernisation of agricultural holdings /Article 26.	+ 50 thousand ha	1320

t/ha 4,8

year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
thousand tons	60	120	180	240	240	240	240	1 320
thousand ha	13	25	38	50	50	50	50	50

By the partial afforestation of agricultural land, the proportion of land covered by trees will increase.	First establishment of agroforestry systems on agricultural land /Article 43	+ 70 thousand ha	1100
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t/ha 2,857

year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
thousand tons	50	100	150	200	200	200	200	1 100
thousand ha	18	35	53	70	70	70	70	70

Renewable crop production for energy purposes	Modernisation of agricultural holdings /Article 26	Plantation	+ 50 thousand ha	1320
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t/ha 4,8

year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
thousand tons	60	120	180	240	240	240	240	1 320
thousand ha	13	25	38	50	50	50	50	50



Increase in the size of the land for vegetables and fruits	Modernisation of agricultural holdings /Article 26	Plantation	+25 thousand ha	880
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t/ha 6,4

year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
thousand tons	40	80	120	160	160	160	160	880
thousand ha	6	13	19	25	25	25	25	25

Measures promoting the change in the land use structure also have a significant impact on the competitiveness of agricultural holdings. The increase in the size of land, and to improve the competitiveness of the fruit and vegetables sector, investments in special machinery are needed.

#### **1.A.2.2. A realignment is expected within the land use structure of cereals production**

The cultivable area of corn, which causes the current surplus in production, will slightly decrease. It will give place to the production of:

- a) rapeseed
- b) sunflower

Direction of the change in land use	Measure/ article	Target value (change) for 2013	The impact on the reduction of surplus corn coming from the decrease in cultivated land for 2013 (thousand tons)
The cultivated area of rapeseed will increase	Modernisation of agricultural holdings /Article 26	+ 100 thousand ha	3.300

t/ha 6

year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
thousand tons	150	300	450	600	600	600	600	3 300
thousand ha	25	50	75	100	100	100	100	100

The cultivated area of sunflower will increase	Modernisation of agricultural holdings /Article 26	+100 thousand ha	3.300
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t/ha 6

year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
thousand tons	150	300	450	600	600	600	600	3 300
thousand ha	25	50	75	100	100	100	100	100

### Market background, external market trends, export possibilities

Hungary is the second largest producer of sunflower out of the 25 Member States of the EU with a share of 30% on the European market. Unlike the crops, the produced sunflower and rapeseed can be fully used in the domestic processing capacities or can be exported. The export of oilseeds of Hungary will increase by 620-640 thousand tons by 2010. This is one of the fields of production Hungary can be competitive in long term by using special machinery in the production.

The annual consumption of gasoil in Hungary is 2,2-2,3 million tons. Supposing an unchanged level of internal consumption and the fulfilment of EU requirements on the 5,75% share of biodiesel of renewable origin, it can be calculated that the internal demand on bio-diesel will reach up to 130 thousand tons, ensuring the market for the total rapeseed production in Hungary.<sup>10</sup>

**1.A.3. Problems caused by the production of surplus cereals cannot be solved merely by the changes in land use, they call for changes in the utilisation of cereals produced.**

#### **1.A.3.1. The production of bioethanol must be increased**

Government Decision 2233/2004 (IX. 22.) envisages a rate of 0,4-0,6% of bio-fuel by 2005 and 2% by 2010. This target was modified by Government Decision 2058/2006 (III.27.), increasing the share of biofuels in total production to 5,75% by 2010.

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<sup>10</sup> Source: International Agri-marketing prospects, Agricultural Research Institute, 2006.

Intervention	Measure/article	Target (change)	Impact reducing corn-surplus by 2013 (thousand tons)
Quantity of produced bio-ethanol increasing	Adding value to agricultural and forestry products /Article 28 within the frame of the rural development programme	+ 400.000 ha	13.950
	(EEOP)		

Year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
thousand tons	450	1050	1650	2250	2550	2850	3150	13950

Report of the International Energy Agency (IEA) – related to OECD – on „Biofuels for Transport” makes reference to many sources gives 3,1-3,4 kg of maize-appropriation to produce one kg of ethanol. <http://www.iea.org/>

The processing capacities for bioethanol and bio-diesel is summarized in the following tables.

Planned capacities(t/year), bio-ethanol	
Factory	Capacity
Gy r	35000
Göny	125000
Almásf zit	167000
Dunaalmás	117000
Szabadegyháza	150000
Gyöngyös	37000
Vásárosnamény	167000
Hajdúsámson	333000
Kaba	100000
Martf	100000
Szeghalom	100000
Csabacs d	117000
Orosháza	100000
Battonya	100000
Kecskemét	167000
Bácsalmás	117000
Fadd	100000
Mohács	225000
Csurgó	100000
Marcali	167000
Total:	2624000

Planned capacities (t/year), bio-diesel	
Factory	Capacity
Pacsa	11000
Mosonmagyaróvár	12000
Göny	50000
Komárom	150000
Bábolna	18000
Gyöngyösoroszi	20000
Gyöngyös	40000
Szerencs	11000
Mátészalka	5000
Polgár	50000
Bánhalma	5000
Baja	30000
Tab	11000
Total:	413000

## Market background

### a. Increase of domestic consumption

According to the Government Decisions cited above, a significant internal market for bio-ethanol is ensured.

## Ethanol

Hungary	2006	2008	2010	2015	2020
Petrol consumption, in thousand tons	1500	1560	1608	1745	1877
Blending proportion %	0.95	3.75	5.75	7	10
Demand for bioethanol, in thousand tons	17	71	144	190	291
Demand for raw materials, in thousand tons	54.4	227.2	460.8	608.0	931.2

Source: Energy Center Kht. and Mol Plc. Trend calculation based on data

EU objective

Agricultural Economics Research Institute calculation for energy content

Based on the international export index (OECD)

### b. Trends of foreign markets, export possibilities

According to economic forecasts, the potential demand on bio-ethanol is significant: to reach the target set in the Bioenergy Directive, there is a potential demand for 22 Million tons of bio-ethanol in the EU by 2010. Based on this, no decline can be forecasted in the crop production of Hungary, although the structure of use of crop produced will significantly change. At present, there are already a production capacity of 3 Million tons for bio-ethanol in Hungary.<sup>11</sup>

The bio-ethanol production in the world took up to 45 Billion liter-s in 2005, out of which 18 Billion was produced in Brazil, 15 Billion in the USA, 3,1 Billion in the EU and another 10 Billion in other countries.

A detailed production structure and forecast for the world market can be found in Annex 5.

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<sup>11</sup> Source: International Agricultural Prospects, Agricultural Research Institute, 2006.

**The use of biofuels in the EU-25**  
(In the share of energy content,%)

Member State	The share of biofuels			National indicative target		2020
	2003	2004	2005	2005	2010	
Austria	0,06	0,06	0,93	2,5	5,75	
Belgium	0	0	0	2	5,75	
Ciprus	0	0	0	1		
Czech Republic	1,09	1	0,05	3,7	3,27	
Denmark	0	0	na.	0,1		
Estonia	0	0	0	2	5,75	
Finland	0,11	0,11	na.	0,1		
France	0,67	0,67	0,97	2	7	
Germany	1,21	1,72	3,75	2	5,75	
Greece	0	0	na.	0,7	5,75	
Hungary	0	0	0,07	0,6	5,75	
Íreland	0	0	0,05	0,06		
Italy	0,5	0,5	0,51	1	5	
Latvia	0,22	0,07	0,33	2	5,75	
Lithuania	0	0,02	0,72	2	5,75	
Luxemburg	0	0,02	0,02	0	5,75	
Mata	0,02	0,1	0,52	0,3		
Netherlands	0,03	0,01	0,02	2	5,75	
Poland	0,49	0,3	0,48	0,5	5,75	
Portugal	0	0	0	2	5,75	
Slovakia	0,14	0,15	na.	2	5,75	
Slovenia	0	0,06	0,35	0,65	5	
Spain	0,35	0,38	0,44	2		
Sweden	1,32	2,28	2,23	3	5,75	
United Kingdom	0,026	0,04	0,18	0,19	3,5	
<b>EU-25</b>	<b>0,5</b>	<b>0,7</b>	<b>1,0</b>	<b>1,4</b>	<b>5,45</b>	<b>10</b>

Source: European Commission

The main reasons to increase the bio-ethanol and bio-diesel production are:

1. In case of bio-diesel inland production shall satisfies only inland demands beside above mentioned blending proportions.
2. In Hungary consider to bio-diesel capacities materialize by the help of foreign fund possibilities of housings of foreign market are guaranteed.

3. In case of bio-ethanol prospective inland production in coming years exceeds the inland demand on the score of blending proportion. Forasmuch several memberstates of EU are cannot fulfill the expected blending proportion from inland production, therefore steady market position is guaranteed to inland producers.
4. In case of inland bio-ethanol capacities swedish and finnish producers (by means of their investments) – who shall consume produced bio-ethanol in their home country – are directly interested.

### **1.A.3.2. Animal husbandry shall be improved**

Increase in live-stock results in increasing fodder utilization, whose cumulated impact lowers the grain-surplus produced.

#### ***1.A.3.2.1. Pork***

#### **Expected development of pork stock until 2013**

Swine stock (thousand animals)	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
	3842	3850	3950	4079	4214	4439	4539	4846

Source: calculations of the Research Institute for Agricultural Economics, Department for Research in Agricultural Politics

Year	<b>2 007</b>	<b>2 008</b>	<b>2 009</b>	<b>2 010</b>	<b>2 011</b>	<b>2 012</b>	<b>2 013</b>	<b>Total</b>
thousand tons	5	30	55	80	105	125	175	575*

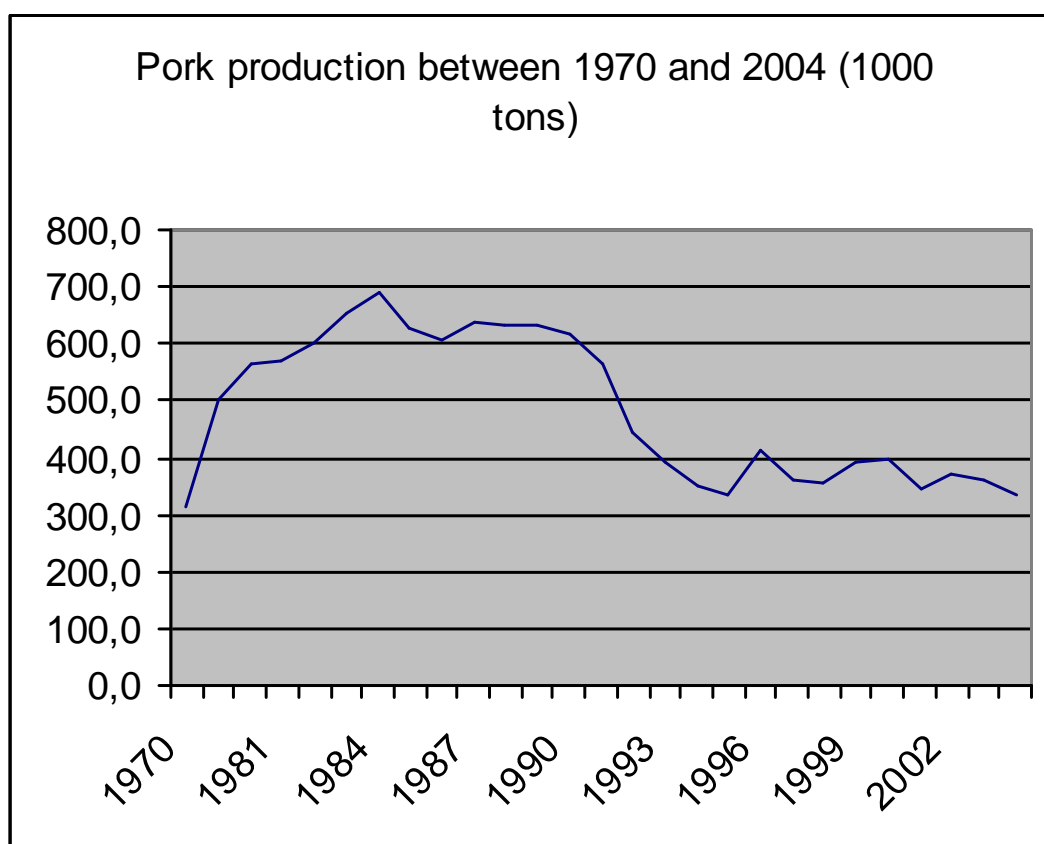
\* The calculations are based on the survey of Danske Slagterier [2006].

<http://www.danskeslagterier.dk/>

The main reasons to increase the pork stock production are:

1. In the year of 2000 pork stock was approximately 5 million in Hungary.
2. Livestock has decreased by more than one million animals in last three years.
3. Since Hungary joined EU import dramatically increased (both livestock and pork).
4. Slaughterhouses and processing plants increases their supplies based on import.
5. Hungary became to net importer.
6. Decrease of import and increase of inland basic commodity demand is expected in coming years.
7. Consumption in Hungary only 28,8 kg/year/person in case of pork, which rate is less than EU-average (42 kg) by more than 10 kg.
8. Increase of consumption is expected.
9. Export positions of Hungary are on the up grade by join of Romania, or rather uneasily entry of Polish pork into Russian market.

On the whole the above mentioned facts justify the increasing of pork stock in coming years.



Currently there is no sufficient supply of slaughter pork on the pig market, because the stock of individual farmers decreased by 1 million animals following accession, at the same time this lacking quantity cannot be supplied by agricultural holdings with legal entity. That is why the processing industry increased the import of live-swine and pork in the previous 3 years significantly. The presently high quantity of live-pig- and pig-import could be substituted by increasing domestic swine stock. Pig stock could be increased between 2007-2013 by 2 million animals, although this largely demands the completion of necessary investments in technology (technology of foddering, heating, modernization of ventilation, updating of space capacities).

Intervention	Measure/article	Target (change) by 2013	Impact reducing corn-surplus due to increase in fodder utilization by 2013 (thousand tons)
Increase of pig stock	Modernisation of agricultural holdings/Article 26	+1 million animals	575
	Meeting standards on Community legislation/Article 31		

#### **1.A.3.2.2. Poultry-meat**

##### **Expected development of poultry-meat stock until 2013**

Output of meat-broiler (thousand tonnes)	2006	2007	2008	2009	2010	2011	2012	2013
	442	450	455	460	465	470	475	480

Source: calculations of the Research Institute for Agricultural Economics, Department for Research in Agricultural Politics

Year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
thousand tons	5	10	15	20	25	30	35	140*

\* The calculations are based on the survey of ITAVI (Institut Technique de l'AViculture) [2005].

<http://www.itavi.asso.fr/>

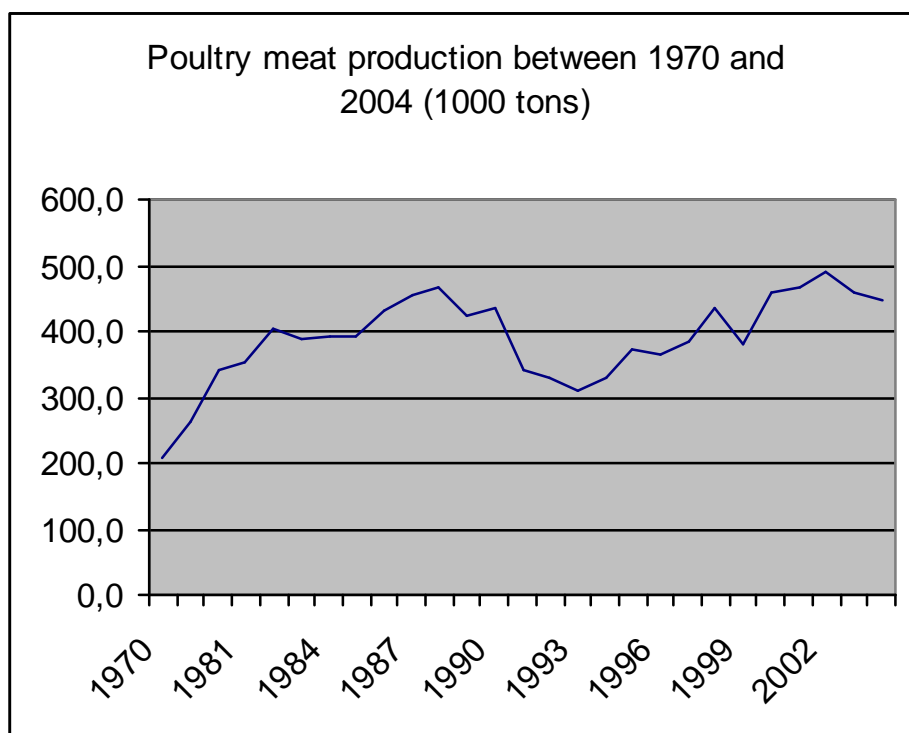
The main reasons to increase the poultry-meat production are:

1. Within the increase of poultry-meat production increase of production of other races (turkey, duck, goosey) is expected in coming years.
2. Maize-demand of these races is higher than maize-consumption of meat broiler.
3. Market position of these races is favorable in view of the whole memberstates (competition is not so sharp as in case of broiler).

On the whole increase of production by the rate of 8% is expected.

Output of meat-broiler production is expected to slightly increase between 2007-2013. Production is expected to cover the domestic demand, but in order to prevent from further decrease in production and import-dependency the sector demands additional investments.





Intervention	Measure/article	Target (change) by 2013	Impact reducing corn-surplus due to increase in fodder utilization by 2013 (thousand tons)
Increase in meat-broiler stock	A Modernisation of agricultural holdings/Article 26	+38 thousand tons	140
	Meeting standards on Community legislation/Article 31		

#### ***1.A.3.2.2. Cattle***

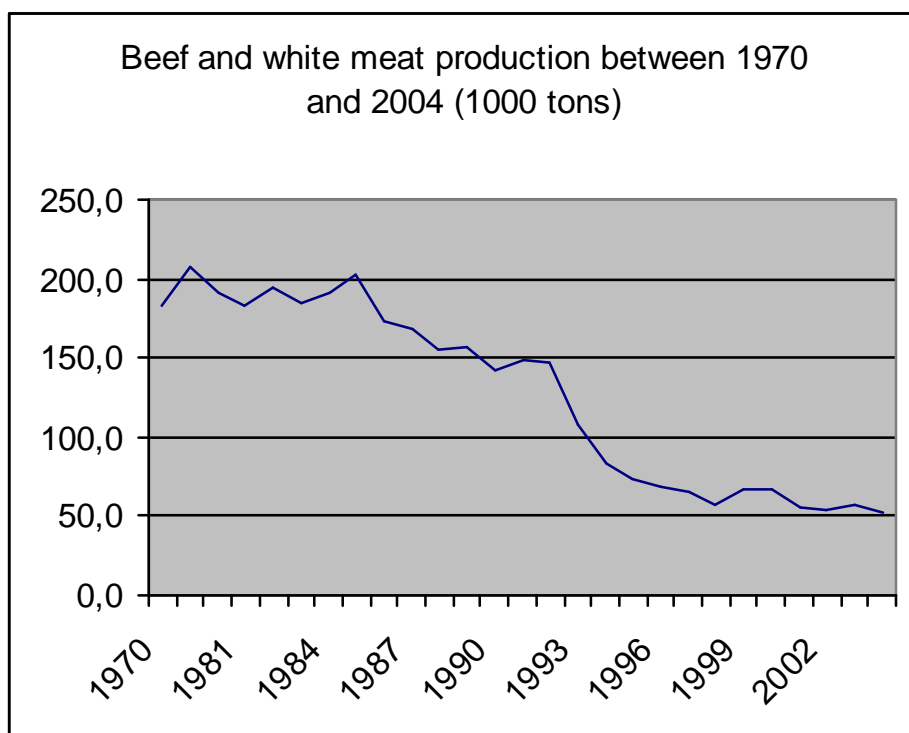
#### **Expected development of cattle stock until 2013**

Cattle stock (thousand animals)	2006	2007	2008	2009	2010	2011	2012	2013
	702	705	715	730	745	760	780	800

Source: calculations of the Research Institute for Agricultural Economics, Department for Research in Agricultural Politics

Year	2 007	2 008	2 009	2 010	2 011	2 012	2 013	Total
Additional thousand tons of cereal needed	5	5	10	20	30	45	60	175

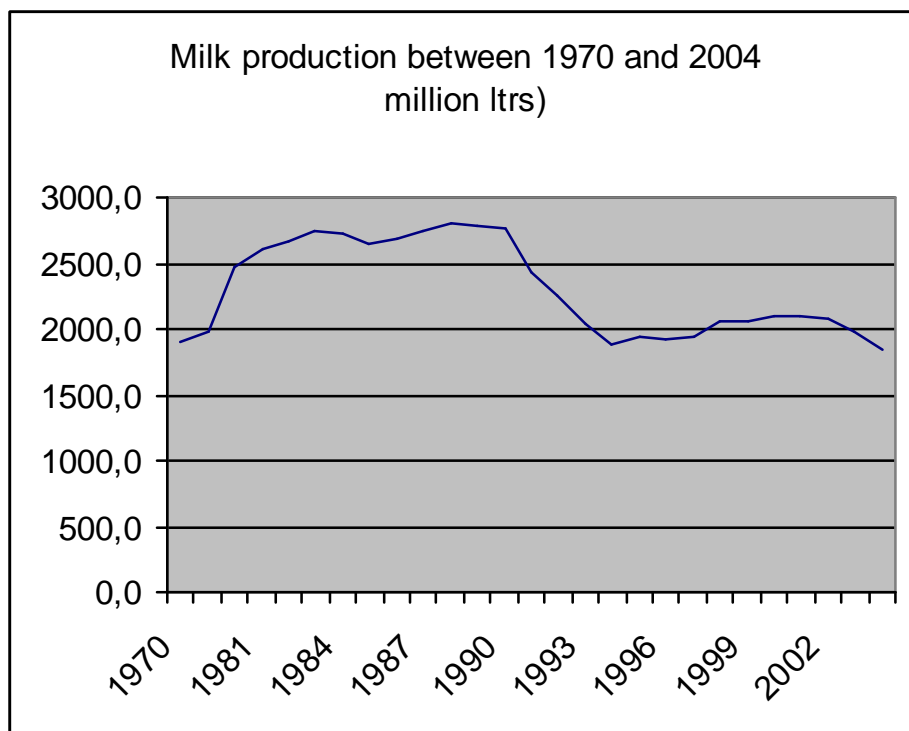
The calculation is based on the research of the Agricultural Research Institute.



Based on the data of the ARDA, the basic information for the milk quota period is the following:

- Quota: 1,947,280 tons + 42,780 (100%)
- Quota distributed: 1,855,244 tons (93%)
- Quota achieved: 1,600,194 tons (80%)

Therefore the available milk quota provides opportunities for the further expansion of milk production and for increasing the cattle stock.



The main reasons to increase the cattle-stock production are:

1. Cattle stock has continually decreased in last ten years.
2. Import is increasing since Hungary join EU.
3. Domestic consumption is the lowest in the EU-25, less than 4 kg/year/person, while the same statistic in EU-15 is 19 kg/year/person.
4. Because of the EU became to net importer in case of beef in last years, there is an obvious market possibility to produce quality beef in Hungary.
5. Rate of meat-cows continually increase since Hungary join EU.
6. Within animal-husbandry sector the most profitable is meat-cattle breeding.

On the whole increase of production is predicted in case of meat-cattle sector, in which case possibilities of EUmarket make real this trend.

Denomination	Rate of change: 2004 compared to 1980
Pork <sup>1</sup> production <sup>2</sup>	59,2
Beef and white meat <sup>1</sup> production <sup>2</sup>	27,0
Horse- and sheep meat <sup>1</sup> production <sup>2</sup>	44,4
Poultry meat <sup>3</sup> production <sup>2</sup>	131,1
Egg production <sup>4</sup>	75,9
Milk production <sup>5</sup>	74,8
<sup>1</sup> In weight of boned meat	
<sup>2</sup> With livestock export	
<sup>3</sup> In chopped weight without animal fat	
<sup>4</sup> Data concerning only hen egg production until 1996, from 1997 items include other poultry egg production	
<sup>5</sup> Milk with butter	

Production of animal foodstuffs (kg/person), 2003

Country	Meat total	Of which:			Fish	Milk (litre)	Egg (pcs)
		Beef and white meat	Pork	Poultry meat			
Austria	105	27	63	14	0	427	198
Belgium	168	26	101	39	3	337	306
Danmark	394	27	327	38	290	867	270
France	109	28	39	35	14	412	270
Netherland	149	29	87	32	36	668	720
Ireland	246	142	54	33	108	1328	144
Hungary	115	6	60	47	2	207	270
Germany	80	15	51	12	3	343	180
Italy	74	20	28	20	9	192	216
Portugal	69	9	32	24	19	201	180
Source: International statistics annual, KSH							

Intervention	Measure/article	Target (change) by 2013	Impact reducing corn-surplus due to increase in fodder utilization by 2013 (thousand tons)
Increase in cattle stock	Modernisation of agricultural holdings/Article 26	+100 thousand animals	175
	Meeting standards on Community legislation/Article 31		

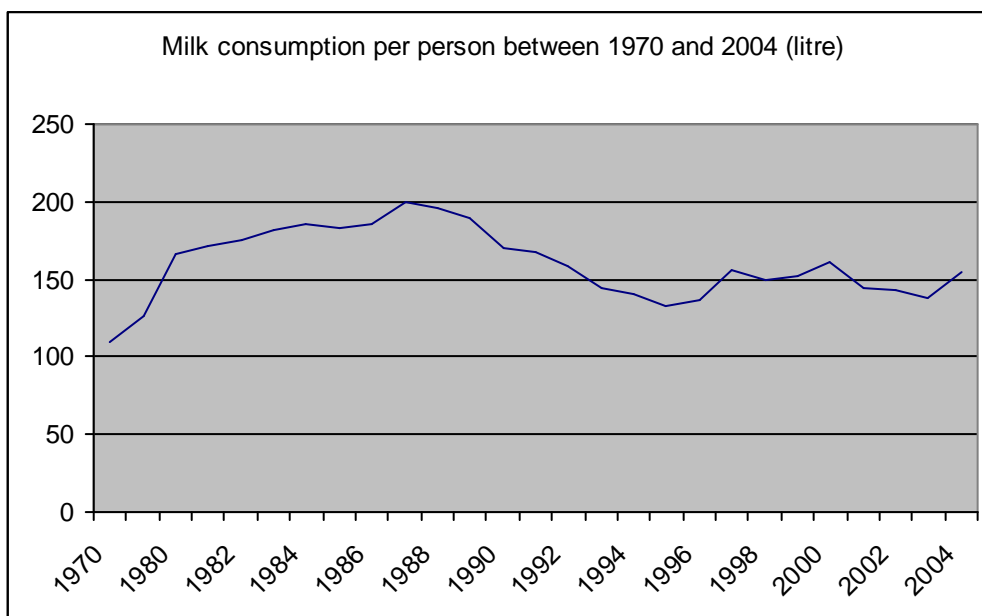
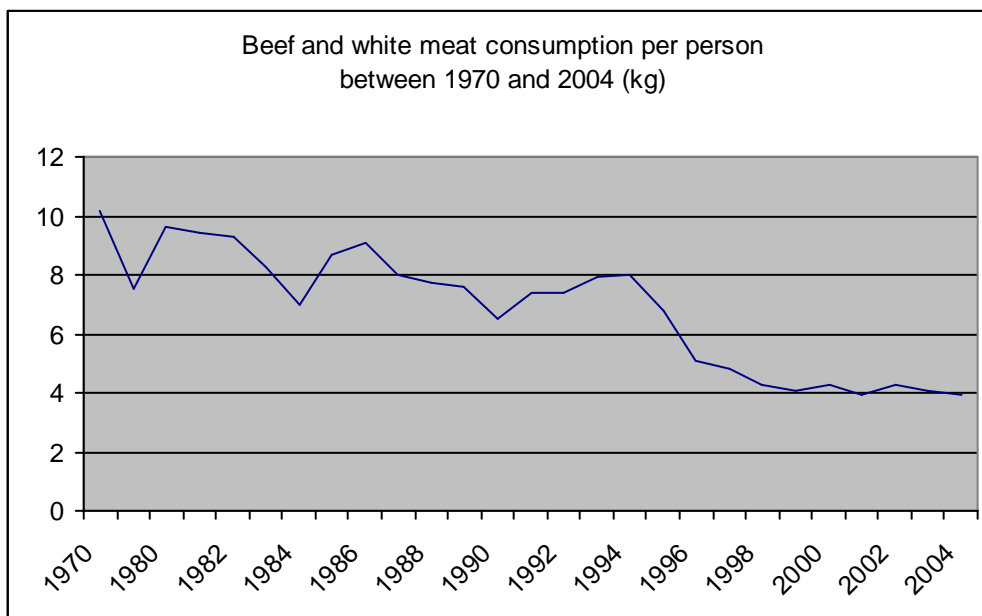
Measures that promote the change in the structure of use of crop produced largely contribute to creating more added value in the production chain (animal husbandy and bio-ethanol production).

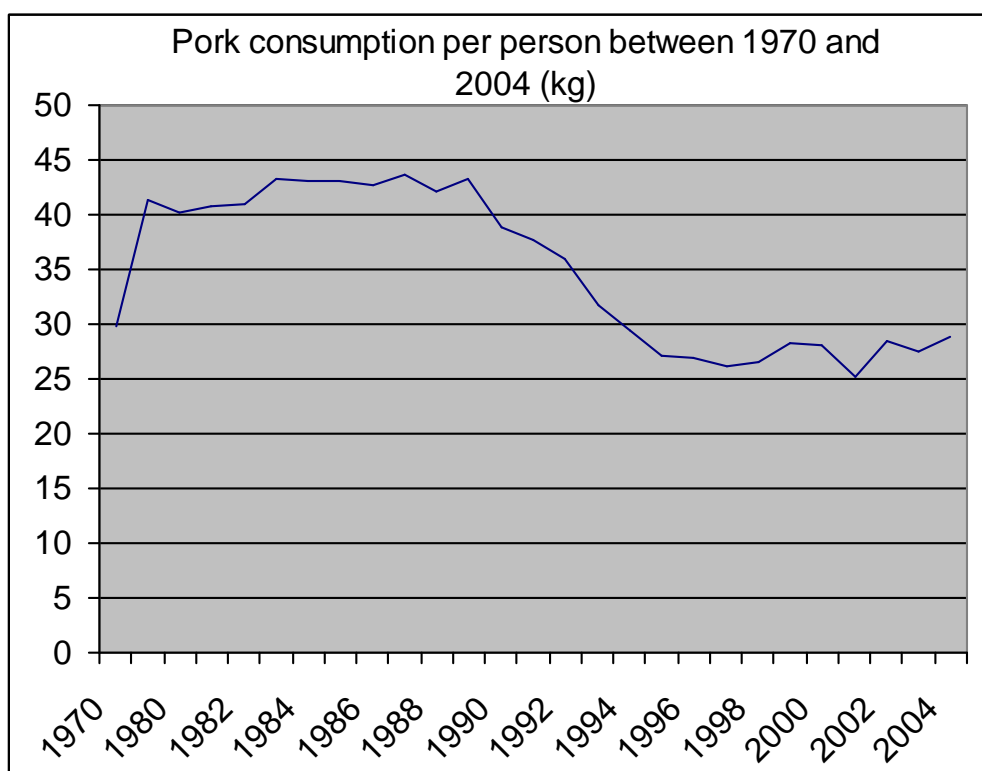
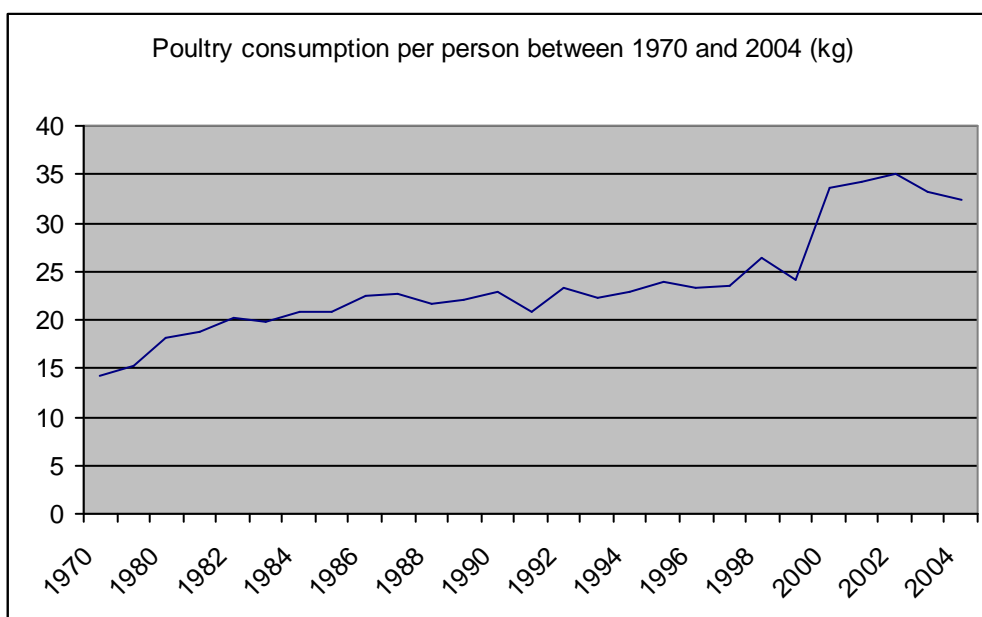
### Market background

#### a. Increase of domestic consumption

The level of domestic consumption of most foodstuffs is slightly increasing (meat 70kg/person – of this: pork and broiler 30-30 kg/person, flour 90 kg/person, milk 150 kg/person, vegetable-fruit 210 kg/person). The enhancement of the consumption level of fruits and vegetables is of national importance due to common health and is accordingly the development of the sector (which is substantiated on both the producer and consumer side) is displayed in the national strategy. The domestic conditions of the fruit- and vegetable production and the expansion trend make the domestic enhancement of this product line a realistic objective. The composition and structure, and the level of foodstuff consumption is stable and high enough in Hungary to realise a slight increase in consumption and to insure that the domestic market shall remain a **stable but moderately increasing absorbing market** for Hungarian products.

In the surveys of the Hungarian Statistical Office it is shown that milk consumption is growing due to the increasing incomes. Mainly high added value products (cheese, yoghurt, milk desserts) are affected by this increase.





#### b. Trends of foreign markets, export possibilities

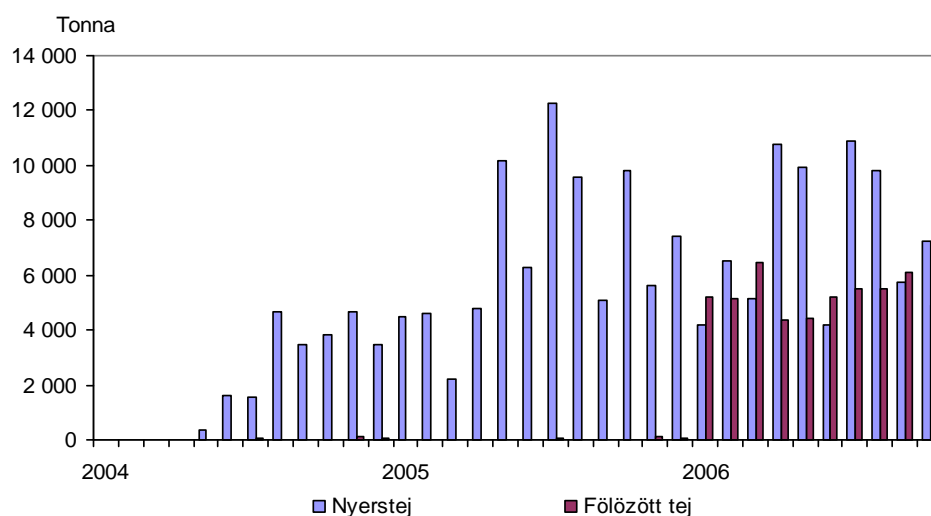
Hungarian exports concerning foodstuffs amounted to 3.3 billion euros and our import to 2.4 billion euros in 2005, therefore our sectoral foreign trade balance sank below 1 million euros (0.9 million euros) for the first time. The exports of Hungarian foodstuff industry **may reach 3.9 billion euros by 2008, and 4.5 billion euros by 2013 due to the widening basis of export commodities and the favourably**

**changing export structure.** To ensure the right quality in the right quantity of export products, the technology used in the production shall be still improved. The increase of import has exceeded the increase of export since 2001, which tendency is going to persist in the future – in a modest pace. Presuming an increase of annually 2 percent our import may reach 2.7 billion euros by 2008 and 2.85 billion euros by 2013. Therefore our foodstuff foreign trade balance is expected to be some 1.2 billion euros by 2008, and some 1.5 billion euros by 2013.

**The increase of milk production may be based on the export possibilities:**

- **The export of raw milk to Italy is growing rapidly: In 2004, Hungary exported 23,837 tons, in 2005 82,562 tons and in 2006 this figure was 157,793 tons.**

**Raw milk exports to Italy**



**Source: CLAL**

\* Tonna > Tons

\* Nyerstej > Raw milk

\* Fölözött tej > Skimmed milk



**The world market of dairy products:** The prices of dairy products and milk grew at the end of 2006, which was the result of an output reduction of the EU and Australia. It is expected that all dairy products will exceed the 2006 price level in 2016. The growing influence of redistributors' networks and multinational dairy companies, the longer expiry periods of products, the better refrigeration and storage equipment, the growing incomes and a larger demand by developing countries for dairy products (e.g. China or Brazil, where the increase of milk consumption is part of the government agenda) may all be considered positive changes. In the medium term the price of butter and cheese may increase. Milk production is growing worldwide; output is being extended in low production cost countries outside the OECD (China, India, Argentina, New Zealand and Ukraine). It is expected that the milk and dairy product trade balance of the EU and the US will decrease by 10% and 30% respectively. On the other hand, the same figure regarding Ukraine and Argentina will grow by 14% and 60%. Argentina can become a major player in the milk-powder and cheese market by 2016. Russian dairy imports (mainly cheese and butter) may grow by more than 50% in the medium term. [OECD-FAO, 2007]

#### **1.A.4. Development of logistical capacities, promotion of launching products on the market, agri-marketing**

The competitiveness of Hungarian agriculture and food economy in the export can be also improved by agri-marketing. International examples illustrate that countries with considerable boost in exports possess strong food economic marketing organization. The relationship between agricultural marketing and exports successes is widely shared. External market organizations with well-constructed general functions and the agricultural diplomacy and marketing, as well as well-financed and appropriate operation together produce a synergic impact on the successful expansion of food exports. In case the competence of external market players with various roles is made clear, their activities are harmonized, and resources are allocated on agricultural marketing (teaming with producers), **the opening of newer market segments can be expected** to open for Hungarian agricultural and food products.

The development of logistic capacities can provide better market access for agricultural products as well as can contribute to competitiveness through decreasing the cost of transportation, animation and product handling. Logistic capacities shall ensure the access to far-distance export markets (India, China) as these countries have an increasingly important role in the agricultural trade and have significant demand on agricultural products.

Hungary is a landlocked country, which causes additional transportation costs for agricultural commodities, resulting a drawback in competitiveness and market positions. To tackle this disadvantage, and to ensure the appropriate quantity in good

quality in the long run on the export markets, - besides further technological improvement in the production – a developed transport logistics system is required exploiting the possibilities of water and railway transportation. With integrated logistics concept and investments mostly based on the financial resources of the Structural Funds, agricultural products can have a better market access in the coming period.

Summary of point 1.A.

As the result of the interventions and measures described below, the structural balance can be also ensured at the current level of crop production in Hungary. But on the other hand, in order to sustain the balance and ensure the competitive edge of the sectors using the crop stocks in Hungary (animal husbandry, bio-ethanol industry), an improving cost-structure in the production of crops shall be reached. This question can be examined at micro-level (at farm-level). This needs the improvement of the competitiveness of crop production through the use of improved (cost effective and environmental-friendly) technology.

## **1.B. The domestic agricultural production will shift towards the production of commodities with an increased added value.**

### **1.B.1. Analysis of the current situation**

1.B.1.1. The quantity of export of agricultural products is low when compared to the potentials

#### **Area intensity of agricultural exports**

The area intensity of Hungarian agricultural exports, i.e. the international comparison of the value of agricultural exports from one hectare of agricultural land, also suggests that in this sector the added value in Hungary is relatively low. The value of agricultural exports from one hectare of agricultural land was 704 USD in case of Hungary in 2005. The relatively small-area Benelux countries and Denmark export a large proportion of animal products and processed food and thus they show much higher area intensity than any other country: the Netherlands 24,535 USD/ha, Belgium 17,317 USD/ha, and Denmark 4,945 USD/ha. At the same time, however, from this aspect Hungary is lagging well behind Germany (2,313), Italy and France (1,582 and 1,578 respectively), but also behind Austria and Slovenia. Regarding this index, the international position of Hungary became even worse between 1999 and 2005.

#### **1.B.1.2. Relatively low proportion of processed products in Hungarian food exports**

In 2005 the EU average of the proportion of processed products was 78 %, in terms of raw materials it reached 22% compared to the total of food exports. In Hungary this level fell even lower with processed products with 69% in 2005. At the same time, this value in Poland, achieving considerable exports successes recently, reached 80%, but Denmark's share also exceeds the EU average.

Rate of processing	EU25	Hungary	Netherlands	Denmark	Poland
Processed (%)	78	69	78	79	80
Raw materials (%)	22	31	22	21	20

#### **1.B.1.3. The Hungarian highly-processed exports products are facing intense competition**

The comparison of the international market situations concerning 37 of the most significant exported Hungarian foodstuffs with 36 competitive countries proves that many products at risk in terms of competition belong to the product group with high added value: food supplements, bakery products, chocolate, cheese, wine, sweets, preserves, vegetable and fruit juices, alcohol free beverages, sausages, and coffee. This

also justifies that in an ever more concentrated commercial environment the conditions for entering and remaining in the market require the most substantial financial and human investment in case of sectors producing secondary food commodities.

#### **1.B.1.4. In international comparison, R&D activity in Hungarian food industry is not sufficient**

Hungarian food industry – especially the small- and medium-sized food businesses in rural territories – is characterized by occasional innovation activity as opposed to old EU member states where 60-65% of companies possess an own R&D department or at least a responsible person. In Hungary less than 1.0% from the 5.4 million Euro value added by production by the food industry is spent on research and development, while this proportion is between 0.3% and 1.5% in EU states with more significant food industry performance. This problem is further exacerbated by the fact that the higher payments and better working conditions in Western European countries threaten to result in the brain-drain of qualified R&D experts and industrial professional from new member states.

#### **1.B.1.5. Summary of the current situation**

In 2004 in Hungary an average of 366 Euros of added value was produced in one hectare. This value in the EU-25 average reaches 818 Euros. **The difference is over twofold.** If, based on this index, the member states are put into a list, Hungary is to be found in the last third, and from among the new member states Slovenia and Poland are in a better position than Hungary.

Hungarian crop farmers produce 303 Euros of added value in one hectare of agricultural land as opposed to the 540 Euro value of the EU-25. The difference is striking even in case of crop farming sectors in the least unfavourable situation.

### **1.B.2. The solution is the increase of added value of agricultural products**

#### **1.B.2.1. The impacts of the decrease of surplus in crop production**

##### **1.B.2.1.1. The increase of animal stock**

**Animal husbandry has a significantly stronger added-value creating role.**

Countries	Value of fixed assets Euro/ha	Value of fixed assets Euro/livestock	Net added value Euro/ha	Net added value Euro/livestock	Net added value/value of fixed assets
<b>Hungary</b>	<b>1769</b>	<b>4125</b>	<b>366</b>	<b>854</b>	<b>0,21</b>
EU-25 average	6731	7968	818	968	0,12

Currently the ratio of crop production and animal husbandry expressed in gross production value is 55/36. The objective of Hungary is to diminish the imbalance of the two branches.

**The gross production volume broken down by the main activities (sectors).**

Activity/Sector	Gross production volume at current prices (Billion Ft)			The share of gross production volume (%)		
	2003	2004	2005	2003	2004	2005
Crop production	700,8	967,9	835,8	49,5	58,4	55,0
Animal husbandry	587,3	541,7	556,9	41,5	32,7	36,6
Non-agricultural activity	51,9	50,5	39,9	3,7	3,0	2,6
Agricultural services	76,7	96,4	87,8	5,4	5,8	5,8
Total agricultural production	1416,8	1656,6	1520,3	100,0	100,0	100,0

*Source: Agricultural Statistical Yearbook 2005, CSO, 2006*

Note: When comparing only the total production volumen of the two main sector, it can be concluded that crop production has a share of 60%, while animal husbandry has a share of 40% of the total. (2005).

**1.B.2.1.2. The increase of the area used for horticulture, the improvement of the horticultural sector**

**1.B.2.2. Increase the level of processing agricultural products**

**1.B.2.3: Investments aiming at quality production**

### **Summary of measures aiming at increasing the added value of agricultural products**

Objective	Measure	Justification
Increase the added value of agricultural products	Adding value to agricultural and forestry products	Creating more added value is the key element in increasing competitiveness, market orientation and innovation.
Increasing the level of processing		
Investments aiming at quality production		

## 2. Supportive business-environment at micro-level

### 2.1: Analysis of the current situation

**2.2.1: The increase of the size (land) of holdings have been experienced in Hungary and this tendency is likely to be continued.**

**The number of private farms and economic organisations and the land cultivated by them broken down by the size of land, 2000-2005**

The size of holding	Holdings		Land cultivated		The average size of a holding, ha
	Number	in percentage %	Hectare	%	
2000					
Private farms					
Under 10 ha	874040	94,5	928387	35,5	1,06
10-50 ha	43630	4,7	898187	34,4	20,59
50-100 ha	4654	0,5	317613	12,1	68,25
100-300 ha	2218	0,2	351598	13,4	158,52
Above 300 ha	249	0,0	118533	4,5	476,04
Total	924791	100,0	2614318	100,0	2,83
Economic organisations					
Under 10 ha	787	14,6	3067	0,1	3,90
10-50 ha	1356	25,1	40640	1,1	29,97
50-100 ha	593	11,0	45625	1,2	76,94
100-300 ha	1101	20,4	232724	6,1	211,38
Above 300 ha	1555	28,8	3511944	91,6	2258,48
Total	5392	100,0	3834000	100,0	711,05
Total number of holdings					
Under 10 ha	874824	94,0	893996	13,9	1,02
10-50 ha	44986	4,8	957165	14,8	21,30
50-100 ha	5246	0,6	370579	5,7	70,64
100-300 ha	3320	0,4	592952	9,2	178,60
Above 300 ha	1804	0,2	3633495	56,4	2014,13
Total	930180	100,0	6448000	100,0	6,9
2003					
Private farms					
Under 10 ha	662856	93,6	669752	28,4	1,01
10-50 ha	37132	5,2	763578	32,4	20,56

50-100 ha	5130	0,7	354326	15,0	69,07
100-300 ha	3062	0,4	509682	21,6	166,45
Above 300 ha	153	0,0	60351	2,6	394,455
<b>Total</b>	<b>708333</b>	<b>100,0</b>	<b>2357689</b>	<b>100,0</b>	<b>3,33</b>
<b>Economic organisations</b>					
Under 10 ha	1190	17,3	4514	0,1	3,79
10-50 ha	1764	25,6	46526	1,3	26,38
50-100 ha	836	12,1	60414	1,7	72,27
100-300 ha	1567	22,7	307975	8,9	196,54
Above 300 ha	1534	22,3	3052663	87,9	1990,00
<b>Total</b>	<b>6891</b>	<b>100,0</b>	<b>3472092</b>	<b>100,0</b>	<b>503,86</b>
<b>Total number of holdings</b>					
Under 10 ha	664046	92,8	673922	11,6	1,01
10-50 ha	38896	5,4	810340	13,9	20,83
50-100 ha	5966	0,8	414497	7,1	69,48
100-300 ha	4629	0,6	817918	14,0	176,69
Above 300 ha	1687	0,2	3113103	53,4	1845,35
<b>Total</b>	<b>715224</b>	<b>100,0</b>	<b>5829781</b>	<b>100,0</b>	<b>8,15</b>
<b>2005</b>					
<b>Private farms</b>					
Under 10 ha	616070	93,45	574154	25,3	0,93
10-50 ha	34149	5,18	699147	30,8	20,47
50-100 ha	5340	0,81	369990	16,3	69,29
100-300 ha	3494	0,53	556913	24,6	159,39
Above 300 ha	198	0,03	68281	3,0	345,25
<b>Total</b>	<b>659251</b>	<b>100,00</b>	<b>2268486</b>	<b>100,0</b>	<b>3,44</b>
<b>Economic organisations</b>					
Under 10 ha	1193	16,83	4474	0,1	3,75
10-50 ha	1784	25,17	46803	1,4	26,24
50-100 ha	918	12,96	65042	1,9	70,83
100-300 ha	1486	20,97	282194	8,2	189,91
Above 300 ha	1706	24,07	3042874	88,4	1784,05
<b>Total</b>	<b>7086</b>	<b>100,00</b>	<b>3441386</b>	<b>100,0</b>	<b>485,66</b>
<b>Total number of holdings</b>					
Under 10 ha	617161	92,62	578981	10,1	0,94
10-50 ha	35982	5,40	745709	13,1	20,72
50-100 ha	6264	0,94	435092	7,6	69,46
100-300 ha	4998	0,75	838780	14,7	167,84
Above 300 ha	1932	0,29	3111309	54,5	1610,09
<b>Total</b>	<b>666337</b>	<b>100,00</b>	<b>5709872</b>	<b>100,0</b>	<b>8,57</b>

Source: General Agricultural Datacollection, 2000 – Territorial Data, CSO, 2000.;

The agriculture of Hungary, CSO 2004.,

The agriculture of Hungary, CSO 2006.



**2.2.1.1: It can be concluded that in the private sector, the concentration of land and the increase of holdings is fostered by market-mechanisms.**

**2.2.1.2: Special programme will be launched that is tailored for semi-subsistence farms (2-4 ESU) and young farmers.**

**The number of holdings, broken down by the size of the holding**

The size of holdings (ESU)	Private farms		Economic organisations		Total	
	Number	agricultural land, ha	Number	Agricultural land, ha	number	Agriultural land, ha
Under 2,0	625863	399429	2197	6720	628060	406149
2,1-3,0	24092	129146	210	2358	24302	131504
3,1-4,0	13855	114928	181	2885	14036	117813
4,1-5,0	8574	93689	134	2594	8708	96283
5,1-6,0	6406	87730	145	2437	6551	90167
6,1-8,0	7576	130704	245	5942	7820	136647
8,1-12,0	7826	193422	386	12040	8212	205462
12,1-16,0	3764	146443	354	15132	4118	161575
16,1-40,0	6995	488418	1087	83184	8082	571602
40,1-100,0	1795	303213	1195	232864	2990	536077
100,1-250,0	125	19105	841	383804	966	402909
Above 250	24	4313	963	1406048	987	1410361
Total	706895	2110540	7938	2156008	714832	4266549

Source: The agriculture of Hungary, 2005. CSOM 2006,

A magyar mez gazdaság f bb ágazatai (a kertészeti ágazatok kivételével) strukturális szempontból alapvet en kétpólusúak. A termelés meghatározó, nagyobb részét (ágazattól függ en 55-90 %-át) néhány száz nagygazdaság állítja el . Ezek az üzemek nyugat-európai léptékkal mérve (az ott jellemz gazdálkodási méretekhez hasonlítva) is kifejezetten nagynak, a méretgazdaságosság szempontjából hatékonynak tekinthet üzemek. A hazai mez gazdasági árutermelést (vagyis a feldolgozónak, keresked nek értékesített mez gazdasági termékeket figyelembe véve, és nem a fogyasztónak közvetlenül eladott terméket) még az össztermelésnél is meghatározóbb arányában (néhány ágazatban szinte teljesen) ezek az üzemek végzik.

A másik oldalon találhatjuk (a elmúlt évtizedekben fontos, de jelenleg drasztikusan csökken számú és szerep ) néhány tízezer gazdálkodót, akiknek a termelése, illetve kibocsátása jellemz en az adott ágazat teljes termelésének csak kisebb részét adja. Ráadásul ezen gazdálkodók közül sokan (de nem mindenki) közvetlen értékesítésre termel, így klasszikus árutermelési tevékenységet nem végez. Ezen gazdaságok jöv jét prognosztizálni szinte lehetetlen, hiszen döntéseiket sokszor nem a gazdasági racionalitások motiválják, hanem sokkal inkább kulturális és egyéb társadalmi ingerek. (Például a sertés árak az elmúlt években viszonylag magasak voltak mégis 1 millióval

kevesebb sertés tartanak háznál, mint 5 évvel ezelőtt, mert már a vidéki népesség is egyre kevésbé veszi magára az állattartás terheit és mellékhatásait.)

### **2.2.2.: Improving the technology used in agriculture**

A gradually decreasing tendency can be experienced when examining the amount of support allocated for agricultural investments in last years. The peak was in the years 2000-2003, using national resources for the modernisation of agricultural holdings. In the Sapard and the ARDOP, the amount for these purposes was still relatively significant. The New Hungary Rural Development Programme will be the closing phase in this process.

Hungarian agricultural producers and holdings get a lower level of direct payment as their counterparts in the EU-15 countries. This lower level of income only makes a lower level of accumulation of capital, therefore lower level of technological developments possible. In order to compensate this, support shall be given to Hungarian farmers also in a way – in the form of further technological investments -, which approach is not launched in the EU-15 countries between 2007-2013. Support for technological is aimed at mitigating the imbalance of payments. This type of support shall be in force until the difference in the level of direct payments exist.

The two trends described in the two paragraphs above makes it necessary to open up a relatively strong technological modernisation measure at the beginning of the period, continued by a „soft landing” tendency till the end of the programming period.

### **2.2.3: Increasing the level of skills and knowledge**

#### **Summary of measures aiming at increasing the competitiveness at micro-(holding) level**

Objective	Measure	Justification
Sustaining a competitive farm structure	Modernisation of agricultural holdings	Economies of scale is one of the key factors in competitiveness
Tailor-made solutions for semi-subsistence farming and young farmers	Setting up of young farmers  Supporting semi-subsistence agricultural holdings undergoing restructuring	Providing development opportunity through investment support for those agricultural holdings, which otherwise would not have the possibility to stay on market
Improving the technology used in agriculture	Modernisation of agricultural holdings	Need for closing the technological gap compared to EU average, therefore increasing competitiveness Fulfilling environmental requirements

		<p>Gradually decreasing role in agricultural policy, closing phase</p> <p>Low level of investments in recent years, therefore significant intention for development</p> <p>Good absorption capacity</p>
Increasing the level of skills and knowledge	<p>Vocational training and information actions</p> <p>Use of farm advisory services</p>	<p>Improving competitiveness by investments in human capital and by the provision of advisory services</p>

# ANNEXES

## Annex 1.

### Major crops, area under cultivation 2000-2005

Name	2000		2001		2002		2003		2004		2005*		Change (%)
	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%	2000=100%
Total cereals	2818000	63.7	3080000	68.4	2953596	66.5	2885811	65.0	2994000	67.7	2929104	66.2	103.9
Out of which:													
wheat	1047505	23.3	1208708	26.8	1110152	25.0	1113755	25.1	1176435	26.6	1129732	25.5	107.8
rye	44445	1.0	50578	1.1	48389	1.1	45790	1.0	46764	1.1	46587	1.1	104.8
rice	3088	0.1	2567	0.1	2099	0.0	2541	0.1	2855	0.1	2665	0.1	86.3
triticale	87360	1.9	117589	2.6	130989	2.9	138544	3.1	158941	3.6	158123	3.6	181.0
meslin	250	0.0	244	0.0	398	0.0	15	0.0	31	0.0	25	0.0	10.0
autumn barley	153072	3.4	202238	4.5	201953	4.5	175507	4.0	187642	4.2	173008	3.9	113.0
spring barley	177600	3.9	168045	3.7	168507	3.8	165279	3.7	148781	3.4	147785	3.3	83.2
oat	63278	1.4	61985	1.4	63132	1.4	67768	1.5	70617	1.6	66964	1.5	105.8
maize	1244857	27.7	1285349	28.5	1205817	27.1	1144735	25.8	1207809	27.3	1204215	27.2	96.7
Green peas	29117	0.6	29970	0.7	22202	0.5	22308	0.5	19500	0.4	21141	0.5	72.6
Sugar beet	60318	1.3	66876	1.5	55307	1.2	51353	1.2	61824	1.4	62179	1.4	103.1
Tobacco	5849	0.1	5311	0.1	5411	0.1	5298	0.1	6029	0.1	6716	0.2	114.8
Sunflower	320269	7.1	320638	7.1	418020	9.4	511191	11.5	481415	10.9	518623	11.7	161.9
Hemp grown fibre	69	0.0	342	0.0	0	0.0	0	0.0	629	0.0	585	0.0	847.8
Potato	46277	1.0	36653	0.8	33763	0.8	31138	0.7	31162	0.7	25902	0.6	56.0
Silage maize	98699	2.2	103294	2.3	119459	2.7	131765	3.0	101635	2.3	93195	2.1	94.4

Pickles crops	1878	0.0	1745	0.0	1049	0.0	885	0.0	1347	0.0	1115	0.0	59.4
Lucerne	165351	3.7	157683	3.5	155481	3.5	157150	3.5	154460	3.5	156519	3.5	94.7
Clover	9746	0.2	9970	0.2	7370	0.2	5983	0.1	7179	0.2	8335	0.2	85.5
Total vegetables	89016	2.0	90569	2.0	114719	2.6	116342	2.6	99028	2.2	86959	2.0	97.7
Other crops					134566	1.7	161881	2.4	193544	4.4	177946	4.0	132.2
Out of which: rapeseed	121838	2.7	110936	2.5	126606	2.9	70629	1.6	103779	2.3	122723	2.8	100.7
soya bean	22317	0.5	20266	0.4	25045	0.6	30340	0.7	27390	0.6	33800	0.8	151.5
Total area under cultivation	4301516	95.6	4399160	97.7	4183173	94.2	4182074	94.3	4288796	97.0	4245670	95.9	98.7
Uncultivated area	198284	4.4	105292	2.3	258222	5.8	255027	5.7	134108	3.0	181033	4.1	91.3
Total arable land*	4499800	100.0	4516100	100.0	4515500	100.0	4515500	100.0	4422904	100.0	4426703	100.0	98.4

Source: Statistical Yearbook of Agriculture HCSO; Area under cultivation for major crops, 31 May 2005

## Annex 2.

### Comparison of member states based on 2004 data of test operations

Member states	Value of fixed assets Euro/ha	Value of fixed assets Euro/livestock	Net added value Euro/ha	Net added value Euro/livestock	Net added value/value of fixed assets	(Material-type costs+ depreciation)/ Production value	Direct support/ Net added value
Belgium	8 673	3 232	1 708	637	0.20	0.69	0.23
Cyprus	12 445	9 802	969	763	0.08	0.84	0.50
Czech Republic	1 930	3 442	359	640	0.19	0.80	0.42
Denmark	13 659	8 181	922	552	0.07	0.79	0.41
Germany	8 257	7 801	837	791	0.10	0.79	0.46
Greece	10 405	16 089	1 920	2 969	0.18	0.51	0.33
Spain	4 587	8 826	981	1 887	0.21	0.46	0.22
Estonia	893	2 643	190	564	0.21	0.82	0.52
France	2 584	3 143	668	812	0.26	0.79	0.53
<b>Hungary</b>	<b>1 769</b>	<b>4 125</b>	<b>366</b>	<b>854</b>	<b>0.21</b>	<b>0.82</b>	<b>0.49</b>
Ireland	12 420	10 445	540	455	0.04	0.83	0.69
Italy	17 038	20 098	1 831	2 160	0.11	0.56	0.20
Lithuania	819	2 339	255	730	0.31	0.69	0.44
Luxemburg	9 872	7 977	757	612	0.08	0.90	0.68
Latvia	589	1 925	168	548	0.28	0.89	0.72
Holland	42 013	13 144	2 846	890	0.07	0.70	0.11
Austria	10 516	10 757	1 132	1 158	0.11	0.83	0.62
Poland	3 653	4 521	436	539	0.12	0.74	0.29
Portugal	3 397	6 444	479	909	0.14	0.75	0.50
Finland	4 941	8 547	637	1 103	0.13	1.18	1.39
Sweden	4 327	7 477	305	528	0.07	1.01	1.03
Slovakia	2 258	6 211	256	703	0.11	0.79	0.38
Slovenia	15 772	14 779	387	363	0.02	1.00	1.13
United Kingdom	5 783	6 828	470	555	0.08	0.84	0.59
EU-25 average	6 731	7 968	818	968	0.12	0.71	0.38

Source: FADN public database ([http://ec.europa.eu/agriculture/rca/dwh/index\\_en.cfm](http://ec.europa.eu/agriculture/rca/dwh/index_en.cfm))

### Annex 3.

#### Production and average yield of major crop products (2000-2005)

Name	2000	2001	2002	2003	2004	2005	Change (%) 2000-2005
<b>Production of major crop products (ton)</b>							
Cereals (total)	9677730	13514730	10410270	8768768	16779333	16212463	167.5
Out of which: wheat	3624973	5153951	3909482	2941248	6006825	5088219	140.4
rye	86346	120580	95155	66832	125095	107308	124.3
rice	10600	7696	9759	11170	9595	9441	89.1
triticale	234984	391938	354645	277829	622296	567738	241.6
meslin	764	279	995	1165	135	29	3.8
autumn barley	529643	821146	596404	437076	820776	681048	128.6
spring barley	340352	464791	449468	373109	592589	509399	149.7
oat	96752	148116	136409	101028	217376	157354	162.6
maize	4980148	7841747	6112937	4532147	8332448	9050004	181.7
Green peas	47268	63828	48868	30069	64424	50235	106.3
Sugar beet	1968619	2894391	2271806	1806419	3527105	3515865	178.6
Tobacco	10473	8595	11221	11432	11413	11385	108.7
Sunflower	482415	627950	776875	992013	1186180	1107907	229.7
Hemp grown fibre	395	..	3779	1958	3643	3814	965.6
Potato	848639	902908	720820	577284	783686	656721	77.4
Silage maize	2352390	2931054	2641826	2268045	3124315	2843762	118.9
Pickles crops	39673	44205	13041	9525			
Lucerne (hay)	679224	836857	700793	548159	941617	805718	118.6
Clover (hay)	20932	27345	19976	13153	21194	17061	81.5
Rape seed	177909	203549	203970	107789	290551	282713	158.9
Linseed	880	778	463	701	1783	2818	320.2
Soya bean	30683	41442	56231	50127	64804	77963	254.1
<b>Average yield (ton/ha)</b>							
Wheat	3.6	4.3	3.5	2.6	5.1	4.5	125.0
Rye	2.1	2.4	2	1.5	2.8	2.6	123.8
Rice	3.3	3.3	4.7	4.3	3.4	3.5	106.1
Triticale	2.2	3.3	2.7	2	4	3.6	163.6

Autumn barley	3.5	4.1	3	2.5	4.5	4	114.3
Spring barley	1.7	2.8	2.7	2.3	4	3.5	205.9
Oat	1.3	2.5	2.2	1.5	3.1	2.5	192.3
Maize	4.3	6.2	5.1	4	7	7.6	176.7
Green peas	1.5	2.4	2.2	1.3	3	2.5	166.7
Sugar beet	34.8	43.8	41.1	35.1	56.7	57	163.8
Tobacco		1.6	2	2.1	1.9	1.7	106.3
Sunflower	1.6	2	1.9	1.9	2.5	2.2	137.5
Hemp grown fibre	-	8.1	4.1	5.9	7.4	8.2	101.2
Potato	16.3	21.3	18.3	15.7	22.8	23	141.1
Silage maize	22.8	28.4	22.1	17.2	28.8	30.6	134.2
Pickles crops	-	25.3	12.4	10.8			
Lucerne (hay)	-	5.4	4.5	3.5	6.1	5.2	96.3
Clover (hay)	-	3.2	2.7	2.2	3.2	3.3	103.1
Rape seed	1.5	1.9	1.6	1.5	2.8	2.3	153.3
Linseed	..	1	1.2	0.9	1.5	1.4	140.0
Soya bean	1.6	2	2.2	1.7	2.4	2.3	143.8

Source: HCSO



## Annex 4.

### Comparison of Hungarian and EU land use<sup>1)</sup>

Definition	EU-15	EU-10	EU-25	Hungary
<b>Agricultural area</b>				
- total (1000 ha)	140 987	38 209	179 196	5 864
- proportion from total area, %	43.5	51.7	45.0	63.1
<b>Arable land</b>				
- total (1000 ha)	74 125	28 663	102 788	4 513
- proportion from agricultural area, %	52.6	75.0	57.4	76.9
<b>Employees in agriculture</b>				
- number (1000 persons)	6 610	3 824	10 434	205
- proportion, %	4.0	13.0	5.4	5.2
Land supply, ha/person	20.7	10.2	16.7	28.6
Employee density, person/100ha	4.8	9.8	6.0	3.5
Area productivity* (€/ha)	1 074	..	..	349
Labour productivity** (€/person)	22 902	..	..	10 125

<sup>1)</sup> EU data refer to 2002; Hungarian data are from 2004-2005

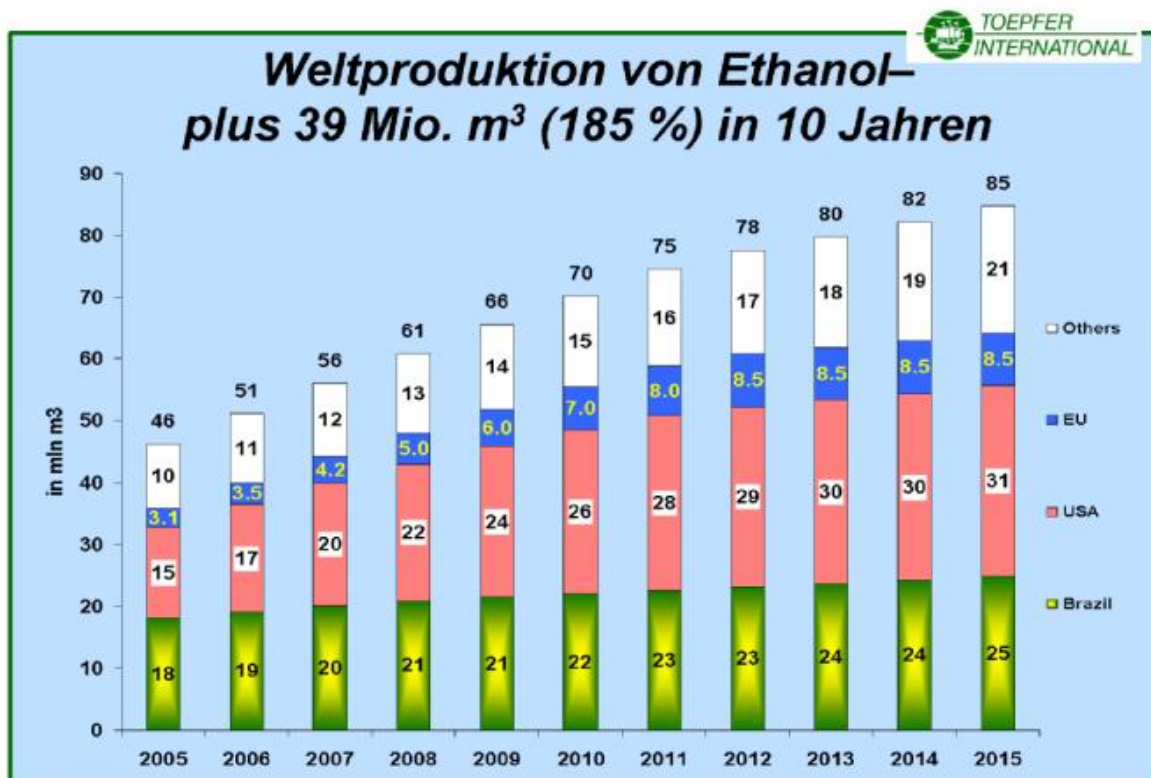
\* Gross added value per one hectare of agricultural area

\*\* Gross added value per one person employed in agriculture (1€= HUF 256)

Source: 15+10 From Rome to Athens Statistical Analysis, HCSO 2003; [www.faostat.fao.org](http://www.faostat.fao.org); Employment in Europe 2003. EUROSTAT, 2004. Hungarian Statistical Yearbook

## Annex 5.

World production of bio-ethanol:  
plus 39 Million m<sup>3</sup> (185%) in 10 years



## **Annex 3: The Ex-ante Evaluation**

### **Introduction**

### **Background of the ex ante evaluation**

The current document is presenting **the final report of the ex ante evaluation** of the New Hungary Rural Development Programme 2007-2013. The object of the ex ante evaluation has been the latest version of the rural development programme to be submitted officially to the EU Commission. The report details the background, processes and limiting conditions of the ex ante evaluation activities jointly performed by PricewaterhouseCoopers Könyvvizsgáló és Gazdasági Tanácsadó Kft. and its subcontractors: CEDEC Közép-európai Fejlesztési és Gazdasági Tanácsadó Kft., Agrár-Európa Kft. and Fitzpatrick Associates Economic Consultants Ltd.

The ex ante evaluation expert team has been granted with this commission in a public procurement procedure announced by the Ministry of Agriculture and Rural Development. The work was commenced back in May 2006. The first interim report of the ex ante evaluation of the “New Hungary” Rural Development Plan was compiled by 27 November 2006. This document focused on the evaluation of the analysis of the current situation and the correctness of the SWOT analysis. The evaluation put down findings and recommendations in relation to the structure, contents and quantifiability of the situation analysis. However, during the ex ante evaluation process the evaluators also followed and gave an opinion on the New Hungary Rural Development Strategic Plan. This document forms the basis of the programme and the two documents have to be in compliance with each other. The next milestone of the evaluation process was the evaluation of the Programme prepared by 18 January 2007. That stage also marked the onset of the very intensive joint activities by the programmers and evaluators, which lasted until the submission of the programme and the ex ante evaluation to Brussels on February 19. The programmers and evaluators reframed the SWOT analysis. They did harmonize the SWOT and the strategy, which was then shown in the programme in the form of a set of charts. They worked intensively on the finalization of the indicator system, in particular on the quantification of the objectives. After the official submission, the evaluators took part in the Brussels negotiations of the Programme, and in the light of the opinions worded by the Commission and in order to follow changes in the NHRDP the ex ante evaluation report was updated. The evaluation can be regarded as closed when the EU Commission accepts the Programme. The preparation of the ex ante evaluation is mandatory according to Article 85 of Council Regulation (EC) No. 1698/2005, and it is part of the elaboration of the rural development programme. Its aim is to optimize the use of the sources attached to the Programme and the general improvement of the quality of the programming. The evaluation identifies and evaluates according to the Regulation guideline:

- Medium and long-term needs;
- Aims to be realized;
- Expected results;
- Aims in numbers (aim values), especially in the aspect of the effect compared to the starting situation;
- Community added value;
- Extent of the consideration of the Community priorities;
- Lessons drawn from the previous programming; and
- Quality of the processes for the implementation, monitoring, evaluation and financial management.

The evaluators took into consideration the relevant sources of law, methodological guidelines (among them primarily the working document “Rural Development 2007-2013, Common Monitoring and Evaluation Framework Guidelines for Ex-Ante Evaluation”), Community Strategic Guidelines recommendations, the guidelines of Hungarian policies, strategies of the applicable studies, previous evaluations, partner opinions and other programmes. However, the work was significantly based on the regular and ad hoc meetings with the planners, experts of MARD, AKI, VÁTI, on the remarks of external experts and the opinions formulated on the level of enforcement (ARDA).

The ex ante evaluation process has been based on the interactivity between the planners and the evaluators. The final evaluation report was formulated as a result of continuous contact, regular conciliations and exchange of opinions. During these conciliations and meetings, recognized Hungarian and Irish agricultural and rural development experts, representatives of the Hungarian Universities and research institutes have contributed to the discussions.

During the conciliations, the ex ante evaluators supported the planners in a few practical planning questions. Among others the clarification of the structure of the measure descriptions and the requirements concerning their content, the elaboration of the rules on the realization of the Programme, but primarily in the finalization of the indicator system of the Strategic Plan and the Programme. The aims of the output and the expected results and effects were specified and re-calculated in a workshop lasting for two days.

The stated and discussed expert opinions were taken into consideration by the MARD and have mostly been build into the draft programme.

The ex ante evaluation addressed also the requirements of the environmental assessment provided for by Directive 2001/42/EC of the European Parliament and of the Council. The Env-in-Cent Kft. was responsible for the Strategic environmental assessment, made in cooperation with the experts of natural protection NGOs.

## **The methodological approach**

### **Assessment of medium- and long-term needs**

The assessment of medium- and long-term needs of the Hungarian agricultural sector and forestry, the rural environment, as well as the rural society and economy in general was based on the situation analysis and SWOT analysis of the draft Programme. The ex ante evaluators reviewed the text, compared it to earlier longer versions (i.e. draft texts from spring-autumn 2006, prepared by AKI, VÁTI and Ministry officials), and to other analyses on the sectors concerned (i.e. background papers brought forward and reviewed by the sector expert members of the evaluation team). The aim of the comparison was to establish eventual information gaps or contradictions, and to suggest the inclusion of descriptive or analytical parts to make the analysis more comprehensive. A grid with the proposed structure for the situation analysis was set up, and was used for judging the appropriateness of the draft text in terms of coverage and its logical flow. The main headings of this grid were translated into 'main topics' and included in the ex ante evaluation report.

In addition, the SWOT-analysis was compared to the content of the situation analysis, with a specific focus on assessing its validity in light of the quantified baseline indicators. A specific two-day workshop was dedicated to the situation analysis and the SWOT analysis. On the workshop, the evaluation team and the officials responsible for the programming jointly reviewed the structure and content of the situation analysis and the SWOT analysis, with determining areas missing or incomplete. Most notably, the ex ante evaluators proposed the improvement of the situation analysis with an outlook on the development of the main agricultural sectors.

The ex ante evaluators also interacted in the preparation of the final version of the Programme on a series of workshops, where they - together with the planners - went through the text using the grid on the proposed structure of the analysis, and proposed and discussed further amendments.

### **Goals to be achieved, evaluation of the strategy chosen**

The ex ante evaluators put less emphasis on assessing the overall strategic decisions made, including the allocation of funds between Axes, but focused on the strategies employed under the specific Axes. In light of the limited experience with, and a lack of evaluation results on, agricultural and rural development policy planning and programming, the evaluators did not see much opportunity to include an assessment of core Hungarian agricultural and rural development policy issues into the evaluation process, and let the question of allocation of funds between Axes subject to negotiations between Hungary and the European Commission.

As regards of the specific strategies described under the Axes, the ex ante evaluators assessed their internal coherence by reconstructing and reviewing the overall intervention logic of the Programme, and that of the specific measures. A series of workshops in January 2007 dealt with highlighting unclear elements and discussing the underlying rationale, specific objectives, as well as ways and means to achieving these with the planners. Specific focus was put on integrating the lessons derived from the medium-term outlook of the agricultural sectors under Axis I, and on increasing the effectiveness and efficiency of rural development schemes under Axis III by creating synergies between measures, and ensuring that rural services and village renewal activities will be implemented in an economically sustainable way. Proposals to strengthen the responsibilities and competences of local actors under Axis IV were also made.

Further, the description of all measures were reviewed by the evaluators, and checked against the requirements issued by the Commission (including the structure – ie. sub-headings - and overall content of the draft text). A significant number of detailed suggestions were made to complement these.

### **The results expected and quantified targets**

Regarding the required indicators, the ex ante evaluators followed a bottom-up approach that was advocated in the Rural Development 2007-2013: Handbook on Common Monitoring and Evaluation Framework, draft guidance document, Chapter 7.

The forecasts for baseline (context, general and horizontal) indicators were reviewed by, or – in several cases – made by the ex ante evaluators. The forecasts were based on a realistic scenario on the future changes in, or affecting, the Hungarian agriculture (employment, share of production, land use, demographic and environmental trends etc.), which was confirmed by expert member of the evaluation team. Input data was derived from data of the Central Statistics Office (KSH).

Quantified targets were set up for individual measures, based on information from the (though limited) monitoring data and interim evaluation results of the previous programming period (both SAPARD and EAGGF) and the actual measure definitions (where appropriate). The indicators, baselines and targets were discussed, complemented and revised with the planning experts in a three-day exercise, on a rotation basis. The experts were – where necessary – asked to provide underlying statistics (including e.g. occupancy data of village tourism establishments) and to undertake basic calculations jointly with the evaluators, by ensuring also that the calculation methods were in line with the intervention logic of the specific measure, and results of earlier similar interventions.

Specific objective-related baseline indicators (and impact indicators) were then obtained by summing up measure-specific data and testing them against the (scarcely) existing knowledge on macro-economic impacts (gathered from international experiences and from the modelling exercise of the NHDP).

## **Assessment of the coherence with relevant guidelines and other programming documents**

To judge the coherence of the Programme with relevant guidelines and other programming documents, a qualitative assessment was undertaken. The evaluators drew up specific assessment grids, using the measure structure of the Rural Development Programme, and the contents structure of the policy documents used for the comparison.

Taken into consideration were the relevant Community policies (most notably the CAP), the Fisheries Operational Programme, the Operational Programmes for the period 2007-2013, co-financed from the Structural Funds and Cohesion Fund, and the Community Strategic Guidelines for Rural Development.

Within the grids, all relevant areas were highlighted where demarcation lines were to be drawn, or where potential synergies were to be created and strengthened. The findings were then used to issue detailed recommendations to the planning team, on a measure by measure basis.

## **Assessment of the quality of the procedures**

The ex ante evaluation work undertaken in order to assess the quality of implementation processes was to a large extent document-based. The evaluators reviewed findings and recommendations from the interim evaluation of the ARDOP, and compared these against the planned implementation structure and schemes. Additional interviews with responsible persons from the Ministry and ARDA were then undertaken to complement existing information. As the regularity of administration and management of measures and support schemes was regarded as satisfactory (albeit there might be room for improvement as regards of time needs), the main emphasis of the assessment was put on the monitoring and evaluation arrangements and capacities.

## **Assessment of the medium- and long-term needs**

### **SWOT-analysis and the evaluation of the suitability of the situation**

According to the Regulation the Program has to contain the “situation analysis considering the strengths and weaknesses” of the sectors, on areas covered by it. The joint aim of the situation and SWOT-analyses is the foundations of the strategic decisions made in the Program. The requirements relating to the planners’ output as well as the description of the areas examined by the ex ante evaluators are given in the sections below. The report is presenting the detailed evaluation of the earlier versions of the SWOT at the level of the axes and the final programme-level SWOT table. The SWOT table is the result of several expert meetings between planners and evaluators. The final SWOT table and strategic goals have been incorporated into the programme.



## General remarks

The situation analysis chapter of the National Agricultural and Rural Development Programme contains the general description of the position of the environmental state and the rural economy and life quality of the agricultural main sectors. It mostly adjusts to the thematic structure outlined in the SGRD. Earlier versions, tended to follow a traditional, sector-oriented structure (mainly in connection with axis I). That is why the evaluators have suggested, that it would be more advantageous to shift this approach to an even more strategic structure, concentrating to the shortfalls or advantages within the thematic of the SGRD, then their analysis. Following the recommendations of the evaluators the situation analysis has been subject to several revisions.

In the axes I. and II., are extensively supported by status description data, however, these data typically characterise only the most fundamental phenomena and trends, and are not always suitable for the characterization of strengths, weaknesses, development potential or for the establishment of the real development requirements. However, little quantification is shown in the field of rural development.

In earlier versions of the Programme the majority of the presented data were not up-to-date any longer, their refreshment and supplementation became necessary.

The situation analysis generally contains no or hardly any international comparison. In the lack of this it is not obvious, whether in the field of the main subjects, a shortfall is encountered, what its extension is, and during its analysis the evaluators are unable to obtain a matter of fact idea, if the recovered reasons and motive forces mean strength or rather weakness. The evaluators suggested to add a statistical table to the SWOT analysis, presenting international comparisons, in order to correct this weakness.

Earlier versions of the description of the situation – due to the above reasons – in our opinion contained few conclusions related to the development potential and the motive forces of the development. The determinations of the key fields of the development were restrictedly supported or not supported by the description of the situation (mainly in the field of agriculture).

The description of the situation was generally characterized by the absence of references to background studies, reports and further data accessible by the planners (e.g. the state of the motorization of crop production), even on quantifiable and investigated, analysed fields. Sectoral analyses have been added to the last version of the programme. Their main findings have been incorporated into the situation analysis.

The strengths, weaknesses, opportunities and threats, implicitly recovered in the text, could be qualified as suitable and important, but were not in full agreement with the items in the SWOT-table. This required revision.

The description of the situation contains the description of the earlier, EU supported agricultural-, and rural development programs, including the LEADER-Program described in a separate subchapter, in a much shorter form than required. Differing from and supplementing the introduction according to the present state, the effects, experiences and conclusions of the former programmes contribute to the establishment of the development strategy. In this respect no significant progress has been made in the current version of the Programme. Therefore the evaluators suggest that upcoming evaluations (such as the planned ongoing evaluation) should pay attention to this issue.

In some arguments of the situation analysis (typically in the field of priority 3. and 4.) there is a consensus according also to our opinion. Although the statements are proved by some observations, there was no investigation supporting the processes, or the description of the situation contains no reference to such analysis. The evaluators agree with these statements, with the addition, that the possible research results of such situations should be mentioned. The determination of the weight of these fields obtained in the development strategy is considerably difficult, because of the lack of justifiable observations.

In some cases phenomena are described on the basis of national data, independently from the sector, which are partly unsuitable for breaking down to agricultural-rural development elements (e.g. the rate of dependents and supporters, the supply of pension, health insurance), partly it does not take other influencing factors (in the countryside there are more aged women than aged men) into consideration.

In the description of the situation the demand for the opportunity of mobility among the priorities appear in small extent. In case of the increase of the rural employment the planners mention the decrease of the agricultural employment, as the basic situation of a problem to be handled.

Previously, the situation analysis did not contain the description of the background of the Common Agricultural Policy, as well as the rural developmental effects of the predictable or expectable reforms. This part of the Programme has been extended.

The situation analysis includes regional references relating to the statistical regions. These regions exhibit considerably heterogeneity from developmental aspects, the description according to the current status was in lesser extent or not suitable for the territory based approach of the developmental issues, neither in its content nor in its regional breaking down. In the new version of the Programme additional information on this has been provided.

In the material some sections are put in inappropriate place (e.g. energy purpose agricultural production under the axis II., meanwhile the description emphasises the diversification of the agricultural products, which is the part of the axis I).

## **The improvement of the competitiveness of the agricultural and forestry sector (axis I.)**

### **Defining, structure, main strategic fields**

The rural development supports, to be provided under axis I. of the National Agricultural-rural Development Programme, are aiming at improving the competitiveness of the agricultural and forestry sector. In agreement with this, the situation analysis of the National Agricultural-rural Development Programme, in connection with axis I. starts from the descriptive characterization of the main sectors – agriculture, forestry, fishery, game management - and food processing: it mainly describes the economy structural, output and employment indexes and their trends.

However, it strives only in lesser extent to indicate, characterize the strategic fields (main subjects) outlined by the Community Rural Development Strategic Directives and to analyse individually the motive forces, necessary for the identification, then the prioritisation of the development requirements to be aimed. In the absence of this it is much more complicated to summarise clearly and transparently the position of the Hungarian agricultural-rural development, the strengths and weaknesses establishing the strategy, as well as the developmental potential (in general, harmony with the SWOT-analysis can be seen in a lesser extent). Therefore, during the updating of the situation analysis, it is worth considering the more determined visualization in the text of the strategic fields visualized in the SGRD, then the characterization of the relevant strengths, weaknesses and development potential and their motive forces, under the individual strategic fields.

Although the situation analysis – at least in parts describing the position of agriculture and food industry - considers the structure of the ERDF Regulation, the analysis of these big fields is not entire (e.g. it does not sufficiently concern the position of agricultural innovation).

Either the axes of the ERDF Regulation, or the priorities involved in the SGRD are based on the fundamentals of the multifunctional model of agriculture, these are:

- agriculture as production sector
- the environmental responsibility of agriculture
- agriculture, as activity possessing social function and elements

This structure is supplemented by the fourth priority, and axis, in the frame of which a special implementation system is provided, so as local interests could be enforced on a broader bases.

Particular problems, development requirements of this field are described below from the point of view of the preliminary evaluator.

In the field of development of agriculture as producing sector, the aim is to strengthen the market activity and the suitability for this. Naturally, it has requirements in competitiveness influencing the production, but the suitable human background is also important. Due to the changing market regulation, the agricultural production is more and more exposed to the international competition. This situation requires different behavioural patterns compared to the former marketing safety providing agricultural production, which was more or less isolated from the international competition. Under the current and the predictable production conditions the behaviour of the farmers should change in the field of flexibility, adaptability and ability to take decisions in accordance with the actual market competition. Currently in Hungary the smaller part of farmers are able to carry out this, which on the one hand, has long-term pointing back social reasons (e.g. expectation of central directions, but their continuous questioning in the same time), on the other hand the recent changes in Hungarian agriculture (privatisation, conveyance of agricultural capital goods, stable corn intervention, as safety market for arable land mass products) provide its background. The adaptability of the agricultural sector is greatly influenced, and simultaneously represents a significant development potential, by the development of the farmers' adaptation ability, in the field of educations and suitable advisory systems, as well as the establishment of continuous and reliable market analysis and information structures. The adaptability simultaneously creates suitability for the market activity of the farmers and the sector in long term.

The description of the situation mentions, consistent with reason, the competitiveness, as the area to be developed in connection with the axis I. of the ERDF Regulation. However, its exact meaning is not defined, the improvement of competitiveness is indicated only in general. As this is a rather complex field, a possible, investigation based, interpretation of the competitiveness is introduced below, which in its present form misses the difficult counting, but is suitable for practical application, and which may serve as the basis for the structured development of the strategy for reinforcement of the competitiveness. The present definition of competitiveness is static, i.e. relates to one product (product group, farming unit, sector, etc.). This pattern is dynamized and supplemented with the time dimension by the farmer's adaptation ability mentioned before.

A product, farmer, processor, sector is considered to be competitive on the basis of the criteria listed below, as preliminary qualifiers:

- the product itself is good; i.e. made at high professional level, with leading technology, in good quality, the consumer accepts it and feels confidence in it;
- the selling price of the product – in the given quality category- is identical or lower than in case of principal market players;

- effective organisations are standing behind the sector (product), the supporting organisation is outstanding (distribution organisations and networks, financing banks, marketing and logistic system) – i.e. the distribution of the product to the consumer is safe.

May only one of the conditions unfulfilled, the high standard of the other two is useless. On the basis of these, the problems of the competitiveness, as well as the possibilities of its improvement can be identified.

The ex ante evaluators prepared their report on the situation and the SWOT-analysis based on an own thematic structure, which rely in great extent on strategic fields defined in the SGRD and in ERDF Regulation (not mentioning some horizontal subjects according to some specific Hungarian and national or Community definitions: e.g. the position of the agricultural sector and its leverage points in the most disadvantageous small regions, or the issues of the equal opportunities of genders relating to the labour market). The structure fixed as the starting point of the analysis is the following:

- The structural suitability of the production, restructuring
- Access to market
- Product quality
- Product processing
- Integration
- Employment (carrying capacity), state of human resources
- The environmental protection performance of the agricultural
- Production infrastructure, technical subsistence
- Regionality

Detailed evaluatory comments are provided in the following sub-section assorted to the given themes.

## **Detailed comments**

### **Structural suitability, restructuring**

The scope of restructuring involves according to the ERDF Regulation

- Modernizing of agricultural plants,
- The increase of economic value of forests,
- The increase of value of agricultural and forestry products,

- The improvement of cooperation within the food industry,
- The improvement of infrastructure connected to the development of agriculture and forestry and
- Action aiming at the restoration of damages caused by natural disasters.

Although there are big structural mistakes in the present Hungarian agricultural production, the NARDP cannot cover the widespread handling of those, since the Regulation No. 1698/2005/EC intends to promote the restructuring aiming at the improvement of competitiveness not on sectoral, but on enterprise level. Despite of this, utilizing the national possibilities, concerning the specific Hungarian structural problems, necessary priorities might be determined.

The planners deal with the disbalance of crop production and animal breeding, and with its restoration. It is a fact, that larger stocks of fodder consuming species facilitates the market bestowal of cereals, while the lack of such animals increase the cereal market problems, and Hungary is definitely located in the cereal producing area of Europe. The significantly high yields of 2004 and 2005 contribute to the present cereal market situation that along with a decreasing animal stock has resulted in a serious „cereal excess”. According to our opinion, it is not possible to talk about the balance of the 2 main sectors in this form. The two main sectors can be in balance not by comparison to each other, we can speak about the balance of sectorial production and the possibilities of the market. From this aspect, in case of some commodities an imbalance can be found, that is closely related to the ternary criterion-system of competitiveness mentioned in the introductory part (e.g. it was in 2005, for the first time, that Hungary became a net importer in pigs for slaughter). Thus, not the balance should be restored between the two main sectors, but the production should be fitted to market possibilities within a main sector, or the market behaviour should be turned so as production capacities could be economically used. In turn, support system should partly aim at the development of part-elements of competitiveness and serve the enlargement of market possibilities that can be followed by the increase of production.

In parallel, it must be noted that the presently decreased or further decreasing animal strength has been caused not by the earlier lack of rural development measures, but by the change of sector independent regulations and circumstances. Animal breeding according to the professional public feeling was a main sector of acceptably high living manpower, and the increase in taxes connected to manpower (tax, social insurance) entailed the decrease in the number of those employed. Due to capital insufficiency – that is partly the result of the fact, that Hungarian banks were not interested in the development of agricultural production after the political change (there was no considerable agricultural property in the portfolios) farmers could not carry out technological developments compensating the decreasing number of employees.

The further reason for the decrease of the number of animals is the decrease in the demand, that is the result of the decrease of income after the period of political change, and as a consequence the decrease of the consumption of food stuffs, and the decrease of the earlier Eastern markets. Nowadays, in Hungary, the decrease of the consumption of animal products has started to stop, moreover, started to increase in case of some products, but only a part of this demand can be supplied by Hungarian producers, due to the price competitiveness of imported goods, and to the extreme price sensitivity of the Hungarian consumers. Based on our determination of competitiveness, in this respect, the delivery of goods to consumers, the reinforcement of this primarily on the marketing side are those facts that can have strategic developmental potential. The proper price – concerning the purchase price or the process generating policy of retail networks – is a short term means, and cannot be precisely determined strategically.

Naturally, farmers striving for competitiveness have to keep their prices under or near the prices of those dominating the market, in this respect strategic possibility can be found in the „influencing” of consumers.

With respect to the development of foreign markets, there is a chance for development by the exploration of markets, by their realistic evaluation and by establishing products meeting the demands of those markets.

Referring to the structure of production the main issues are the size of farms and the characteristics of the agricultural crop/products produced by them. Concerning this, it is a main problem especially for the crop production, that in case of all plant sizes the produced crops are the same; and they are those crops, that are entitled to area based support based on the national supplement or SAPS, that can be merchandized in intervention, or due to the present state of motorization most of the farmers have machine-lines eligible to the production of these crops. These are those arable land cereals, the profitability of which is determined mainly by the size economy. This is not reinforced only by technical tasks of soil and crop cultivation or by the emerging market demand for unified, pure breeding on the side of crops in the recent years, but it is also served by the technical/technological development of machinery background (larger and more expensive harvesters, larger and more expensive soil preparation equipments, etc.) With larger and more expensive machines profitable farming can be achieved only on larger fields; in parallel with technical development the lower size limit for an area that can be economically cultivated is increasing. This weakens the competitiveness of smaller size farms in case of such crops, and there is a chance that considering the structure of crop production plant size can grow one-sided (exaggerated economy concentration), that can considerably weaken the carrying capacity of the sector. Weakening the carrying capacity cannot be a goal, therefore, besides spontaneous economic (concentration) processes the support system must provide chance, have to encourage the economy level product structure change, with what various plant sizes can be maintained, establishing various product structure meeting the market demands and suitable for the sizes of farms. This way the structure of the Hungarian rural agricultural production – that is integrated part of the European culture – can be maintained. The aim is not the conservation of a badly operating, production structure loaded with problems, but by maintaining the plant structure to maintain the carrying capacity of the agricultural in the same time with establishing a

structure corresponding to the sizes of farms, and the establishment of product structure that if needed can be dynamically changed utilizing the actual local features. Strategically, the developmental potential for these plants are the entire organization of market bestowal of plants produced by them, organization of training and advisory network and merchandizing organizations related to the production of these plants, and the establishment of entrepreneurial, risk taking ability and initiation ability.

The structure of production and the size of the farm is equally important in animal breeding. In this sector basic issues are keeping/feeding technologies and the use of the breed. As it is known, breeds with high genetic performance, under production circumstances significantly lower than their needs, will not only respond with a corresponding decrease in production, but will a decrease exceeding it, and their fodder consumption will increase, as well as their health problems. Developmental potential in this respect is the establishment of breeding technologies corresponding to the size of the farm, and that can be economically utilized, and the use of breeds corresponding these conditions.

In the strategic framing of product structure outstanding role should be given to the evaluation of market possibilities, as the product structure – due to profitably demands – responds to the size of the farm. Concerning the market possibilities product-processing-market distances from one another is an important issue in geographic sense, as the price of the products is significantly influenced by the needs and costs of transportation. Development possibilities in this respect are the framing of farming structure properly near to processors/markets and the exploration and mobilization of market possibilities near to the present location of production/processing.

Relating to restructuring, separation of land ownership and land use is an important phenomenon, though regulation No.1689/2005/EC does not contain any measures concerning this. The ex ante evaluators can make preliminary determination of the concentration of asset structure. Concentration results in the disappearance of smaller plants and in the same time propagation of larger ones. Accordingly, the structure of the crop production main sector is further simplifying, and steps serving product diversification does not go together with the increase of living manpower tie, i.e. the increase in the carrying capacity of the sector. Possibility for development are the encouragement of the production of proper products corresponding to the present asset structure, establishment of the ability of farmers to identify their market possibilities according to their farm size, and their cooperation with other producers.

Out statements concerning the production structure are valid for processing, naturally, properly adapting.

## **Market entry**

Entering the market is a further important factor of competitiveness, determines the disposability of the produced goods.



In relation to getting to the market the evaluators agree with the negative effects of the price breaking down policy of retail chains. This is considerable, as more than 50% of the food stuff turnover is realized via these trading chains. The lack of supplying these retail chains is regularly specified as one of the main problems of getting to the market. This is true for a certain scope of producers (product or size), but the evaluators question this exclusive approach. In this case the main problem is the not proper behaviour of the producer originating from the lack of estimating the market demands, and the loss of market possibilities due to the improper serving of consumer demands (e.g. the elimination of traditional village merchandizing possibilities; the re-routing of these consumers to retail chains, by serving their further strengthening, and in the same time further decrease the scope of Hungarian producers not getting into such chains or those losing ground in them, therefore decreasing their market possibilities). naturally the problem in itself is not the growing of such chains, but the negative effects of their good acquisition policy, and the adverse changes of the habits of consumers on producers. Therefore, there developmental possibilities can be found in the establishment of adjusting to merchandizing channels others than the chains. This is effected by measures other than the rural development (e.g. hygienic regulations related to food stores), that can require complex handling and only partly treats the problem from the side of the producers.

In getting to the market, i.e. in delivering the products to the consumers, further problems are the infrastructural background, and its imperfections, and the lack of market influencing merchandizability of products.

## **Product quality**

The quality of agricultural, forestry and processed products is of outstanding importance from the aspect of competitiveness of producing farmers and processors. Quality is an aspect of outstanding importance in case of all products and has influence on the merchandizability of goods.

In general, it can be stated, that the quality of Hungarian agricultural products do not fall behind that of the international competitors, moreover, it exceeds, they are of better quality. In the Hungarian agricultural production and food industry those problems that appear in Western-European countries are unknown. The reasons for the good quality of our products are climate and production.

A main problem in merchandizing the good quality products is the lack of considering the Hungarian aspect not applicable to the standardized approach of the European Union, especially from regulating point of view. A sample can be the EU quality regulations concerning vegetable and fruit products. Based on these, products – with the standard size and other characteristics - do not meet the Hungarian traditional consumer demands, that besides the physical appearance of the product at least to the

same extent require features manifesting in flavour (which cannot be expressed in numbers). Trade, of course, buy in all fields according to the operative regulations, and corresponding to other practical interests (e.g. shelf-life, visual appearance). Vegetables and fruits with special flavour have a content value, that makes longer storing and transportation inapplicable. In parallel with the increase of the turnover of the retail chains, the decrease of the turnover of other merchandizing channels Hungarian products that are satisfactory to the traditional Hungarian consumer demands, decrease the chances of merchandizability of goods with distinguished quality. This is the main problem related to quality. In case of quality there is developmental potential in marketing of products.

Another problem concerning the quality is the lack of quality harmonization of products produced by different farmers. This does not make possible the supply of consumers (should it be end consumer or processing plant) with homogen commodities. This is a very important issue relating to processing, as by providing homogenic commodity processing can be standardized, and the homogenic product can be effectively produced, having income consequences. Development possibilities in this relation are the development of cooperation of farmers and the conciliation of interests in different phase of the product path.

### **Processing of goods**

The aim of situation analysis of strategic aspect is the establishment of strategic decisions. As such, it should reflect the situation and prospects of the given sector, at present that of Hungarian food processing; in what market situation is it in, and in what direction it is developing to. This has crucial effect on how to allocate optimally the available resources.

Determining tendency of the planning period is the gradually increasing influence of commercial chains. It means only suppliers can survive, who have proper production size, performance and trademark. As an increasing portion of food stuff turnover get to the consumer through this channel, the role of some dozens (according to our opinion 60-70) enterprises will further grow. All the other enterprises will sell their goods on local markets, in independent small shops, on markets and in catering, while their ratio on the market will further marginalize.

Concerning the determination of the ratio of support of processing with the aim of rural development, it is important to embrace the real possibilities of small plant processing. It is an important fact, that while for 2003-2004 (covered by data) the expansion of commercial chains involved only larger cities, however, nowadays, and especially in the coming years there will be hard discount in almost all settlements having ten thousand inhabitants. Their effect will be significant on local retailers that will also influence the possibilities of their suppliers.

Another not exposed theme in the programme is the availability of the commodities. In the past, but especially in the coming years significant drive back in some processing activities or their geographic rearrangement can be expected due to the

uneconomic commodity production. Such field is the production of canned food, due to the expensive and small amount of domestic goods and due to the lack of competitiveness. This can reach poultry processing too.

Foreign trade is another topic that can have decisive effect on planning. A durable tendency can be observed on this side. The presence of foreign goods will strengthen on the Hungarian market. This is in relation with the spreading of German discount stores, the unconsciousness of the consumers, and the competition limits in the domestic industry mentioned above. The consequence is the narrowing of the living space of the domestic industry that will influence small and middle sized companies the most painfully.

## **Integration**

Producers' cooperation in the Hungarian agricultural is not easily evaluated; in the professional public sense the opinion is: that the forced establishment of cooperation killed the intention for cooperation from the Hungarian farmers. There are numbers in case of producing groups (PGs) and cooperation (Cs), but part of the PGs are not real, they are jointly developing privately formed companies due to the need realized by farmers, and Cs are units of mutual vegetable-fruit market establishments, therefore, in our opinion in this form, are not categories of rural development.

Well operating, PGs fully serving the interests of the farmers, as preliminary evaluators, think, they play important role in establishing the income safety of farmers.

One of the main problems of the Hungarian food industry is the lack of vertical integration according to product path. A part of this is the narrow scope of producing ownership among processors (a regularly mentioned example of this is that Parmalat get into the possession of producers). A great problem emerges with this: the great geographic distance between the owner producer and its processing plant. Another important factor is the lack of cooperation between the producer and the processor, and the inevitable exposure of the producers. In settling the situation, in encouraging the cooperation between processors and producers, there is a developmental potential for the producers. The processors in such a coordinated situation can optimise their purchase prices to a lesser extent; however, for small scale processors establishing the vertical integration with producers can lead to establish the optimal market possibilities.

Integration on the producers' side emerges from the merchants of input material and products, even today. Their role is important in cereal trade, and though they are profit oriented, they seek not the farmers direct financial profit, they have significant role in passing information towards farmers among changing market conditions, and in the development of farming culture. Besides, engrossers – dealing with arable land mass products in domestic scale - play an optimising role, considering the regional

allocation of cereal storing capacity, new developments, and occasionally relinquishing the building of storage tanks due to merchandizing difficulties. Naturally high level of commitment is necessary from the side of those taking part in the development, because in case of cereals the present intervention system gives significant financial advantages for those storing the cereal, therefore, state intervention is needed in the form of support programmes, through the identification of target areas and target groups. In the producers' integration on the one hand there is developmental potential in market development, and on the other hand in optimising sectoral areas.

In relation of forestry the evaluators agree with the large number of private forest holders and the very low level of integration among them is also accepted.

### **Employment (carrying capacity), human resources**

From rural developmental point of view agricultural production is a significant factor in employment.

The decrease of the employment in agriculture is a fact, and is considered to be among the reasons for the decrease in the output of certain sectors (mainly animal products, horticultural products). Concerning the agricultural employment main problem is decrease of demand for living manpower due to the changes in product structure and concentration, and the lack of social acknowledgement of agricultural activity. A further problem from rural development point of view is that the production of goods (food stuff) is evaluated with the same index-numbers in each farm size (exclusively on financial bases, including all other –food safety, income/cost relation, biodiversity, land usage, cultural landscape etc. - including „large scale” cereal production, and farm size that produce mainly for self consumption, perhaps selling the excess on market, albeit these farms of different size play different role from the aspect of rural development, therefore cannot be evaluated on the same manner. From the improving of carrying capacity point of view, there are great development possibilities in the changing of this sense, although it must be noted, that the present Hungarian society public sense focuses on the short-term financial profit, and this makes the changing of this approach difficult.

The evaluators agree with the qualification data of farmers as they are based on statistical analysis. As ex ante evaluators, our opinion is that through training the adapting capacity of farmers should be improved, and there is great developmental possibility in this. Besides, always the latest knowledge referring to the actual production of a product should be provided to them. Isolation of research-development and production practise is considered to be a great problem. This makes it difficult for the producers to accommodate to market circumstances, and sometimes research considered to be practical deals with themes the usability of which can be questioned. There is great development potential in farmers joining to research-development.

There are problems in Hungarian. with the advisory system set up to pass information Several systems are operating next to each other working with the same target group, sometimes changing according to the political will, keeping the farmers in uncertainty. Advisory service for encouraging farmers in the field of accommodating ability is of outstanding importance.

Concerning human resources serious problem is, that among farmers the sense ruling still today is, that due to Hungary's excellent natural facilities, competition conditions are very good in agricultural, and it is not taken into consideration that besides natural facilities, lot of other factors are influencing competitiveness.

### **Environmental protection**

In case of the performance of agricultural environmental protection significant problem is the allocation of manure in animal breeding. Concerning this, Hungary has temporary exemption from applying EC regulations, but in this context it is less reassuring, as our environment is being polluted. In case of environmental protection there is great development potential in the development of manure allocation. In case of environmental protection, there is serious development potential in the field of manure allocation.

Concerning environmental protection, the phenomenon that immigrant from other settlements do not intend to tolerate the smell accompanying animal keeping is an important problem, and settlement governments serving the needs of the inhabitants not really related to the settlement put regulations into operations that make traditional ways of animal keeping impossible. System to protect against the smell effects of animal keeping at settlements, in their development the ex ante evaluators think, there are big possibilities, as from rural development point of view animal breeding around houses in Hungarian having long term traditions, are desirable, having more advantages than disadvantages.

### **Production infrastructure, technical furnishing**

Concerning the technical furnishing, farm site and the performance of power machines mean a great problem. According to certain studies, „small plants” are over machinarized. According to the experience of support systems of previous periods farm size and machine park size was not concerned when applications were evaluated.

Referring the sense of supporting, great problem is that farmers base their investments exclusively on investment supports, as they are conditioned to this, due to the former – preceding the EU accession – support systems. It is well reflected that the value of agricultural investments realized in recent years equals to the value of agricultural investments realized by the help of support. This partly shows the capital

necessity of, and denotes the fact, that farmers do not consider area based supports arriving from the EU a developing source assisting their farming.

Obsolescence of the technical state, appears especially in animal breeding sectors having smaller cost bearing capacities, and in farming size, that can play important role from environmental and employment point of view. The improvement of these is important not only from performance point of view but considering all the elements of a multifunctional agricultural model.

The development of production infrastructure has potential too, most of them being community investment, the support of which makes the development easier, as an external source is connected to the development of the infrastructural means that always means strong motivation among Hungarian farmers.

Concerning production infrastructure, the utilization of renewable energy sources is low.

## **Regionality**

The evaluators do not comment statistical regions. Data are available to these area units, but within Hungarian regions area inhomogeneity is so significant, that no homogenic region can be mentioned from the rural development point of view, the provided data in this respect are inestimable, therefore area approach strategy cannot be based on them. It is considered to be important however, to handle separately the really homogenic regions, which are homogenic from geographic point of view, and on the other hand other features make them usable. From structural side, concerning cereal production, such an area is the Southern part of the area beyond the river Tisza. Here natural facilities for agricultural production are extremely good, but the state of railways, the big distance of ports the production of cereals are less profitable as in areas of less favourable location, or with better transportation (e.g.. the Small Hungarian Plain). Therefore, from strategic point of view, on the Southern part of the Great Hungarian Plain, farmers should be encouraged to product structure change, and not building of further cereal storing tanks should be assisted, that help to store the stock that is difficult to sell.

In relation to regional concerns an outstanding problem is the joining of Romania to the European Union, and the effect of opening the border to the merchandizability of agricultural commodities. According to market analyses Romania has considerable agricultural commodity releasing potential, the objections to its utilization at present are the lack of capital, the frittered plant size, the unqualified producing layer, the lack of co-operation and the insufficiencies of agricultural technologies. Geographic and climatic facilities are excellent, and Romania is traditionally admitting towards foreign investors. This is shown by e.g. that the biggest American pork processor is to build a considerable slaughter capacity, the enterprise sets up 200 pig farms in the area of

Partium and Transylvania, and intends to cover the feed background from own production or let it be produced. The effect of this processor is binal, on one hand it could be a supplier target for the Hungarian producers, but based on market analyses and forecasts a more significant effect is that due to the free flow of goods, the products will get to Hungary, and due to the size effectiveness of the producing system most probably it will provide the Hungarian consumers with its slaughterhouse products till the border of Tisza. As the domestic consumers are fairly price sensitive, they will prefer the cheaper goods, and this in turn will weaken the Hungarian producers' competitiveness.

## **Situation of the Hungarian food industry**

The production and domestic market of the Hungarian food industry is narrowing continuously. According to the data of the ÉFOSZ, while the food market grew by 4.4 percent in 2006, domestic sales of the food industry continued to fall by 1.6 percent. The situation was the same in the two years preceding 2006. This means that the growth is clearly covered by foreign products. Translated into rates, the domestic share of Hungarian products which was still at a level of over 90 percent two or three years ago, fell below 80 percent in 2006. The value of gross production of the sector is equivalent to its output in 2000.

Foreign sales of the food industry had been increasing since 2001 until last year, but this trend ended in 2006, with a decrease of 2.4 percent. 92 percent of exports remain in Europe. On the other hand, the 24 member states of the EU represented 65 percent last year. Three-quarters of these sales went to the market of the old 15 and one third to that of the new 19 countries. This latter is a relationship with an increasingly negative balance.

The food industry remains advantageous regarding the value-added ratio of production. This is proven by the fact that, while in terms of production data we are 16th within the rank of the EU-25, according to this indicator we are 6th or 7th. Most countries showing an increasingly large volume of import to Hungary have a worse ranking than us.

Unfortunately, fewer and fewer producers have the chance to break out from the spiral of worsening competitiveness. Fewer and fewer companies are able to implement investments and innovations year after year. Although it is not the ability to innovate that is the problem.

Part of the picture is that the worsening competitiveness on the side of raw materials in some major sectors, such as the meat trade, the poultry trade, fruit and vegetable processing, is a clear obstacle to development.

Given that three-quarters of domestic food turnover reaches consumers through commercial chains, compliance with the demand of these chains is a determinant element of the competitiveness of the food industry. Those who are not able to supply in appropriate quantities, at low prices, flexibly and with high refunds have little chance of survival. Due to this main driving force, the number of food processors in Hungary is continuously decreasing. This in itself is not an unfavourable trend, but it contributes to the upsetting of the structure of the food supply resting on traditional products.

In order to ensure that the production of traditional products can be sustained, supporting those small and medium-sized processing plants still in existence is essential. Namely, they will be the guarantors of satisfying the constantly increasing demand for organic and traditional products. Thanks to their high production culture, producers' background and innovation ability, it is simply their lack of capital scarcity which is an obstacle to them fulfilling their very important mission.

In order to comply with these challenges, the Hungarian food industry must make progress concerning relationships with their suppliers. This traceability is indispensable in the field of common development and joint utilisation of the results of R&D. That is to say, the level of the latter leaves a lot to be desired.

The Hungarian food industry is having difficulty in stopping the declining trend of its competitiveness without the efficient help of the European Union. And this causes continuous uncertainty in the largest and major market for agriculture, which buys 60 percent of its products.

### **The suitability and harmony of the SWOT analysis with the situation analysis**

By the processing of the SWOT table shown in the Programme, or by the supplementation of the modifying proposals of the SWOT workshop held on the 8th. June 2006 (drab background shows the new items) the evaluators phrase their comments relating to the SWOT items in the table below.



*Table 2: Report on the SWOT-items connecting to axis I.*

	SWOT-item	Comments
	Strengths	
S	Outstanding good ecological, habitat endowments	The item is not sufficiently supported; evaluators agree with the item, but it deserves supplementation in the Situation Analysis, because although it raises the competitiveness of the agricultural production, the lack of the distribution possibilities may restrict the utilization of the favourable environmental characteristics. The good habitat endowments contribute to restructuring.
S	The abundance of the surface an underground water supply	The abundance of the water supply is not supported; we agree with the item, it promotes the development of the irrigability, hereby it contributes to the restructuring.
S	Habitats, suitable for production of unique quality region-specific products.	The item is not sufficiently supported. We disagree with the separate listing of this item, and suggest to merge it with the first item.
S	Up-to-date biological background, high performance biological resources	We agree with the item. The item is not sufficiently supported. In connection with the item, the events of the last years (e.g. integration of research institutes, difficulties of the state support system of the maintenance of the biological resources) exerting effect on the maintenance of the biological resources, require further analysis.
S	High standard theoretical-, research knowledge basis, developed vocational training network	We agree with the item. The item is not sufficiently supported. The specification of the item is required, concerning the theoretical-, research knowledge basis, and the theoretical knowledge and practical application. The specification of the item is required, concerning the quality of the knowledge of the pupils released by the vocational training network. The present of the vocational training network is an achievement in itself, but its suitable operation is more important, because a vocational training network providing a lesser usable knowledge is unsuccessful.
S	The big food processing businesses operate effectively	The item is too generalised, it requires specification. The item is not supported, moreover, the opposite is included in the material.
S	The bigger part of the processing industry operates integrated in the international market	The item in this form is not relevant, we disagree with the inclusion of the item.
S	The labour in the food industry is skilled and still cheap	The item in this form is not sufficiently detailed (e.g. plant size issues). The item is not sufficiently supported. The cheap labour is evanescent competitive advantage, we disagree its inclusion.
S	The renewed technical supplies in the arable crop production	The item is not sufficiently supported. We agree with the inclusion of the item.
S	The concentration of the land use has started	The description of the item is not sufficiently detailed. The item is mostly supported. We agree with the inclusion of the item, and suggest the specification of the item, and concerning the land use concentration we suggest the description of the real strength.
S	The absorptive capacity of the agricultural enterprises in the field of development supports is strong	We disagree with the inclusion of the item. The item relates to a narrow population, both as the target group and the subject of the development support.

	SWOT-item	Comments
S	Some SME-s achieved good results with certain special local products (good endeavours of the SME-s appeared in the field of the accession to the market, although, the volume is still not determinative)	We agree with the inclusion of the item. The item is not supported.
S	Low environmental load	We propose the transfer of the item to the axis II. The item is partly supported (there are data relating to the fertilizing, there are no pesticide and reference period).
S	Positive effects realized from the earlier rural development programs	We agree with the inclusion of the item. The support of the item is missing.
S	The presence of farming according to the long-term forest plan based on the yield regulation	We agree with the inclusion of the item. The item is supported.
	Weaknesses	
W	Extreme precipitation conditions, and the resulting unfavourable water balance situation	The item is not supported. The item requires specification. After specification we agree with its inclusion.
W	The low profitability of the sector, lack of capital	We agree with the inclusion of the item. The profitability is supported, the lack of capital, although well known, and is mentioned in the material, it is not supported by data.
W	The concordance among the size, form, producing capacity of the farms is not suitable, in some activities the technical standard is low	The item in this form requires specification. We agree with its inclusion. According to our opinion, the form of the farms is irrelevant concerning the item. The item is restrictedly supported.
W	Considerable part of the buildings, structures, animal farms disagree with the EU regulations.	We agree with the inclusion of the item. The support of the item is missing.
W	The producing infrastructure is incomplete, outdated	We agree with the inclusion of the item. The support of the item is incomplete.
W	The age composition of the farmers and the people employed in the agriculture in general, is unfavourable	We agree with the inclusion of the item. The item is supported.
W	The knowledge of the farmers in the fields of enterprise, market and marketing is incomplete	We agree with the inclusion of the item. The item is partly supported, The analysis, relating to the quality of professional knowledge, and the lack of the mentioned special knowledge, is not involved in the material.
W	The vocational training is not sufficiently practice oriented, the operation of the advisory system is not sufficient	We agree with the inclusion of the item, expanded to the whole agricultural education (mid- and high level). The item is not supported. We suggest the division of the item, the education (obviously the school based) and the advisory system are separated from each other. The support of the statements concerning the advisory activity is missing from the material.

	SWOT-item	Comments
W	The services, trading, logistic systems (storage, transportation), supporting the entire product paths are underdeveloped	We agree with the inclusion of the item. The support of the item is missing from the material, the storage developments implemented in the last years were not considered in the item and in the situation analysis. Especially important element of the item is the issue of transportation.
W	The market organization of the private farmers is of low level	We agree with the inclusion of the item, the item is partly supported, the reasons of the low level of the organization, and the effects of the supporting systems of the last years, are not included in the material. The material does not contain data on the degree of integration of the forest farming.
W	The structural weaknesses, outdated technical standard, weak marketing activity of the small and mid sized food processing businesses	We agree with the inclusion of the item, but suggest its separation, because its elements require different activities.
W	The considerable separation of the food processing and the raw material production, and the quality follow-up is not sufficient	The item contains statement opposing with the material or appears on a level differing from that. (The situation analysis treats on the one hand the differences of the degree of concentration of food industry-raw material production, on the other hand the optimal area distribution of the processing capacities). The first part of the item requires specification. We agree with the inclusion of the item. The item is not supported.
W	There is no accepted national agricultural strategy.	The item indicates a very important issue, we agree with its inclusion in the SWOT-analysis. Its support is missing. We suggest transforming its wording and its placement among the Risks.
W	No effectively operating production groups were established in the forestry (private forest farmers: the absence of instruments, capital and knowledge)	We agree with the inclusion of the item. The item is mostly supported.
W	The weak innovation activity and capacity of the SME-s (food industrial and agricultural)	We consider the item to be important, we agree with its inclusion. Its support is missing.
W	Weak or lacking integration and cooperation	We suggest the incorporation of the item into the item „The market organization of the private farmers is of low level”
W	Sectoral difficulties with area consequences	The item is of special importance from the point of view of the formulation of the strategy. Its support is missing. We propose to consider its transfer to Risks after reinterpretation.
	Opportunities	
O	Increasing national and international demand on good quality national raw materials, traditional, special, trademark bearing food industrial products	The item is not supported, it is relative, we suggest the introduction of the real demand, in each mentioned category. We agree with the inclusion of the item.
O	Safer, more uniform agricultural production	The item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. We disagree with the inclusion of the item, it is too general and unsuitable for establishing of strategy.

	SWOT-item	Comments
O	The improvement, updating of the conditions of food safety, quality, environment protection and hygiene	The item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. The content of the item in itself is a burden to the enterprises, it is rentable only, if the consumer acknowledges these advantages in the price of the products. We agree with the inclusion of the item after reinterpretation. The item is not supported.
O	The prospects of the access to the market, the increase of the safety of the farming	The item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. The item is not supported. We disagree with the inclusion of the item, however, if the planners keep it, we suggest its separation. Concerning the access to the market, we suggest emphasizing the possibilities involved in the new solutions, while concerning the safety of the farming, the possibilities involved in the market of the current and alternative products. The support of these is especially important.
O	The improvement of the knowledge and age structure of the farmers	The item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. The item refers to useful matter from the aspect of the sector. We agree with the inclusion of the item after reinterpretation. The item is not supported. The item in its present form (age structure and the improvement of the knowledge, as possible leverage point) is not supported.
O	The increasing headway of the producers’ organization	The item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. The item is an access to the market promoting condition. In this form it is not supported. We do not suggest the inclusion of the item, however we suggest its integration with the last item.
O	The utilisation of the national raw materials, meeting the consumers’ demands, preparing and sale of high quality products can be enhanced by marketing	We agree with the inclusion of the item. The item is not supported.
O	Formulation of coordinated, well operable product paths (production, processing, marketing), harmonizing the interests	The wording of the item is passive, the product paths shall not be formulated by themselves, they can be formulated, however in this case the item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. We consider the item to be important and suggest the transformation of its wording and its proper supporting.
O	Alternative energy production	The item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. After reinterpretation we suggest its inclusion. The item is not supported.
O	The increase of the added value of agricultural and forestry products	The item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. After transforming its wording we propose its inclusion.
O	The demand for forest by-products is increasing.	We agree with the inclusion of the item. Its support is missing.
O	The revitalisation of the processing of forest by-products	The item does not fit to the category „Possibilities” of the SWOT-analysis, because do not refer to external, positive effect. We disagree with its inclusion and suggest its incorporation into the previous SWOT-item.
	Threats	

	SWOT-item	Comments
T	The increase of the competitive disadvantage of the agricultural sector	The item does not fit to the category „Risks” of the SWOT-analysis, because do not refer to external, negative effect. The item is important from the sector’s point of view, after reinterpretation and transforming its wording we agree with its inclusion. The item does not appear factually, although, some elements of the competitiveness, as descriptions are included in the material. The reasons of the strengths and weaknesses of the competitiveness are not recovered.
T	The decline of the remedy	The item does not fit to the category „Risks” of the SWOT-analysis, because do not refer to external, negative effect. The item is not supported. The item is too general, in its present form we disagree with its inclusion, we suggest its reinterpretation.
T	The producers’ market loss, the repression of the production, tensions in employment and subsistence	The item does not fit to the category „Risks” of the SWOT-analysis, because do not refer to external, negative effect. The item mentions important questions, therefore we suggest to keep it, however its reinterpretation is necessary, in order to establish SWOT-based sufficient strategy. If the item relates to agricultural producers, its support is missing.
T	The increase of regional differences	We disagree with the inclusion of the item in this form, its specification is required. The item is not supported.
T	The unimplemented developments maintain the environment damaging production procedures	We agree with the inclusion of the item. The item is not supported.
T	The price reducing efforts and import purchasing of the multinational firms and retail networks	We disagree with the inclusion of the item and suggest its incorporation to the market loss category during the transforming of its wording. The item is supported, without data. If it is relating only to the food processors, we suggest the expansion of the item in connection with the market loss of the processors, and suggest its inclusion.
T	The price-sensitive consumer demand prefers purchasing the cheap, often low quality and content imported goods	We agree with the inclusion of the item. The item is not supported.
T	The decline of natural and landscape values, the decrease of biodiversity	We agree with the inclusion of the item, it is not supported.
V	The possible reform of Common Agricultural Policy	We agree with the inclusion of the item, it is not supported.
V	Further decline the already weak remedy capacity	We disagree with the inclusion of the item and suggest its integration with „the decline of the remedy” item.
V	During the improvement of the competitiveness, the sustainability and the requirements of the environment protection are not considered	We agree with the inclusion of the item, it is not supported.

## **The determination of the key development areas**

The subsection can be found in one unit with the SWOT of the axes I and II, but among the key development areas it contains statements concerning the axis II very restrictedly. Our comments are shown in the table below:

*Table 3. Report on the key development areas connecting to Axis I.*

Key development areas	Comments
(1.) In the agricultural economy, next to the general capital insufficiency, the shortage of development sources and the unjustified development and surplus of some producing capacity are simultaneously present.	We partially agree with the statement, the capital insufficiency is not a real statement for all farming category. The lack of the capacity concordance is not supported by data in the material. The direction of the development is not determined.
(2.) Due to the ownership and organisational changes, the establishment of the (economical, technological) concordance between the size (form) of farming and the producing capacities, proceeds very slowly, the allocation of the development sources is not sufficiently reasoned and is uneven.	We agree with the statement, although its establishment is not thorough in the material. We agree with the statement relating to the allocation of the development sources, it is not supported in the material and it is not a key development area.
(2.) The diversified – considering its size and form – farming system of the agriculture is characterized by a very simple production- and activity structure.	We agree with the statement, the key development area is not determined.
(3.) The agriculture is characterised by excessive – in many cases even not conforming to the production potentials – production orientation, and the effectiveness of the utilization of the potentials of the increasing of the cost efficiency, utilizing the environmental potential, conserving the rural life style, improving the life quality is much more modest.	We agree with the statement, it is a key development area, it is not sufficiently supported in the material.
(4.) There exist no well operable regulating system, development (handling) strategy for the separate handling of the agriculture exposable to the market competition (competitive agriculture) and the social purpose agriculture.	We agree with the statement.
(5.) The changes of too structured plant structure are very restricted, the establishment of the mid-sized, economically viable, market competition exposable farms is slow.	We partially agree with the statement, the structured plant structure, provided that the product structure is suitable, can be healthy.
(6.) Despite the slow asset concentration, the estate structure is still extremely frittered away, therefore the earliest implementation, encouragement of land reform is invariably timely. In the land use, following our EU accession, due to the relatively high proportion of the tenure of land, the uncertainty of the land use, the very significant increase of the rent comparing to the profitability cause trouble invariably.	We partially agree with the statement, the separation of the estate and the land use, in our opinion, does not obstruct the establishment of the profitable farm size. The issue of the rents is out of the scope of the of development sector policy, it is a market category.
(7.) The population involved in agricultural activity decreased significantly in the last years, the age structure of the family manpower of the private farms worsens dramatically.	We agree with the statement.

Key development areas	Comments
(8.) The qualification level of the private farmers, especially compared to the altered farming conditions, is unsuitable. Their knowledge on the complex farming (plant economy, plant operation, finance and marketing), and concerning the EU (support possibilities, requirements, preparation of application) is especially insufficient. The absence of the practical knowledge, practical training manifests more and more obviously, and the service, advisory system is not sufficiently developed either.	We agree with the statement, although its establishment is not thorough in the material.
(9.) The agriculture is characterised by the uneconomical and conflicting interests generating separation of the product paths (production – processing –marketing). The organisation level of the integrations is differentiated in each sector, the absence of the cooperation is more typical. The headway of the producers' organisations is rather slow.	We agree with the statement.
(10.) The primary food-processing is characterised by the predominance of the small and medium sized businesses, where the lack of capital enhances the drawback in competition, and powerfully restrict the quality, food safety and environment protection developments, conform with the EU regulations.	The statement (the predominance character) is inaccurate, and does not define development direction concerning the processing SME-s.
(11.) The standard of the forestry is invariable restrained by the high number of unskilled forest farmers, having frittered away areas. The organisation of forest farming affiliations is unsatisfactory either. However, the bigger share of the aforestations is realised on private forest areas, which can serve as an encouraging starting point for the forestry development of next planning period.	The statement contradicts to the corresponding chapter of the Situation Analysis, and with the relevant SWOT-item (the presence of long-term forest farming schedules). We agree with the statement concerning the level of organization of the forest farmers, although it is not supported by data.

## **Environment and rural development (Axis II.)**

### **Defining the programmes, main points**

Due to its multifunctional nature—which is nowadays more and more recognized—agriculture, including forestry, plays a decisive role in the protection of natural resources and, on the other hand, can also be a determining factor as a burden on environment.

The European Agricultural Fund for Rural Development (EAFRD) has the following subsections with regard to this field:

- Sustainable utilization of agricultural areas
- Sustainable utilization of forestry areas
- Setting the areas

Among the EAFRD Decree, Axis 2. subsections, the first two contain promotable measures, the part “setting the areas” contains additional specifications as for the definition of promotable areas.

Axis 2 requires an approach different from Axis 1, since the subject-matter here rather concentrates on reaching a certain state, and it is not so much project-oriented. Therefore, while analysing the situation—in addition to SWOT-analysis—it is not the driving forces of Axis 1 we are after, instead, we need to clarify the presence of those elements that refer to the sustainability of the natural environment, as an opportunity to develop the rural environment.

In light of this, the main points have been defined as follows:

- Natural and environmental capacities and status
- The role of agriculture in preserving the natural environment and rural environments
- The preservation of rural environments
- Animal welfare
- Environmental sustainability—a tool and a burden



## **The presence of main points in the analysis**

### **Natural and environmental capacities and status**

The natural environment of Hungary is something of a fact, we agree on its description.

The measures of the 2 axes highly concentrate on the issues of the multifunctional agricultural model as an agricultural sector with reasonable environmental responsibility.

On the basis of this, assessing it *ex ante* we find it fundamental to put emphasis on biodiversity.

A high degree of biodiversity needs to be sustained in order to maximize the survival potentials of a certain community. As for biodiversity, a monitoring system operates in Hungary which can be enabled to evaluate the effects of agricultural activities' biodiversity.

### **The role of agriculture in preserving the natural environment and the preservation of rural environments**

Agriculture moves more and more towards intensive agriculture, using greater amounts of chemicals to cover itself against production risks. This process leads to decreasing biodiversity.

Indeed, within the framework of the national rural development plan, a large number of farmers have gained financial support (partly under the umbrella of the agricultural development programmes), several of whom are so-called large-scale farmers. On the other hand, among the agrarian and environmental activities, the majority of the applicants was formed by the simplest models that require minimal administration.

These first steps are quite relevant in agrarian and environmental management; however, this is still not the sign of environmental awareness, but plays a role in mobilizing significant additional funds.

The delays in the programmes—launched as late as 2004—of agrarian and environmental management lead to the problems that rise in connection with the environmental role of agriculture. Payments of the Nature 2000 programme have not started yet in Hungary, which extremely keeps agricultural production from playing a potentially decisive role in the protection of the natural environment and in the preservation of rural environments.

## Animal welfare

As for the implementation of some animal welfare measures, Hungary as a new member-state of the European Union was given a temporary exemption. This time period has not expired, and the country has to face remarkable challenges with regard to these measures. According to the EAFRD Decree, only additional solutions that have point beyond the given regulations can be supported within the frame of Axis 2. Provisionally, there is no widespread demand to implement it. The statement needs revising during the interim assessment of the national agrarian and rural development programme.

Axis 1 supports the conformity to animal welfare specifications.

## Environmental sustainability—a tool and a burden

Environmental sustainability is a significant part of both developments and any activities of a maintaining sort see measures of EAFRD Decree, Axis 2. Sustainability, environmental aspects often put a burden on economically justified developments; or the different interpretation of certain specifications can easily lead to negative consequences (the ultimate costs of implementing the HACCP regulation might as well spoil small shops in the countryside). The establishment of regulations falls outside rural development's duty, but it is our *ex ante* evaluation that all these regulations make their influence felt in reaching the goals of rural development.

## The suitability of SWOT-analysis, its conformity with the analysis of the situation.

Having processed the SWOT Table presented in the programme, and, secondly, due to the proposed amendments (new items are emphasized in beige background in the Table) issued during the SWOT Workshop held on 8 June 2006, the following reflections have been made in connection with the SWOT-items. (See Table)

*Table 4 Report on SWOT items connecting to Axis II.*

	SWOT item	Comments
	Strengths	
S	On forest areas a multi-purpose, long term farming is done according to a forest plan	We agree that the item is included in axis I, here we disagree.
S	facilities of game management are good	The item is a general statement, has no special content, rephrasing is suggested. We disagree that the item is included (During the SWOT workshop day the item was excluded from the SWOT analysis).
S	Low environmental load	The phrasing of the item is too general. The item is considered to be important, therefore correction is suggested. The item is mostly supported.
S	Rich biodiversity	The item is extremely important, but is not supported sufficiently. We agree that the item is included.

	SWOT item	Comments
S	Rich natural values	We agree with the inclusion of the item, it is partly supported.
S	The presence of extensive farming methods	We agree that the item is included, its establishing is exemplifying, it meets the practical of the Situation analysis requirements from this aspect.
S	farmers have recognized the needs for environmental protection/maintaining set against agriculture , and the possibilities included.	We agree that the item is included, its establishment is missing.
S	The several years long past of public welfare forest management	We disagree with the inclusion of the item in its present form, emphasizing one from among the methods of forest use without mentioning the others does not mean special strength category from the direct natural environmental aspect. It is good for changing the sense, and has other advantages, but rephrasing of the item is necessary. Its support is insufficient in the material.
S	In relation to native animal species we have proper practice, and with systems and in most cases with basis aiming at the maintenance of genetic basis.	We agree that the item is included, it is considered important. Its support is insufficient in the material.
S	Continuous, well balanced aforestation programme.	We agree with the inclusion of the item, its support based with data are partly proper.
	Weaknesses	
W	Environmental-friendly technologies are not well spread, the protection and maintenance of resources are not proper	We consider the item to be very important, its support is not sufficient. We agree that the item is included.
W	Areas having natural values, and their proper handling is not solved	The item is considered to be very important, we agree that it is included. The item contradicts to the material, its support is inadequate. It is proposed to harmonize the item with the Situation analysis, and its correction.
W	The lack of knowledge in environment management	We agree that the item is included, its establishment is missing.
W	Measures relating to environment management are under financed	We agree with the inclusion of the item, its support and the exploration of conclusions is missing.
W	Ratios of procedures really measurably improving environmental protection and conservation are not sufficient (environmental aspects are not shown up in agricultural production	We agree that the item is included, its establishment is missing. The item is considered to be especially important.
W	The ratio of locally produced bioenergy/biomass utilization is very small	We disagree with the inclusion of the item in its present form, although it means an important issue.
W	The local sale of goods produced in small farms for local markets is difficult	The item is not directly relevant in the subject of environmental protection.

	SWOT item	Comments
	Opportunities	
O	The spreading of alternative energy supply, agricultural environmental management	The item is inadequate to the SWOT-analysis „Possibilities” category, as it is not referring to an exterior, positive effect. We propose the division of the item. The first part of the item - according to the ERDF Regulation – is nearer to restructuring. Biomass production with energetic aim on lea-lands, or on areas fallowed can be an alternative activity, though areas with definitely bad facilities are not proper for biomass production with energetic aim. We propose the correction of the item. Not one part of the item is supported.
O	The increase of the added value of forest management and the wider production of forest by-products	The item is inadequate to the SWOT-analysis „Possibilities” category, as it is not referring to an exterior, positive effect. The item is not with environmental but with market approach, and in this aspect serves mainly competitiveness according to axes I.. We disagree with the inclusion of the item. The item is not supported.
O	The improvement of the environmental condition, by developing the conditions of extensive agricultural production and of nature-close forest farming	The item is inadequate to the SWOT-analysis „Possibilities” category, as it is not referring to an exterior, positive effect. The item is extremely important, we agree that it is included. The rephrasing of the item is proposed to a „Possibilities” type SWOT item. The item is not properly supported.
O	With water retention, and governing the increase of local usable water supplies	The item is inadequate to the SWOT-analysis „Possibilities” category, as it is not referring to an exterior, positive effect. The item is partly a market category, its natural/environmental content is not proper. Its rephrasing is suggested, after this, we agree with its inclusion. In its present form it is refused. The item is not supported. (not included)
O	The increase of farming by utilizing the game protection target programme	The item is inadequate to the SWOT-analysis „Possibilities” category, as it is not referring to an exterior, positive effect. According to the ERDF Regulation there is no game protection target programme, there is no support in the material. (not included)
O	Further rationalization of land use	The item is inadequate to the SWOT-analysis „Possibilities” category, as it is not referring to an exterior, positive effect. The item is not properly supported. The item is too general, it is not proposed for inclusion in its present form. (not included)
O	The spreading of traditional farming methods and those requiring high amount of manpower.	The item is inadequate to the SWOT-analysis „Possibilities” category, as it is not referring to an exterior, positive effect. The rephrasing of the item is suggested, the requirement of living manpower is not natural environmental category in this form, however, traditional farming methods are. The establishing of the item is exemplifying, it meets the practical criteria of the Situation analysis from this aspect.
O	Saving soil fertility, therefore decreasing the possibilities of soil degradation	The item is inadequate to the SWOT-analysis „Possibilities” category, as it is not referring to an exterior, positive effect. We agree with the inclusion of the item, but with a modification that directly refers from among the possible soil fertility saving methods to advantageous solution from natural environmental aspects, (to the present wording fertilizing can also be understood). The item is supported.
	Threats	
T	Soil degradation can cause irreversible damages in natural heritages.	We agree with the inclusion of the item, it is supported.
T	farming conditions and market chances of private forest owners are worsening.	The item is inadequate to the SWOT-analysis „Dangers” category, as it is not referring to an exterior, negative effect. The item is not aiming a direct environmental danger, it approaches the issue through a market category, rephrasing is proposed. After modification, we agree with placing the environmental effects into the focus.

	SWOT item	Comments
T	Extreme water balance situations (flood, internal water, drought) decrease the safetiness of agricultural production	We agree with the inclusion of the item, it is supported.
T	Biological decline of natural and landscape values, the decrease of biodiversity	We agree that the item is included, its establishment is missing.

## **The determination of the developmental key areas**

Among the developmental key areas of the agricultural sector the material referring to the development of environment and countryside mentions 1 item according to the table below. The expansion and the further specification of the theme is considered to be important.

*Table 5. Report on SWOT items connecting to Axis II.*

Developmental key areas	Comments
(12.) Activity diversification connecting to agriculture or only loosely connecting activity, association of activities, the establishment of environmental conscious farming among those living in the countryside is essential – and encouraged by all means – need the change of approach.	We agree with the statement.

## **Driving forces towards a sustainable rural development**

As evaluators, we consider as driving forces those elements whose existence makes the relevant activities appropriate or induces them to make exploitation of the potential resources as effective as possible.

The actual realisation of driving forces must also involve the consideration of employment and environmental issues on the level of individual projects.

On the basis of the situation description of the rural development programme, the following elements can be identified as driving forces. However, these are not indicated in the programme as driving forces:

## Driving force     Agriculture

- A large part of the territory of the country, i.e. 89% is appropriate for agricultural/forestry activity

## Rural area

- Number of enterprises employing less than 10 persons is considerable
- A relatively high percentage of individual farms has income from outside agriculture
- Beautiful landscape, natural conditions, cultural heritage
- The environment of homestead areas is beautiful, they play a large role in the conservation of the soil/landscape
- Homestead areas can also be the scene of modern agriculture
- There are a lot of buildings in the countryside which should be given new functions
- In harmony with the needs of the local community
- There are a lot of non-governmental organisations in rural areas
- Handicrafts are still present in rural areas
- Ways of farming which conserve the landscape exist
- There are local food products
- A part of Hungarian specialties are linked to rural areas
- Existing, maintained cultural traditions

In the current world market environment, good natural conditions are a resource. This is however not the main determinant of the success of the agricultural sector of a farm. In our evaluators opinion the driving force is the market. Production of such products which have future market potential is worth supporting .

It is specific to Hungary that agriculture is a significant employing factor. Therefore, we as evaluators, identify agriculture as a driving force in the improvement of the rural living conditions, as an employing factor and potential employment opportunity. Based on these facts, agricultural developments can be unambiguously assessed from the point of view of employment.

The aspect of environmental protection is also counted as a driving force. In this respect, agricultural developments can be taken into account as a means.

In terms of the improvement of rural living conditions, we consider that existing economic and usual traditions and the need for their conservation are an important driving force. We identify non-governmental organisations and interest in local developments as driving forces, although interrelation and interdependence of the individual projects is not a general rule.

For the purpose of diversification of rural farms and improvement of income possibilities, we assess existing natural circumstances as driving forces. Exploiting them provides an opportunity for the cultivation of activities which supplement each other.

## **Ranking of disparities and priorities influencing the rural quality of life and economic opportunities**

Looking at the areas managed by the ERDF in a complex way, we, as evaluators, deem the difficulties relating to the employment opportunities in the rural areas as a major problem. The shortage of employment opportunities, more exactly that of income possibilities is the source or origin of a number of other problems (migration, health conditions and public safety).

Within it, the decline of the employment role of the agriculture is of primary importance. We feel that the professional qualification of people employed in agriculture is a problem of great significance. Currently no agricultural qualifications are needed in Hungary to perform this activity. Primarily, we see this lack of capacities of making individual farmers able to adapt and perceive the changes of the given market environment and properly respond to those changes as an even greater problem. In the case of business entities, this problem is of lower importance because they have well-prepared managers in higher numbers. This is complemented by the weakness in market-orientation of the advisory system in that the advisory activity mostly does not contribute to adjusting to market opportunities.

A large problem is the simplification of the production structure. Consequently, the decline of the sustaining capacity and the motivation for reduction of handwork remains as low as possible. This process is facilitated in crop production by the holding concentration. The simplification of production structure is also disquieting in an environmental respect; it reduces bio-diversity and means monocultural exploitation of the soil as well. The lower number of produced species even has disadvantages from the point of view of the market, because it exposes the crop production sector to certain market effects to a greater extent. Farmers in Hungary only make limited use of mass-production possibilities; above all individual farmers are unable to connect their activities to such production (e.g. in the case of wheat, production of goods in large quantities). One reason for this is that farmers have an aversion to producers groups, for partly historical and partly individual reasons.

An equal problem to the decrease of the employer's role in agriculture is the issue of rural enterprises. Here qualifications do not belong to the most important issues to be discussed, since most enterprises outside agriculture can only be set up in possession of an appropriate qualification. In respect of such enterprises, the greatest problem is the lack of knowledge (mainly about marketing, however, not the sale of existing products but the assessment of market demands and designing products adjusted to them), which results in a lack of market as well as limited availability of local purchasing power.

An extraordinarily significant problem is that at the same time that the employer's role in agriculture has decreased, the employer's role of activities outside agriculture has not risen. This has also contributed to the growth of rural unemployment.

In our evaluators opinion, the lack of funds is subordinated to the range of problems of rural income opportunities. Of course, supporting investments facilitating the adjustment to market changes is important, but, in our evaluators opinion, these should

serve the restructuring as mentioned above in such a way that does not involve a decline in existing employment indices. A related problem is that no definition based on a consensus is available either for competitiveness or restructuring within the agricultural sector.

In respect of vocational training, a significant problem is the weakness in market-orientation of the education structure and the restricted character, or in many cases, absence, of continuous monitoring.

The Roma people create a considerable social problem in certain areas of regarding their living conditions and the environment in which they live. As evaluators we consider it to be a major concern that the problems relating to the Roma have not so far been attempted to be solved through programmes, actions and projects which take into account the way of thinking of this ethnical group. Therefore, weaker results have been achieved than expected, meaning that no progress has been made in the solution, on the one hand, and it was thought that the Roma were refusing the solutions, on the other.

In respect of rural living conditions, a considerable problem is partly the shortage in services and partly the difficulties of access to those services which do not exist in certain towns and villages. A special problem in relation to the shortage of services is that no definition based on consensus is available in Hungary for rural services, for their necessity and minimum level or, if available, such definitions are regulated by laws working independently, which do not analyse the rural development effects, due to the lack of a complex rural policy. The absence of analysis of the effects of rural development is a generally observed trend in Hungary.



## **Quality of life and the diversification of rural economy (Axis III.)**

### **Defining and main topics**

The sub sections according to the ERDF Regulation in Axis III are as listed below:

- Diversification of rural economy
- Improvement of life quality
- Training learning skills

The quality of life is partly an economical question, but questions being outside of the economy - on long turn inevitably - play role with at least as much emphasis, that are indirectly have positive effect on the development of economy (traditions, the strength of local communities, local identity, etc.). All these are included in the passing, mediating and maintaining of relevant knowledge.

The main topics based on those mentioned above are determined as follows:

- Inhabitants
- Local communities
- Training and profession
- Services and infrastructure
- Job opportunities

The main topics in some instances cannot be expressed by numbers, or there are no official statistical data for them. In such cases it is suggested to cite analysis done in a wider scope – that is also appearing in some parts of the material – is there had been such research and study evaluation made.

### **The handling of the main topics in the Situation analysis**

#### **Inhabitants**

We agree with the statement referring the rural inhabitants. As a supplement it is stated – and it is obviously known by the planners- that inhabitant retaining ability besides rural development depends on other factors (e.g. willingness of banks to

finance village building) to what the programme has no means, and yet significantly influence the achievement of the programme.

### **Local communities, inheritance**

The strengthening of the local communities is an added value to the measures of rural development that as multiplier effect can influence the development of economy, and the life quality independent of financial prosperity. The Situation analysis mentions the problems of local communities, including problems derived from emigration, and the disadvantageous processes originating from Roma immigration. The development of local communities aims at these social problems, and partly in community levels and partly through complex programmes strengthen the unity of the local society. We agree with the statements.

As ex ante evaluators, under local inheritance we mean not only the built inheritance and folk traditions, but all elements of rural life and all part units of their scale of values, including independency, willingness to take independent responsibility, and the need for and possibility of independent decision. In connection with the measures of axis III. the disappearance of these is the most important factor, establishing all effective development sustainability. Without these there will be no long term sustainable rural existence. Without the ability of independent responsibility rural inhabitants will not survive the effects of rural service-distraction accomplished in the name of administrative and other rationalizations. Moreover, the successful realization of the programme will be essentially influenced by the changes of regulation systems during the 2007-2013 period besides the ERDF measures of the rural development. The improvement of local communities, their strengthening helps to redeem the reduction of decrease in services, and therefore helps the rural survival.

Concerning the problems of local inheritance and local communities the material phrases those, and lists the main requirements, we agree with them.

In relation to local communities no target group is determined, as the reinforcement of local communities in all regions, settlements, communities of Hungary are extremely important concerning the multiplier effect of the topic.

### **Training and profession**

Qualification level of the rural inhabitants, the problems of those and their reasons are identified, as well as the main areas to be developed; and we agree with them. In the field of profession/ability encouragement of becoming an entrepreneur, letting the entrepreneurial thinking be known, and therefore establishing the ability to economic diversification is of outstanding importance. Without this, production centred thinking will not turn into market centred thinking, i.e. the bases for successful economic diversification will not be established from human resources point of view. At present most of the rural entrepreneurs are not seeking the ways of sale but resign to the fact that there is no possibility to change product, because there is no sound consumer

demand. The healthy market attitude is missing from those rural entrepreneurs who are at present not working on area monopoly, that is the might need possible diversification. The qualification and ability of those working in the agriculture make on-farm or off-farm diversification possible only in a narrow area. We agree with statements referring to profession

## **Services and infrastructure**

The development of rural basic services and infrastructure can only partly be aimed at by the measures of ERDF. Concerning services due to non rural developmental regulations in Hungary the disadvantage of rural areas is significant, the Government's present short term regionalization with economic approach overbalances the supply of rural areas - already being in disadvantageous situation – with services, it is enough to think of post offices schools, and we are to facet he reforms of health and government system. These are changes that in their effects are more significant in the negative direction (decrease the inhabitant retaining ability) then in the generally positive one, which might be achieved by the rural developmental measures of ERDF. It can be supplemented with the fact, that certain bank do not finance private house purchase, and therefore the service competition gets narrower in rural areas that is economically disadvantageous to the rural inhabitants.

In connection with the spreading of economic services the problem emerges differently, as it is regulated by economic lawfulness, where necessary economic services appear quickly competing with one another. On such areas regional problem is the lack of starting the development of the economy due to the absence of economic services. These services are regularly following ones, that is, the demand should appear for such services, and these in themselves do not create market in the countryside. The reason for this is the higher density of enterprises in larger cities that means a connection system that can be operated more effectively from the side of the service providers. A further problem is, concerning service providers, that they offer similar service price level, as in cities with greater economic potential. Naturally, it cannot be expected that they should gain less money for their job, but it is a fact, that higher prices prevent the forming of economic services in a wider scope.

If not the greatest, the provision of the participants of the rural economy with up-to-date information is still a problem. This problem does not apply to the given economic circumstances, but to market forecasts, to long term thinking from the aspect of evaluating the necessity of activity or product diversification that might emerge.

Concerning infrastructure, it is of outstanding importance that rural settlements are difficult to be reached physically and through information channels; - this is a great problem. this includes the poor quality of road network, involution in the name of rationalizing of public transportation, difficulties of rural families in the field of car keeping, and the lack of coverage of certain areas by mobile-phone networks, and the lack of a possible up-to-date internet connection.

In infrastructural relation further problem is the lack of spreading of the use of renewable energy resources.

## **Job opportunities**

On countryside there are two major problems concerning the working possibilities, One of them is the small number of workplaces, the other is the relatively high number of the unemployed people unwilling to work.

From the aspect of creating workplaces, the rural areas are not attractive, the bigger employers settle in the regional centres. This has company-seat selecting reasons, and the minimizing of the leaving barriers, the maintenance of the later marketability. These are economical regulating mechanisms, there is nothing to do with them with rural development measures. Concerning the workplaces the next problem is the existence of suitable skilled manpower, which is a considerable problem on countryside. Concerning this, the manpower adaptive capacity promoting character of the training in the countryside is an effective help in improvement of the employment conditions.

The low social appreciation of the self-employment, and the absence of the self employing ability among the rural population, is a considerable problem connecting to the increasing of the working possibilities in Hungary. The major part of the rural population of the age of employee, shows higher willingness to be employed at a workplace, work out the necessary time there, and after refraining from such economic activity, which would contribute to the improvement of his living conditions. This trend is stronger and stronger among the youth. This makes the rural population of the age of employee defenceless, which restrict the later capacity for changing of working activity and in the present economic situation it shall not be able to take a new job after discharge, so contributes to the increasing of the rural unemployment. The improvement of the capacity of the rural population to take the responsibility, is a major contribution to the increase of the working possibilities and through this to the improvement of the employment. In the development of this, as ex ante evaluators, we see great possibility.

On the countryside the social network which – may be, that due to its economic interest -adopt the matter of unemployed, and taking the local social responsibility, and realizing the social deviances originating from the unemployment, organizes the village employment network, is absent. The reinforcement of the local communities provides help in coping with this problem as well, we see considerable development potential in this.

We, as ex ante evaluators, consider the problems of the quality of life of the disadvantaged target groups, especially in case of the Romas, to be similar. In relation of the target groups mentioned, the greatest problem is that given solutions not taking into consideration or only to a smaller extent, the different cultural features of these social groups, and at implementing the solutions intended to be custom-tailored, they evaluate with identical measures as the mainstream programmes.

### **2.5.3. The suitability of SWOT-analysis and its harmony with the situation analysis**

With the processing of the SWOT-table provided in the programme and with its supplementation with the modifying proposals of the SWOT-workshop day held on the 8th June 2006 (shown in drab background) the evaluators phrase the following comments in connection with SWOT-items.

*Table 6. Comments on SWOT-items in connection with Axis 3.*

	SWOT-item	Comments
	Strengths	
S	Rich cultural heritage, natural resources, variable regional conditions.	Expanded
S	Healthy, peaceful place to live	We agree that the item is included, but we propose transforming its wording so as to help it better convey the meaning of strength. The item is not supported with argumentation.
S	In rural settlements, the density of basic infrastructure is convenient with the exception of homestead areas, small village- and peripheral regions.	We agree that the item is included, it is partly supported with argumentation.
S	The rural areas' economic and cultural heritage, their natural and habitat properties serve as suitable ground for the development of economic activities in the non-agricultural sphere, as well as in other supplementary fields (world-heritage sites, architectural heritage, archaeological values, folklore, traditions).	We agree that the item is included.
S	Well-skilled craftsmen communities, professionally established panels of experts to judge folkloric arts and crafts.	We agree that the item is included, it is not supported with argumentation.
	Weaknesses	
W	The cultural values of rural areas are almost never exploited properly, the sustained utilization of natural resources also remains at a low level.	The item is not included in this form; parts of it have been reorganized into other items.
W	Small village regions give an overall deteriorating picture of themselves.	Not included.
W	Characteristically, public utility services are not always easily available for all inhabitants.	
W	The means of subsistence, that are not based on agriculture, are slowly spreading.	Expanded.
W	Reduced economic services and auxiliary infrastructure (sales, logistics, communication networks).	Transformed wording.
W	Low and ever decreasing economic activities in rural areas, a great number of 'involuntary entrepreneurs.'	We agree that the item is included, it is well supported.
W	Long established productive sectors with low profitability are of great importance in rural areas; the means of subsistence, that are not based on agriculture, are slowly spreading.	We agree that the item is included, it is partly supported with argumentation.

	SWOT-item	Comments
W	In rural areas, the capital attractiveness and the degree of knowledge intensive employment should be improved.	We agree that the item is included; while it is well-supported with argumentation, it lacks sufficient data.
W	The enterprise potential and the innovative capacities of the rural population is low; in the absence of the necessary abilities and own strength, they are less likely to make use of development programmes.	We agree that the item is included; the account of the prevailing conditions is not well-supported.
W	Lack of certain practices, e.g. partnership, well-functioning networks.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
W	Poor promotion of traditional arts and crafts, lack of public recognition, vague practice of sales.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
W	The utilisation of renewable energy in the private and public sectors has not gained ground so far.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
W	Disparities as for the quality and regional heterogeneity of village tourism; a lack of integration.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
W	Insufficient legislation in the field of direct marketing small-scale producers' products through tourism.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
W	Infrastructure and service industries available for enterprises require improving.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
	Opportunities	
O	Natural and cultural values are to be appreciated; the importance of healthy environment should be underlined.	The item is not included in this form; parts of it have been reorganized into other items.
O	A growing social demand on the utilization of renewable energy sources.	Transformed wording.
O	A growing and sound demand on foodstuffs that have been produced in more environment-friendly ways.	It has been reorganized into other items.
O	Cultural heritage comes to the fore worldwide.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
O	A growing demand on products and services that are safe, healthy, and bear the marks of certain regions, with respect to the considerations of the labour market and ensuring the protection of values.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
O	By means of the development of information and communication technologies, the capital attractiveness of peripheral areas is going to be increased, isolation is reduced.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
O	In line with European trends, the options of energy sources available in rural areas (e.g. biomass) are to be re-evaluated; a high value is to be set on healthy environment and natural values.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
O	A gradual presence of tourism's multiplier effects in the fields of agricultural products and services utilized in village tourism.	We agree that the item is included, the account of the prevailing conditions is not well-supported.

	SWOT-item	Comments
O	The reduction of infrastructural drawbacks emphasizing environment-friendly solutions as part of the EU's cohesion policy.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
	Threats	
T	The migration of active, well-trained labour force is going to continue, similarly to the ageing and the decrease of rural populations in small village regions.	Transformed wording.
T	As a consequence of functional changes in rural areas (such as agglomeration or resort villages), existing values and unique characteristics are going to disappear.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
T	As a consequence of the falling natural increase in population and the migration of the active, well-trained labour force, depopulation and deteriorating age-structure of the population is going to occur.	We agree that the item is included, it is well-supported.
T	The importance of agriculture in employment keeps falling; yet this phenomenon will not be followed by the development of non-agricultural economic activities.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
T	As a result of the intensifying migration into urban areas, a strong regional concentration can be expected.	We agree that the item is included, it is well-supported.
T	Commercializing and a general value crisis in trade and in public opinion is going to show an upward tendency.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
T	As a consequence of a lack of financial sources, in the fields of culture and traditionalism, it will be difficult to be respectful of traditions.	We agree that the item is included, the account of the prevailing conditions is not well-supported.
T	The security of property and public safety is going to change for the worse.	We agree that the item is included, the account of the prevailing conditions is not well-supported.

## **Defining key development areas**

As for the key development areas regarding the realignment of the most backward regions (as a subject matter), our comments will be the following. See Table.

*Table 7. Comments on the key development areas in connection with Axis 3.*

Development priorities	Comments
Low entrepreneurial skills; micro companies are prevalent; lack of integration; the low range of service industry is a proof of the economic dynamism that is lagging behind that of urbanized areas especially in the south, the eastern parts of the country, and in small village areas, of course. In rural areas, the falling economic strength of agriculture is not satisfactorily compensated by alternative and/or supplementary non-agricultural economic activities.	We agree that the statement is correct, the subject matter is well-supported with argumentation, but there is a relative lack of data and references on the basis of analysis.
(2.) In the structure of the economy, the less profitable sectors and activities are in majority, so the earnings of the enterprises and the employed lag behind townspeople's earnings, and behind the national level as well. The larger scales of manual workers and those with lower educational level, as well as the falling degree of the working population are another factor that reinforces the income conditions.	We agree that the statement is correct, while it lacks sufficient data, it is well-supported with argumentation.
(3.) The unemployment rate is more than twice the national average, especially in small settlements, which is due to the critical labour market situation. For people with higher qualification it is hard to find a suitable job; on the other hand, the employment of low skilled social groups, e.g. the Roma population, is also very problematic. All this leads to migration in the case of the former, and to unemployment, deviation, and disappearing from the labour market in the case of the latter group. The migration of those with higher qualification results in the lack of strong knowledge base in the countryside.	We agree that the statement is correct, while it is not well-supported with trends, it is well-supported with argumentation.
(4.) The service industry that helps restructure the economy and strengthen local enterprises are concentrated into towns, which makes it rather difficult for the rural population of peripheral areas to obtain them. Logistics, information networks, the number and capacity of organizations and networks are all unsatisfactory to reach efficient sales and marketing. With regard to basic services, small villages and homestead areas are still very problematic.	We agree that the statement is correct, it is partly supported in the analysis.
(5.) Basis infrastructure has improved a lot in rural areas, however, in small villages and peripheral and homestead areas public supplies still need improving (sewerage system, periphery roads, electric network, drinking water etc.). The basic infrastructure, that is necessary to achieve the development of the entrepreneurial sector, is insufficient; the utilization of info-communication facilities is weak (with regards to both equipment and skills). The field of renewable energy resources is almost completely unexploited.	We agree that the statement is correct, it is partly supported with data.
(6.) Developing village tourism is one of the key areas of economic diversification. In order to intensify this phenomenon, an abundant supply of agro tourism, supported by the cooperation of regions, is required; a service and marketing network also needs to be established that help direct marketing of local enterprises. In addition to this, training in the field of tourism and catering is not satisfactory.	Overall, we agree that the statement is correct; within the domain of opportunities the question of demand needs further analysis.



Development priorities	Comments
<p>(7.) Rural areas have their own special, characteristic and remarkably various cultural heritage, which is a cultural and economic resource at the same time. Therefore, it is rather important to protect these values, and to ensure its sustainable management. As a matter of fact, this is of great importance with regard to regional development, tourism, economic diversification, culture and local communities.</p> <p>Alongside the protection of values, it is just as relevant to increase value, especially in settlements with no architectural values, or no remarkable image.</p>	<p>We agree that the statement is correct, it is partly supported.</p>
<p>(8.) There is no considerable synergic relationship between local developments.</p>	<p>We agree that the statement is correct, we propose it for further analysis, it is partly supported.</p>

## **Leader (Axis IV.)**

### **Defining the programmes, main points**

As Axis 4 (Leader) does not have subsections, and the approach is standardized, no main points are differentiated.

Leader is still taken as a novel idea in Hungary apart from the fact that before the country's accession to the EU, there used to be a Leader programme, moreover, for the time being there is another Leader programme which has been launched by the Ministry of Agriculture and Rural Development, under the umbrella of the Agricultural and Rural Development Operational Programme (ARDOP). At the moment, little is known about the practical application of the approach and the problems involved, but some of the difficulties can be drawn from the progress of ARDOP's Leader programme.

The implementation is significantly delayed, which is actually an obstructive factor in the widespread understanding of Leader's importance and its policies. Skills have to be improved; local planning and operational mechanisms all have to be cleared.

The obtainable sums of money per application are relatively small with regards to the complexity of the system. Leader supports smaller projects, and the obtainable sum of money is less than half of the accounted costs, if the application is submitted by a company. This raises no problem itself, because the smaller the amount of support, the more likely the project is further ensured at a higher rate. The problem arises when it comes to the complexity of the application system and decision mechanisms. The application form is too much complicated; in addition, it makes no differences between the legal entities of the potential applicants, nor between the types of financial commitments involved. Due to the standardization, there are some headings in the form that simply make no sense in the case of projects which otherwise are in line with the policies of Leader, a phenomena that ends in losing some scores in the final assessment.

In contradiction to the original Leader policies based on local decisions, new assessments are implemented in the application procedures which use a scoring method that is less able to judge the applications in local circumstances. On the other hand, according to the new method, the final decision is made by a central

administrative authority independent from any region, in spite of the previous practice, when decisions would be made by the Local Action Group.

The principal responsibility of the final decision lies with the head of the managing authority, a decision that cannot be challenged afterwards. This approach is totally opposed to the policies of Leader.

### **The suitability of the SWOT-analysis, its coherence with the analysis of the situation**

Having processed the SWOT Table presented in the programme, and, secondly, due to the proposed amendments (emphasized in beige background in the Table) issued during the SWOT Workshop held on 8 June 2006, the following reflections have been made in connection with the SWOT-items. (See Table)

*Table 8. Comments on the SWOT-items in connection with Axis 4.*

	SWOT-item	Comments
	Strengths	
S	Significant local experience and willingness to initiate and implement integrated development programmes at small area levels. Economic activity is on the rise in some areas.	Transformed wording.
S	Significant local experience and willingness to initiate and implement integrated regional development programmes at small area levels. The activity of local communities is on the rise in some areas.	We agree that the statement is correct, its argumentation is not presented.
	Weaknesses	
W	Low entrepreneurial skills, innovative capacities and economic activity of the rural population.	Removed.
w	Weak synergy among local developments, poor integration.	Transformed wording.
W	A lack of initiatives and trust.	We agree that the statement is correct, but there is no adequate argumentation.
W	Weak synergic relationship among local developments.	We agree that the statement is correct, but there is no adequate argumentation.
W	Public utility services are not always easily available; there is a lack of non-profit solutions; as for the existing services, there are significant regional differences between the quality of services.	We agree that the statement is correct, the argumentation is partly presented and incomplete.
W	Poor security of property in small villages and homestead areas.	We agree that the statement is correct, but there is no adequate argumentation.
	Opportunities	

	SWOT-item	Comments
O	An increasing demand on intensifying the relationships between regions and rural-urban areas.	Transformed wording.
O	The majority of rural population show a willingness to develop partnership and implement projects that are based on local resources and solutions.	Transformed wording.
O	By means of the development of information and communication technologies, the capital attractiveness of peripheral areas is going to be increased, accessibility is improved.	Removed.
O	A growing regional and rural-urban integration; more developments are implemented that are based on local resources and solutions.	We agree that the statement is correct, but there is no argumentation.
	Threats	
T	Segregation becomes stronger, further ghettoization of certain areas, deteriorating security of property.	Removed.
T	Agriculture keeps losing ground, which is not compensated by new economic activities or else.	Removed.
T	The accessibility of rural areas keeps falling (roads, public transport).	Removed.
T	Security of property and public safety keep deteriorating.	We agree that the statement is correct, but there is no argumentation.

## **Determining key development areas**

No key development areas have been determined in connection with Leader.

## SWOT table

Following the completion of the version of the Programme of 18 January 2007 the planners and the ex ante evaluators have organized a two-days strategic workshop, aimed at strengthening the coherence of the situation analysis and the strategy. In the course of the SWOT workshop the strengths and weaknesses at Programme level have been identified in a summary SWOT table. Opportunities and threats have been defined based on a set of international and domestic trends collected previously. Offensive strategies have been selected by matching strengths with opportunities and defensive strategies by matching weaknesses and threats.

An offensive strategy is per definitionem a set of interventions based on existing strengths further supported by foreseeable trends with a positive impact (or opportunities). An offensive strategy is relatively easy to measure and the availability of the opportunities is straightforward to test. A defensive strategy, on the other hand, targets weaknesses further engraved by foreseeable negative impacts of trends. A defensive strategy, aiming at countering the worsening of a situation, or avoiding a potential crisis, is much harder to measure (non-occurrence of a crisis may be a consequence of either an effective intervention or an erroneous forecast). The intervention logic is presented graphically in the next Chapter, where vertical bars with square connectors present individual intervention chains (the vertical bars have square connectors at least on their both ends – they are placed at the individual SWOT items that specific chain refers to).

Below the final SWOT table is presented:

Strategic goals:	Strengths:	Weaknesses
<p>Agriculture and food processing restructuring production, quality production, operation of product-lines, improving competitiveness</p> <p>Environmental conditions Improvement of water management systems, sustainable use of agricultural land, conservation of biodiversity, restoring the effects of climate change</p> <p>Rural economy Improvement the quality of rural life, accessibility to sustainable living standards</p>	<p>Outstanding ecological and habitat features Habitats, suitable for production of unique quality region-specific products. The concentration of land use has started The operating efficiency of large food processing enterprises with state-of-the-art technology is favourable Hungarian agriculture produces high quality and safe food products Traditional and special quality products The presence of farming according to the long-term forest plan based on the yield regulation Rising aim of founding co-operatives Rich in environmental and natural endowments Up-to-date biological background, high performance biological resources High level biodiversity and low level environmental load Healthy living conditions Co-operativity of local communities</p>	<p>Fragmented land structure: the concordance among the size, form, productive capacity of the farms is not suitable, and in some activities the technical standard is low The balance between the two main sectors, mainly crop farming and animal husbandry have shifted The low profitability of the sector, lack of capital Investments failed from lack of capital, obsolete production assets Agriculture as a full-time activity only provides livelihood for a limited number of farmers The coherence between the size and production capacity of holdings are not appropriate, certain activities obtain a low technical and technological level Obsolete technologies used for animal husbandry Livestock emplacement and animal welfare compliance is not adequate - environmental load The age composition of the farmers and the people employed in agriculture in general, is unfavourable The knowledge of the farmers in the fields of enterprise, market and marketing is incomplete The vocational training is not sufficiently practice-oriented, the operation of the advisory system is not satisfactory The market organization of individual farmers is significantly under EU average The structural weaknesses, outdated technical standard, undercapitalization, weak marketing activity of the small and medium-sized food processing businesses The considerable separation of food processing and the material</p>

		<p>production, and the quality follow-up is not sufficient</p> <p>The services, trading, logistic systems (storage, transportation), supporting the entire product paths are underdeveloped; Alternative utilisation of poor quality agricultural areas</p> <p>Areas having nature values, and their proper handling is not solved</p> <p>Imperfect rural infrastructure (civil, entrepreneurial, production, e.g. transport, traffic, working-site)</p> <p>Services supporting product chain, trading and logistic systems are underdeveloped</p> <p>Tumbled rural communities</p> <p>Lack of employment opportunities in rural areas</p> <p>Dynamic differentialization of village development, the critical state of villages in areas lagging behind, increasing depopulation</p> <p>Lack of space used by communities</p>
<p><b>Trends</b></p> <p>The proportion and balance of the two main sectors (plant production and animal husbandry) has unfavourable consequences</p> <p>The genetic resources are endangered and not developing</p> <p>The change in nutritional behaviours, increase in quality expectations, moderate increase is overall demand</p> <p>Due to the structural problems of education the demand for market and labour force qualifications do not meet the market expectations</p> <p>Growth of internal and international demand</p>	<p><b>Opportunities</b></p> <p>Increasing portion of competitive holdings</p> <p>Threats</p> <p>Promoting the shift to land use methods appropriate for the natural endowments;</p> <p>Utilisation of forestry and timber industry can be increased</p> <p>Increasing demand for traditional and special quality products</p> <p>Extension of Eco-production</p> <p>The improvement of the environmental condition, by developing the conditions of extensive agricultural production and of</p>	<p><b>Threats</b></p> <p>The increase of regional differences</p> <p>Disproportionate increase in the costs of agricultural production</p> <p>The use of inappropriate adulterants endanger the supply-demand balance and the quality of the products</p> <p>Realized product surplus derived from agricultural production</p> <p>The lack of up-to-date knowledge endangers the utilization of highly capable production sites</p> <p>Soil degradation can cause irreversible damage in natural heritages.</p> <p>Extreme water balance situations (flood, internal water, drought)</p> <p>Global warming</p> <p>The decrease in size and quality of outstanding agricultural areas</p> <p>The abandonment of lands endangers the maintenance of the</p>

<p>for eco-products</p> <p>Emerging and further aggravation of EU environment protection, animal welfare, quality assurance norms and requirements</p> <p>Transmigration from rural areas</p> <p>Increase of the demand for alternative free-time activities</p> <p>Moderate strengthening of degradation processes connected to agriculture</p> <p>The market selection resulting from professionalism is increasing</p> <p>Change of the CAP</p> <p>The decrease of partitioned, uncultivated privately owned forests</p>	<p>nature-friendly forest farming</p> <p>Saving soil fertility, therefore decreasing the possibilities of soil degradation</p> <p>Increasing demand for renewable energy resources</p> <p>Broadening the activities of the rural population provides safer subsistence;</p> <p>Locally binding rural workforce – diversification of activities</p> <p>Increasing interest for gastronomy, eco- and recreational tourism</p>	<p>agricultural status, especially at less favoured areas.</p> <p>The out-of-date knowledge and the low level of adaptivity may be a long-term limiting factor for the rural population</p> <p>The small village areas are socially tending to lag behind</p>
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<b>Strategies</b>	<b>Offensive strategy (measures)</b>	<b>Defensive strategy (measures)</b>
Development of competitiveness	112. Setting up young farmers	111. Training, information and diffusion of knowledge
Supporting groups of production	122. Improving the economic value of the forest	113. Early retirement of farmers and farm workers
Competence centres, Dissemination,	123. Adding value to agricultural and forestry products	114. Use of farm advisory services
Renewable energy plants	125. Infrastructure related to the development and adaptation of agriculture and forestry	121. Modernization of agricultural holdings
Natura 2000 sustenance plan, KAT, AKG,	142. Setting up producer groups	141. Semi-subsistence farming
Observance of norms	226. Restoring forestry potential and preventive actions	212. Payments to farmers in areas with handicaps, other than mountain areas
Encouraging entrepreneurial drive	313. Encouragement of tourism activities	214 (A). Agri-environmental payments
Non-agriculture driven enterprises (e.g. rural tourism)	341. Skill acquisition, animation and implementation	214 (B). Preservation of genetic resources
Equal opportunities		216. Assistance provided to non-productive investments
		221. First afforestation of agricultural lands
		222. First establishment of agro forestry systems
		223. First afforestation of non-agricultural land
		225. Forest-environment payments
		227. Non productive investments
		311. Diversification into non-agricultural activities
		312. Support for business creation and development
		322. Basic services for the economy and rural population
		323. Village renewal and development
		331. Training and information
		411. Implementation of the local development strategies
		421. International and trans-national cooperation
		431. Running costs, acquisition of skills and animation

## **Goals to be achieved, evaluation of the strategy chosen**

### **Internal coherence of the programme<sup>12</sup>**

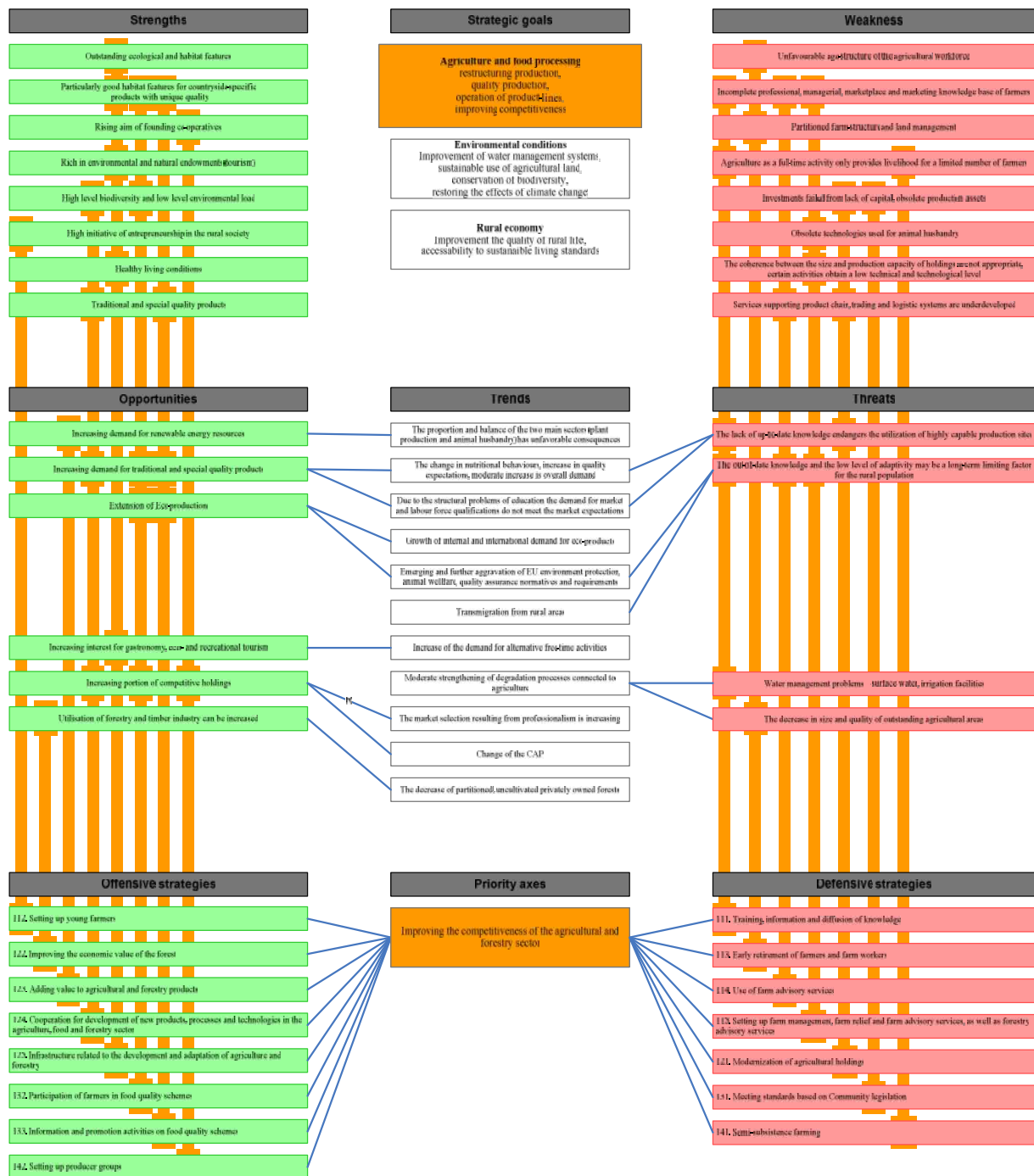
As regards of the specific strategies described under the Axes, the ex ante evaluators assessed their internal coherence by reconstructing and reviewing the overall intervention logic of the Programme, and that of the specific measures. A series of workshops in January 2007 dealt with highlighting unclear elements and discussing the underlying rationale, specific objectives, as well as ways and means to achieving these with the planners. Specific focus was put on integrating the lessons derived from the medium-term outlook of the agricultural sectors under Axis I, and on increasing the effectiveness and efficiency of rural development schemes under Axis III by creating synergies between measures, and ensuring that rural services and village renewal activities will be implemented in an economically sustainable way. Proposals to strengthen the responsibilities and competences of local actors under Axis IV were also made.

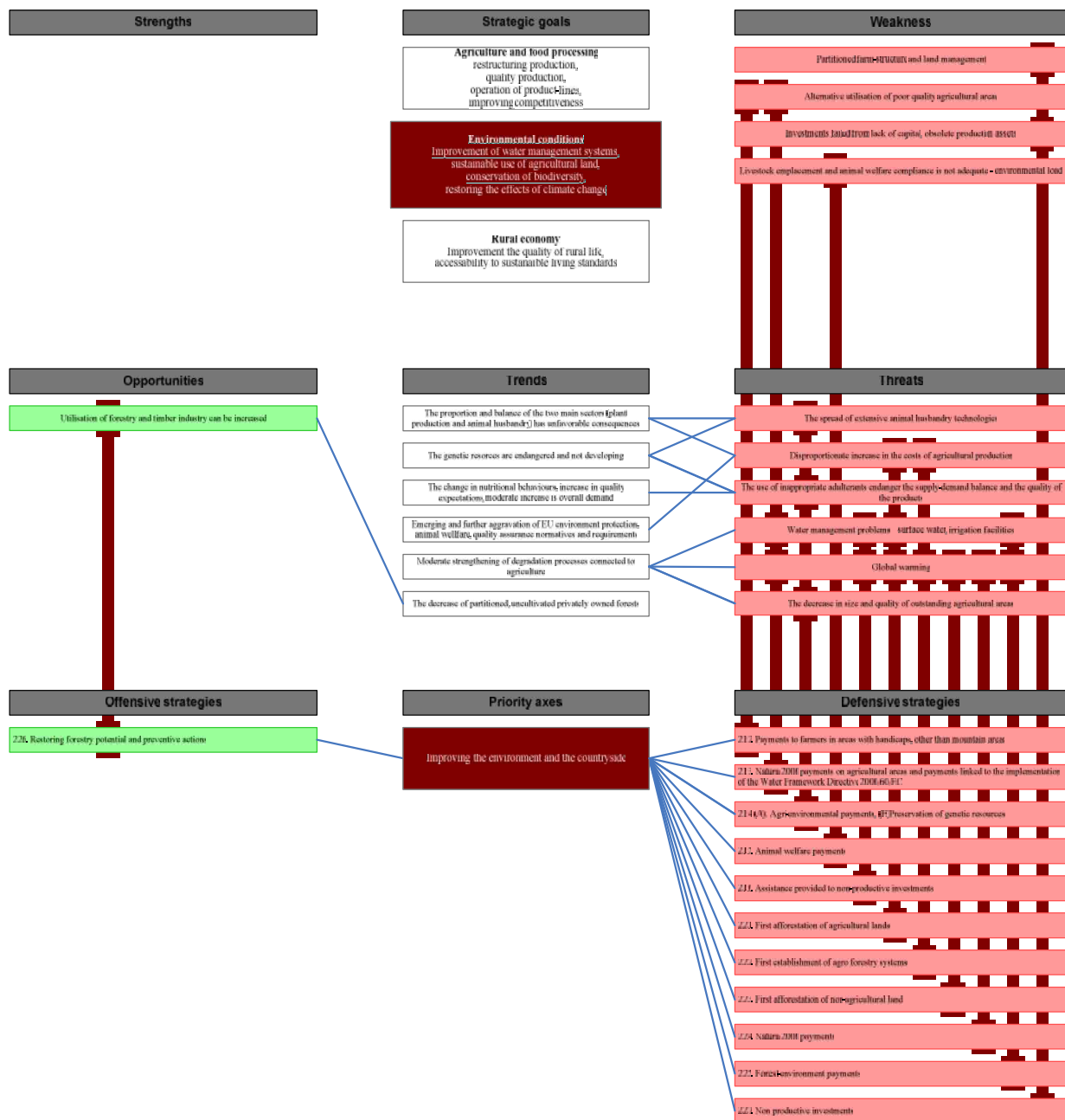
Further, the description of all measures were reviewed by the evaluators, and checked against the requirements issued by the Commission (including the structure – ie. sub-headings - and overall content of the draft text). A significant number of detailed suggestions were made to complement these.

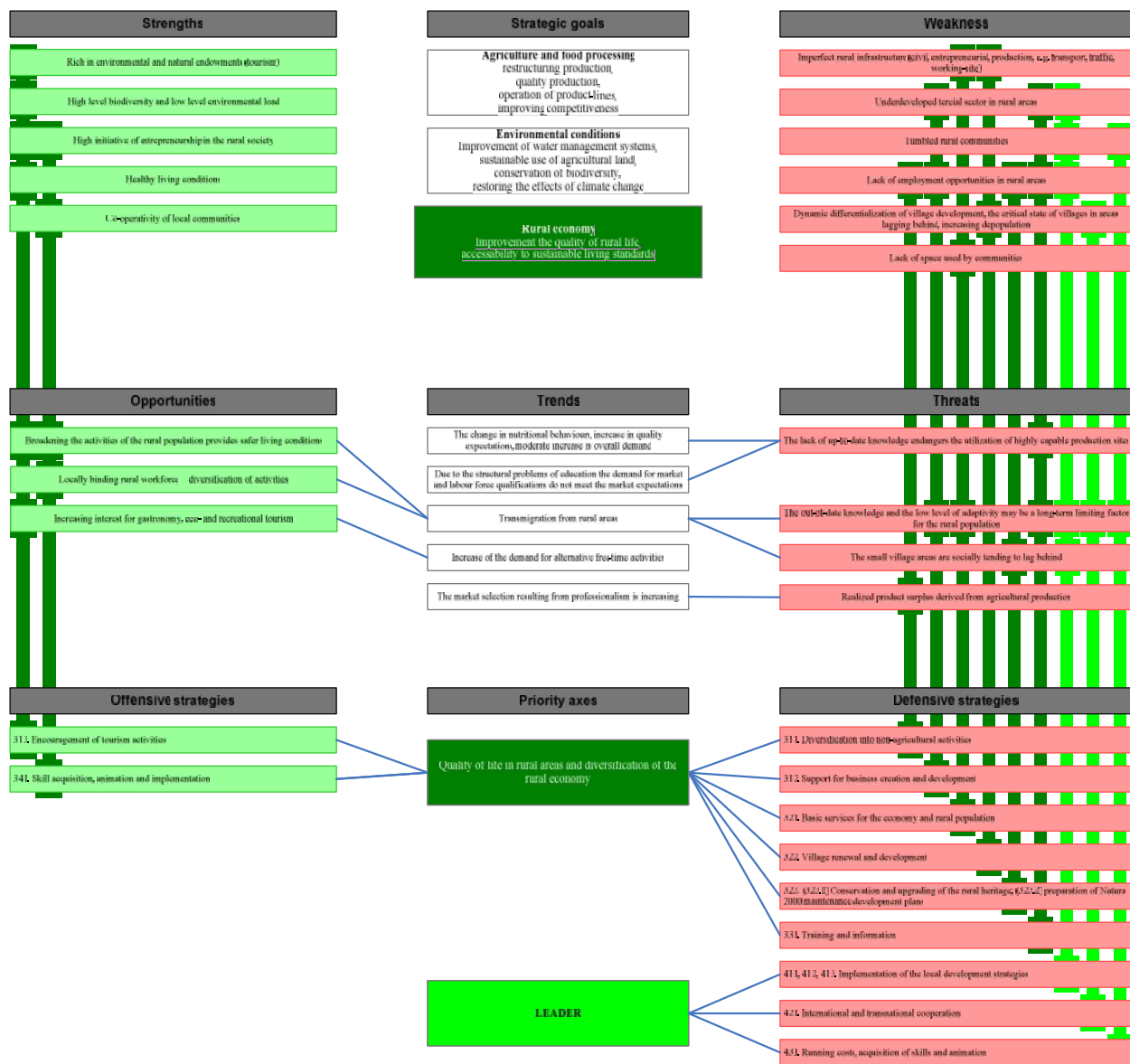
The following exhibits show the procedure how the specific measures have been identified. Concerning the measures two groups (offensive and defensive strategies) have been identified. In both cases the connection is shown by vertical lines, which demonstrates the linkages to the components of the SWOT analysis with a bullet. Besides the SWOT analysis there is also a table with the trends showing the correlation between the targeted opportunities or threats by the specified measure.

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<sup>12</sup> Previous measures 1.1.5, 1.2.4, 1.3.1, 1.3.2, 1.3.2, 2.1.5, 2.2.4 of the February version of the Programme are no longer present in the final NHRDP.







## **Assesment of the overall strategy**

The strategy identifies 3 Axis, along the Axis I-II-III, while the Leader serves as an implementation approach of the 3 Axis.

The intervention actions cover the needs of the agriculture, the environment and the rural areas. The weight of the Axis, taking into consideration the number of the intervention actions, reflects the possibilities of the EAFRD-measures. The rural development without the agricultural related measures (Axis I-II) has fewer possibilities on terms of intervention actions. Beside this, there are several kinds of circumstances, which influence the results of this strategy, mainly in the fields of services and enterprise-development, which are the two main areas of the present strategy's Axis III intervention actions.

The fund allocation answers the structural and employment problems should be solved within agriculture and forestry.

The horizontal issues and the need of meeting the Lisbon and Gothenburg principles, are handled well in the strategy, despite the fact of in some cases, in principle, improving competitiveness does not contribute to the increase of employment.

## **Axis I. – Improving the competitiveness of the agricultural and forestry sector**

In case of Axis I there the justification of the strategy chosen is not organised along one, broadly approved competitiveness definition, while the national priority refers some of the competitiveness elements. We suggest analysing market situation and impact of suggested measures on different commodity markets in more details. The Axis's strategy contains different, really important measures, but it is not clear enough how it will contribute to the competitiveness of the agricultural sector. It needs more explanation and analyse.

The goals are as follows (by intervention actions):

- Spreading information and knowledge: increasing knowledge, ensure possibility for tailor-made extension
- Improving age structure: encourage young farmers to start, through this lowering the average age in agricultural production
- Change in production structure: adjustment of grain-production, change the structure, along changing market possibilities, enhancement of role of agriculture and forestry in raw material production for renewable energy, change in structure of land use towards products with more added value
- Renewable energy use and production
- Strengthen the viability of animal husbandry
- More added value in horticulture
- Forestry
- Supporting quality: increase in added value of agricultural products through processing for food; strengthen the producer groups
- Infrastructural improvements: increase in irrigated land, as well as the farms' infrastructural development

The intervention actions cover the national priority, while the intervention actions contain the relevant EAFRD-measures. There is a need, which to take the environmental effects into account of the investments, during the implementation. We see that it might have a better place in Axis I.

Among the result we expect high interest in machinery development, since this measure has been “closed” almost two years ago. The same is valid for investments in buildings, technology. That is why we suggest strong market orientation and screening for deadweight, in the application procedure. The same situation is expected in the forestry measure.

The trainings need strong proactive steps, without it this measure will not attract many farmers. The extension service will be popular, since this is based on the obligatory established farm advisory system.

Setting up young farmers will also be popular; in particular if the farms transfer measure also will run. There is a large interest in transferring farms. So, finally there will be more young farmers.

Since the processing is limited, the large factories are not eligible; there will be more, much smaller projects in food. The non food sub-measures are not supported with market analysis however could be good way to decrease the grain market disorder, in case of proven market possibilities.

In case of infrastructural investments the irrigation will attract relative high interest, as well as the amelioration. In both cases the private investments will be more popular. But, since the common improvement is at least important, strong proactive steps are needed to enhance those.

The meeting standards seem to be very popular, all of the farmers concerned are expected to join.

Concerning food quality systems, we expect not too high interest, although the fund allocated can be covered. The marketing support of producer groups will not be a real attractive measure, except they will have outside contribution besides the subsidy (proactivity).

The semi-subsistence farm measure will be of high interest, if the implementation tends to simple enough. As it is stated, it requires strong capacity building support.

The producer group measure is really important, because there is strong potential in cost-decreasing with co-operation among farmers, mainly on the purchase side.

Among the measure indicators, there is no reference to workplaces (maintained or created) in Axis I. As the competitiveness in Hungary goes almost hand in hand with the increasing unemployment, we suggest referring in the description of the measures the expected increase of unemployment, or, at least, which measures will help the people getting unemployed by the effect of the investments.

The Program does not identify target groups, based on structural features, only gives legal form, as well as statistical numbering of the activities. The structural change is not measurable on this basis. If the Program aims at structural change, we suggest the measures to be complemented these target groups.

With the help of EAFRD Hungary's natural potential remains as a resource in rural areas for maintaining and creating workplaces, helps to maintain the countryside and ensures good quality raw material for potential markets. If, during the implementation, there will be intention from the management side to take into consideration and prefer broad rural development objectives (e.g. employment, rural services, environment, local products), the EAFRD-support to the agricultural sector will be of a great help for the rural areas.

In the previous programming period the Priority I. investment in agricultural holding was the most popular group of measures and sub-measures. The possibility of



submitting applications was left in abeyance relatively early, in the spring/summer of 2004, which shows an extreme strong interest. More than half of the applications have been supported, which resulted in a significant improvement of basic machinery in arable, and also a strong improvement of grain warehouse capacity.

The agricultural investments implemented with help of subsidy during the ARDOP were almost the same as the total agricultural investment. It shows a strong interest towards EU resources.

## **Axis II – Improving the environment and the countryside**

In terms of Axis II, the strategy aims at the special national needs, as well as contributes to maintain the agricultural production's low environmental load. The agri-environmental intervention action goes further than the soil-protection, which is the relevant national priority. We agree with the intervention action. The strategy contains cross references with Axis I measures in case of investment for keeping the environmental requirements, we agree with this. We highly agree with the water-protection strategy.

The LFA targets are realistic, in 2004-2005 the number of the supported claims was 5137, the planned area is also realistic. The figures for agri-environmental measures also realistic, corresponds to the number of the 2004-2006 claimants. However, it should be noted, that the 2004-2006 figure was based on a system with relative low requirements, the 2007-2013 system will be based on higher standards.

In case of animal welfare commitments we do not have experience. The 3000 farmers is a realistic target, although a strong monitoring system will be needed to assess the improvements in this field.

In case of non productive investments the target is one third of the agri-environmental claimants, if we see the higher requirements, this figure should be revised.

The targets of afforestation of agricultural land also reflects to the previous period results, it is realistic to support 1000 claimants a year, with 10 000 ha afforested agricultural land the agro-forestry systems targets 300 claimants with 3000 ha. It is also realistic, it is a new measure in Hungary, but means good possibilities for some of the target groups. In case of afforestation of non agricultural land the target seems a bit low, since the subsidy rate is relative high, main part of the costs will be covered by this measure, and it will be more attractive for the forestry sector. It should be revised. Furthermore, it is a really important measure in terms of activity, production and income diversification, environment protection.

Natura2000 areas are designated. Since the requirements will be obligatory, most of the farmers/foresters will claim the possible subsidy. The targets can be given in area, but the number of claimants depends on the land and owner structure. The forest-environmental protection systems also expected to be a popular measure, with high number of claimants and involved area. The non productive investments in forestry targets 10 000 claimants, much less than the supported foresters in the forest-environmental measure, although this non productive investment goes further the forest-environmental related investments. We suggest checking this target.

Hungary has a large agricultural potential in terms of natural resources. We do have to utilise it, and, based on our market possibilities, will do. It can be managed in an environmental friendly way, introducing Axis II measures. It results healthier food, maintained countryside, as well as protected environment. In the implementation of

land consolidation the environmental aspects should seriously be taken into consideration. Maintaining the countryside means more rural workplaces, while supporting higher level animal welfare also means higher quality food.

The Axis takes into account the Community's priorities. Which is not present in the strategy is the plan for introducing higher standards than the cross-compliance rules in case of agri-environment measures. Organic farming is not present with enough weight in the strategy. Later on, the description of the measure contains these issues.

We experienced an extreme high interest in agri-environmental basic schemes in Hungary. The burden of the subsidy was only the fund allocated for this measure; lots of good claims have been refused due to this fact. The bio-production is increasing in Hungary.

The LFA measure was not a real success in Hungary, because the strong requirements towards applicants (e.g. not possible grain production).

We do not have experiences with Natura2000, although the Natura2000 areas have been designated. There are no Natura2000 management plans for these areas, except the areas located in Natural Protection Areas, but those management plans not for Natura2000.

The afforestation of agricultural lands was also a popular measure.

### **Axis 3 – The quality of life in rural areas and the diversification of the rural economy**

In terms of Axis III the national priorities take into account partly the needs of rural areas and to some extent handle the social, and partly the infrastructural issues. The three actions do not cover the national priorities, although the actions lie closer to the needs. In case of micro enterprises one of the most important fact, the market has not been taken into account as strategic importance. In terms of services, the access to the services in those areas, where the presentation of these services is not reasonable (very small villages, outskirt areas, homesteads), taking into consideration the nature of the service (e.g. employment consultation, post office, healthcare, education) is not present in the strategy. Axis III has 17% of EAFRD, 13.425% without the Leader share (5.5% x 65%).

The services centres can result significant improvement of the quality of rural life.

The diversification differs from the ARDOP diversification measure; the one presented in the Program needs strong proactive steps.

The trainings based on the statistical areas, intended to prepare the areas to the Leader. These areas are not homogeneous, concerning Leader requirements, therefore are not suitable for this objective.

The diversification and the rural enterprise development almost the same measure, the target group differs. There are exclusions concerning subsidised activities, which are not explained.

The tourism is expected to be a popular measure.

Improving rural services is really important, we expect high interest.

The target for employment maintenance and workplace creation is 16,000 at Axis level, which is a significant improvement in the field of rural unemployment, subsidising 4500 micro-enterprises and 400-500 farmers, it means 3-4 workplaces per enterprise.

The rural tourism guest night target is 600,000 per 7 years. It will be achievable, if complex projects will be implemented, attracting more tourists.

300-400 Rural Service Centres will be supported. It will have a significant effect on rural services. There are buildings which are suitable to be a basis for this improvement, thanks to the latest institution closes (e.g. rural post offices).

The Community's financial contribution is 437.6 million euro, which is 11.5% of the EAFRD.

These measures help to improve the quality of life and the income generation possibilities in rural areas, which contribute to the maintenance of the rural heritage,

and help to improve the age, education situation of the rural areas. Some of these measures require a local development plan, which gives a coordinated approach to these instruments.

The Axis takes into account the Community's priorities almost completely. Which is missing the ICT take-up a diffusion, and upgrading local infrastructure, which helps to access the services as well and also makes the "outside world" accessible.

The problems with these measures in general are the market of local products and the absorption capacity of some of the target group. These issues in some cases came from the low training situation, resulting lower flexibility and market orientation.

In case of rural tourism part of the project aimed at improving family houses, without real tourism activities. In some cases, tourism projects (mainly infrastructural) without real local tourism potential of a particular micro region have been supported. In the future more attention should be paid to complex development programmes.

Great interest could be observed in case of improving rural road, local built heritage and local marketplaces.

There were no possibilities to apply the ARDOP to the outskirts areas of the towns, although those areas are typical rural, with all the problems of the rural areas (workplaces, services, infrastructure, etc.)

In the ARDOP we did not have measures for local services, nor for outskirts areas.

## Axis 4 – Leader

In terms of Leader, the strategy takes into account this approach rather weakly, it is not taken as a specific “Axis”, it is only part of the Axis III. The main aim is to strengthen the present Leader system, which has now implementation problems. In the case of Leader the strategy is only showing a weak intention of contributing to the objectives of the 1-2-3 Axis. On this basis the results are expected to be less, comparing to a stronger Leader-like strategy. In Hungary there are those kinds of rural issues (economic, environmental and social) which can be handled effectively with Leader, but the present system does not meet fully with this. The Leader allocation, 5,5%, it is distributed between the Axis I-II-III.

The approving procedure of a LAG is based on an Article 59 development plan, which has a “sub-plan” for Leader.

Based on the description there will be around 200 local development groups, of which the LAGs will be approved, which mean a less number of LAGs. Comparing to this the indicator table contains 200 approved LAGs. The 200 approved LAGs is a realistic plan (we have 187 applying LAGs in ARDOP, 70 approved), covering 60-70% of the area of Hungary. The size of the LAGs should be different, based on the features of the key area planned to improve locally.

In case of number of projects the target means 15-20 projects a LAG in 7 years, which is 2-3 projects a year. It is not overly ambitious, and does not show significant effect. The same is valid for the workplaces, 2 workplaces per LAG in 7 years.

The community added value can be identified in case of Leader as local answers to local problems. The fund allocated is two times more in one year than it was in the ARDOP for the whole period. If the decisions will be made at the local level, there can be real improvement in solving the problems based on the local resources. It requires strong capacity building. Since the rural development issues are typical and special in a given area, the more the fund used along the Leader approach the more the adequate answers to the local problems. Therefore we suggest examining the broader application of Leader approach in the measures which influences local employment and quality of life, mainly in case of services.

The objectives of the Axis meet the Community requirements towards Leader application. The Program does not contain information about the management of the LAGs, the decision making procedure, which is basically influences the implementation of the Community's priorities. The Program should detail deeper the LAG approval procedure.

The ARDOP Leader has a strong central management beside the local one. It makes the procedures more difficult, more bureaucratic. This situation is result of the fact the Leader was part of the ARDOP; the same procedure had to be applied. The smaller applications needed the same documentation as the rather big investments. There were human capacity problems at the beginning, within the administrative body of the

central management (ARDA). There were uncertainties with the local tendering, too short application periods, and changing documentation. There were no official manual, helping documentation, guidelines.

The tendering LAGs cover rather big part of the country, which shows a real interest towards this bottom-up approach, the number of the supported ones is a result of the fund allocated in the ARDOP.

There is no experience with implementation of Leader projects in the 2004-2006 period, due to the late introduction.

The LAGs need more and detailed training. The rural network is needed to have place to change ideas, good practice, etc.

## **Evaluation of the measures of the NHRDP**

### **Measure Group I.: Increasing the value of agricultural and forestry products**

In connection with competitiveness, we provide and apply the definition below:

- good product quality,
- competitive price, in a comparison with the main producers of the given goods,
- ability for market access.

The development of these elements may increase the competitiveness of the agricultural producers and forest managers and their sectors.

In the quality of valuers, we could identify, independently from the sectors, the following target groups:

- large producers, wishing to go on with the same activity
- large producers, ready to make changes
- small producers, wishing to go on with the same activity
- small producers, ready to make changes

Characteristics and development needs of the groups above:

- core-business agricultural producers (large producers), wishing to go on with the same activity: market orientation is clear, the main activity is agricultural production, operates efficiently in terms of economies of scale, ready for growth, produces primarily mass products, the main target is profit maximisation; main development target: preparation for more difficult situations in order to survive such periods, improvement of competitiveness with the development of product deliveries to the buyers (primarily logistics), as well as cost-cutting investments.
- core-business agricultural producers (large producers), ready to make changes: the main activity is agricultural production, readiness to cooperate, larger extent of awareness of environmental issues, flexible approach to diversification; main target: maybe the use of all potential revenue compensations (agri-environmental, commitments in animal welfare, etc.), this group is able to produce energy plants (energy plantations, RVÜ ); they shall be the main target group of the investments.
- Producers with agricultural activities, as auxiliary activity (small producers), wishing to go on with the same activity: part-time farmers, the product has a buffer role, in terms of quantity and quality, market changes shall be compensated; target: their sustenance in production, through revenue compensation, sustenance of the rural region, production of public goods and remuneration for the producers, strong cooperation in order to reduce costs, sustenance of the traditional modalities of agricultural production, aboriginal



- species, production for the local markets.
- Producers with agricultural activities, as auxiliary activity (small producers), ready for changes: part-time farmers, using their leisure time to produce for own consumption and partially for the market; target: to maintain the present level, if any development takes place, the activity shall be diversified, the products shall be diversified, processing is on a smaller scale, exploration of market niches, local markets. Or, is about to leave agricultural production.

### **1.1.1. Vocational training, information activities and innovation;**

#### **Identification of the problems**

Analysis of the current situation

In 2003, 4.8% of the managers of individual farms (in 2005, 4.9%) had a primary degree, 7.6% (in 2005, 7.4%) had a secondary school or higher education degree in agriculture. In 2005, only 9.2% of the employees in agriculture had a college or university degree, 57.4% and 33.4% had secondary school and primary school, respectively, as highest qualification in education.

At the individual farmers, mainly the knowledge of the European Union (market and production regulations, assistance system, quality provisions for products, requirements to animal accommodation, environmental provisions) and professional management skills were insufficient.

In forest management, forest owners are obliged to use forest management services, if they do not hold a degree themselves. In the field of agricultural production, a similar obligation exists only in respect of certain partial areas (such as the use of certain pesticides).

The problems to be targeted

An important portion of the Hungarian producers do not have qualifications in agriculture, and this also means a lack of skills required for competitive farming. The lack of skills applies first of all to individual farms. The lack of skills is a hindrance for a flexible adaptation of the farmers to the changing market conditions.

Identification of the target group

In the case of the actions relating to agriculture and forestry, the measure is aimed at the agricultural producers and forest farmers attending the trainings and the information meetings. The Programme does not give a more detailed definition for the target group. Nevertheless, on the basis of practical experience, it can be expected that only those of them will attend the events who actually need the information to be provided.

### **Objectives of the measures**

#### Comprehensive objectives

The comprehensive objective of the measure is to improve the competitiveness of people working in agriculture and in forestry, to increase the level of awareness and improve the capability of adaptation to market changes.

#### Specific objectives

The objective of the measure is to increase the professional knowledge of those working in the agricultural sector, as well as to offer knowledge required for the attendance of non-agricultural activities representing alternative sources of income to the rural population in order to improve their subsistence potentials.

Among the specific objectives, the target regarding the mobilisation of alternative income resources outside agriculture belongs to Measure Group 3, instead of Measure Group 1, in line with the Community provisions.

#### Coherence with the Strategic Plan

The objective of the measure regarding the agricultural sector complies with the objective of competitiveness included in the Strategic Plan of Measure Group 1, but in training, professional advisory services, it does not clearly present the orientation of the Strategic Plan towards animal breeding, the processing sector, the production of energy plants and horticulture, in addition to arable production.

### **Actions proposed in the measure/ submeasure**

#### The proposed actions

In the framework of the measure, the Programme proposes 4 subareas:

1.1.1.1 Dissemination of innovative technologies by means of demonstrative–informative programmes in plants

1.1.1.2 Trainings related to Measure Group I, II and III of NHRDP

1.1.1.3. Demonstrative and informative programmes in connection with the measures of Measure Group III of NHRDP

1.1.1.4. General client service information on the agricultural policy

Out of these subareas, the elements of 1.1.1.2 and 1.1.1.3 regarding Measure Groups 2 and 3 are not connected with the objectives of Measure Group 1, they are serving the implementation of Measure Group 3 and for that purpose, an adequate measure is included, under Measure Group 3, in the Regulation (EC) No. 1698/2005.

#### Experiences of the previous period

In the period 2004-2006, the training measure belonged to the less popular interventions. The reason for that primarily represented the criteria of the application

system (20, and later 10 trainings per project). In the second half of the period, some negative signs were observed in terms of the readiness of the farmers to learn.

The demonstrative-informative programmes and the general agricultural policy customer service information are new actions.

#### Coherence between the measures

The measure strengthens the effect of several other measures in the Programme, because some of the measures contain the criterium of attending training courses, and training and an increase in information generally improves the application efficiency of the new technologies.

In the description of the measure, in the indication of connections between the measures, cross-references to the indicated measures are missing in several cases (e.g. in the description on Article 26, the obligatory training is not mentioned).

#### Expected effects of the measure

In the case of the subarea 1.1.1.1, we expect, as valuers, significant popularity, because this activity was successful in past years, also in the absence of aid.

The success of trainings, courses supported by the subarea 1.1.1.2 depends, on the basis of the experiences of the past period, on the system of application criteria, and it can be judged only on the basis of the Programme.

In the case of subarea 1.1.1.4 it is not shown, how general information shall be provided by the Hungarian Agricultural Chamber, what the target group, the methods, the conditions shall be, and how the members of the target group could use such general information in the short, medium and long runs. In the absence of these, no estimate can be given on the expected impact of this subarea.

#### Community value added

Compliance with Community objectives (relevance)

The measure complies with the Community objectives. As a result of better information, the competitiveness of the farmers and of the sector shall increase.

#### Cost efficiency of the measure

Reality of the financial plan

The draft Programme contains an appropriation of 86,529,809.03 euro for training and information programmes, covering the provision of information for 100,000 persons in 7 years. The source represents 3% of the public expenses under Measure Group 1. The amount is an aid of about 22,000 HUF per capita.

The public expense is not broken down into subareas, therefore, cost efficiency cannot be measured exactly. As a comparison, between 2004 and 2006, ARDOP planned about 6.4 million euro for the training of 24,000 farmers in management

skills. Proportionately to output indicators and the budget, the present measure plans about 61 million euro more, covering customer service for 73,500 persons in 7 years and the organisation of 1500 business events. In our opinion, as valuers, the planned public expense does not harmonise with the realistic target values included in the Programme.

An eventual, lower-cost method to reach the targets

In the framework of the subarea 1.1.1.4, skills can be transferred in a more cost-efficient way through the agricultural advisory system. Its use is eligible for support and on the basis of contracts, the transfer of information can be tracked and the advisor can be checked, therefore, such bilateral agreements can be tracked, while an estimate on the efficiency of a customer service is more difficult to estimate and is possible only with extra costs.

The cost efficiency of the measure is supported by the authorisation of the Hungarian Agricultural Chamber for the applications regarding the training projects.

#### **Conclusions, suggestions**

Increase of information, one of the objectives of the measure, provides an efficient contribution to the increase of the farmers' competitiveness.

We suggest to specify in the description of the measure the provisions regarding obligatory participation in the training projects.

As a valuator, we recommend to define the subareas of the measure, in line with the Community rules and the relocation of trainings regarding Measure Group 3 to Measure Group 3.

In order to give a more exact estimate on the expected impacts and cost efficiency of the measure, we recommend a more detailed description of subarea 1.1.1.4.

As valuers, we recommend a study of the transferability of knowledge in the framework of general customer service consulting, in the framework of the obligatory professional advisory network.

### **1.1.2. Launch of the operations of young agricultural producers**

#### **Identification of the problems**

Analysis of the current situation

We agree with the analysis of the current situation in the Programme, these are based on statistics.

The problems to be targeted

The relatively high average age of the farmers represents a structural problem for the Hungarian agriculture. A characteristic feature of this ageing group of farmers is a weakness from the point of view of flexibility and of adaptability to market conditions. High age is not favourable from the point of view of acquiring new information either. Such ageing group of farmers is less capable of cooperation and so, from the point of view of making use of market advantages. The foreseeable change in Common Agricultural Policy, strengthening market orientation in agricultural production, require a higher level of flexibility from the farmers.

Identification of the target group

The Programme creates a target group consisting of agricultural producers with agricultural qualifications, between 20 és 40 years of age, setting up their first farms or taking over a farm from a producer who benefits from farm transfer assistance.

#### **Objectives of the measures**

Comprehensive objectives

The comprehensive objective of the measure is to improve the agricultural sector's competitiveness through the improvement of the learning capacities of human resources and the ensuring of the maintenance of farming, with the entrance and involvement of young farmers. An additional objective is to increase the capacity of rural regions to maintain the population.

Specific objectives

The specific objectives of the measure include the launch of the first farm of young farmers and promotion of a restructuring in the ownership structure, with a young-making of manpower engaged in agriculture.

Coherence with the Strategic Plan

The measure is fully compliant with the objectives of the Strategic Plan, where an emphasis is given to restructuring and the increase in competitiveness, as well as a long-term utilisation of Hungary's natural characteristics. The business plan to be prepared by the target group strengthens the market basis and this contributes in an active way to long-term sustainability.

### **Actions proposed in the measure/ submeasure**

The proposed actions

There are no subareas within the measure.

Experiences of the previous period

In the period 2004-2006, the start-up assistance to young farmers was launched with difficulties, due to the lack of information. In the meantime, having recognised the problem, the Intermediary Body took some proactive steps to increase the level of information on the applications and this proved efficient, the full amount of the fund being allocated.

Coherence between the measures

The measure is closely connected with the measure on farm transfer assistance, because only a transferor who transfers his farm to a farmer who is below the age of 40 can benefit from that. Although there is a possibility that the transferee shall not be a farmer benefiting from young farmers' support, by the fact that the target group definition extends to farmers who establish not their first farm, it creates, in the case of a transfer to farmers below the age of 40, a possibility for young farmers to participate in this aid.

The measure is in close connection with the measure on training within the framework of the Programme, a criterium for the support is participation in a training course, within 2 years, at most, from obtaining the support.

The measure is in connection with the modernisation of agricultural plant and with the other measures of the Programme, relating to agricultural production, because young farmers have the opportunity to submit applications regarding further measures, within the limits of the business plan. This way, in those measures, young, qualified farmers will receive the support, who know the market conditions and are able to adapt themselves.

### **Expected effects of the measure**

If this measure is launched together with a farm transfer support, we, as valuers, expect a significant popularity.

### **Community value added**

Compliance with Community objectives (relevance)

In terms of its objectives and contents, the measure complied with the Community goals, in particular to the objective of competitiveness on Measure Group 1 and the

increase of the strength of rural regions, to retain population. The measure has a positive impact on employment in rural regions.

#### **Cost efficiency of the measure**

Reality of the financial plan

The Programme set apart about 4.6 million euro for the measure, for 7 years. The maximum amount of the aid can be 40,000 or 55,000 euro per farmer, in line with application requests to be received from 800 young farmers, as indicated in the plans.

#### **Conclusions, suggestions**

The measure is aimed at the involvement of young agricultural producers: The way of thinking, business approach of the younger generation strengthens competitiveness, enhances adaptability. The strong point of the measure is the training obligation. If this measure is launched together with a farm transfer support, a higher attraction can be expected and this may speed up the restructuring in agriculture.

### **1.1.3. Support for farm transfers between agricultural producers**

Identification of the problems

Analysis of the current situation

We agree with the analysis of the current situation in the Programme, these are based on statistics.

The problems to be targeted

The relatively high average age of the farmers represents a structural problem for the Hungarian agriculture. A characteristic feature of this ageing group of farmers is a weakness from the point of view of flexibility and of adaptability to market conditions. High age is not favourable from the point of view of acquiring new information either. Such ageing group of farmers is less capable of cooperation and so, from the point of view of making use of market advantages. The foreseeable change in Common Agricultural Policy, strengthening market orientation in agricultural production, require a higher level of flexibility from the farmers.

Identification of the target group

The target group of the measure represents an individual entrepreneur, over 55 years of age, active in agriculture since at least 10 years, as a core business, who cultivates at least 3 hectar of land and does not receive a pension in his/her own right. In addition, an employee of the farm be transferred, who is of more than 55 years of age and who spent at least in the last 5 years prior to the transfer more than half of his working time as an agricultural employee and does not receive a pension in his/her own right.

### **Objectives of the measures**

#### Comprehensive objectives

The comprehensive objective of the measure is to improve the agricultural sector's competitiveness through the improvement of the learning capacities of human resources.

#### Specific objectives

The specific objectives of the measure represent the improvement of the age structure, the young-making of community of agricultural producers. In addition, the objective is directed towards an increase in the land size, an improvement of the viability and competitiveness of the farms.

#### Coherence with the Strategic Plan

The measure is fully compliant with the objectives of the Strategic Plan, where an emphasis is given to restructuring and the increase in competitiveness, within that, the improvement of the age structure.

### **Actions proposed in the measure/ submeasure**

#### The proposed actions

There are no subareas within the measure.

#### Experiences of the previous period

In terms of support to farm transfers, Hungary has no experiences, the measure is a novelty.

#### Coherence between the measures

The measure is in close relationship with the measure relating to the start-up of young agricultural producers' activities, because the farmers of the farm to be



transferred can receive the support under this measure only at the same time, as the young farmer.

#### **Expected effects of the measure**

This measure, even though it was not announced in 2006, was under preparation in the previous planning periods, therefore, the professional community is already aware of this type of support possibility. As valuers, based on our practical experience, we can state that the farmers are waiting for the measure and they do plan to transfer their farms.

#### **Community value added**

Compliance with Community objectives (relevance)

The measure complies with the Community objectives, both in its targets and contents, it contributes in an active way to the improvement of the age structure.

#### **Cost efficiency of the measure**

Reality of the financial plan

The Programme set apart 26.9 million euro for the measure.

The Programme assumes that there will be 3500 farmers who transfer their farms, with a total area of 60,000 hectares. This means an average of about 17 hectares per farm. 17 hectares correspond, in the case of normal wheat, to almost 3.6 EUME.

The average support is almost 7,700 euro in 7 years, representing an annual support of 1,100 euro, or about 280,000 HUF per year. This is below the size of 1 EUME (306,000 HUF SFH).

On this basis, the size of public expenses is inferior to the target values set for the farms to be transferred and their areas.

#### **Conclusions, suggestions**

In respect of the measure, no local experience is available, but the intervention, significant in its impacts, shall improve the age structure of farmers.

If the target group for the transfer of farms is restricted to core-business individual entrepreneurs, the scope of the eligible persons will be significantly restricted.

We recommend a harmonisation of the public expenses and of the quantified target figures.

### **1.1.4. Using advisory services**

#### **Identification of the problems**

Analysis of the current situation

The agricultural production structure in Hungary has a dual character, encompassing at the same time well-prepared farms and producers who lack knowledge and who are defenceless, due to this lack of knowledge.

In Hungary, there is an operational agricultural advisory system, coordinated by the Ministry of Agriculture and Rural Development, through the Advisors' List. In addition to that, MARD operates a network of village extension officers and the MARD Educational and Advisory Institute (KSZI) coordinates a network of NRDP consultants.

In accordance with the Community provisions, in each Member State, a network of advisors shall be established. In Hungary, it shall be coordinated by KSZI, under its new name: Rural Development Educational and Advisory Institute.

The problems to be targeted

Due to the fact that, in our opinion, as valuers, the maintenance of the production structure is a target, it is necessary to build up services, where the less prepared farmers, who have less time to collect professional information receive assistance from well-prepared advisors who act in a coordinated way.

Identification of the target group

The scope of the beneficiaries may change in the different subareas, the final beneficiaries are, in each case, the farmers. In the subarea of direct agricultural producers and forest managers, the target group is not reduced further, the relative preference given to smaller size producers is reflected in the size of the aid. Agricultural producers with a revenue of less than 2 million HUF, gardeners with revenues below 1 million HUF and forest managers with an area of less than 1 hectare are not eligible for a support by advisory services.

#### **Objectives of the measures**

Comprehensive objectives

The general objective of the measure is to enhance the competitiveness of agricultural entrepreneurs, promote the adaptation capabilities and population retention abilities of rural areas.

Specific objectives

The specific objectives of the measure represent the promotion of sustainable agricultural development projects, the increase of the performance of agricultural producers.

#### Coherence with the Strategic Plan

In terms of its objectives, the measure is identical with the Strategic Plan. It puts emphasis on the strengthening of competitiveness and it also strengthens the sustainability of agricultural development projects, partially financed from public expenses.

#### Actions proposed in the measure/ submeasure

The proposed actions

In the framework of the measure, aid can be granted to:

- agricultural producers and forest managers,
- producer groups, for the purpose of using professional advisory services by their members, and
- local municipalities, for the purpose of using professional advisory services by persons participating in social land programmes in their competence.

#### Experiences of the previous period

In Hungary, no previous experience is available on advisory support provided from Community sources.

#### Coherence between the measures

The measure is not directly connected with other measures in the Programme, due to its impacts, it contributes to the effectiveness of measures aimed at competitiveness and environmental issues.

#### Expected effects of the measure

The impact of the measure is to expand the knowledge of smaller size farmers and to use such knowledge in farming, when it cannot be mobilised, applied by them, due to the lack of time or due to the special character of such knowledge. This helps, on the one hand, the farmers to optimise their production and, on the other hand, the participants of the social land programmes to acquire or update the production skills. Advisory activities also have an innovative impact, because advisors are able and ready to intermediate new knowledge and the competition between them makes this necessary, as well.

#### Community value added

### Administration and subsidiarity

In the course of the advisory services, applications are not sent directly by the farmers directly to the intermediary bodies, but the applications are submitted, in a concentrated manner, by the Territorial Advisory Centres, on the one hand, and by producer groups or the local municipalities participating in the social land programme, on the other hand. So, administration is substantially simplified for the farmers.

### Compliance with Community objectives (relevance)

The measure complies with the Community objectives, it enhances the competitiveness, innovation capabilities of agricultural farmers and forest managers struggling with a major competitive disadvantage, it contains environmental advantages. It contributes to the enhancement of the population retention capabilities of the rural regions, its effect on employment is a positive one, it strengthens the sustainable use of environmental resources. Through the social land programme, it has a strong connection to the objectives of Measure Group 3, it has not only an economic, but also a social impact.

### Cost efficiency of the measure

#### Reality of the financial plan

The Programme plans to spend almost 38 million euro for the measure, for the support of 60,000 farmers during 7 years. This is 90 euro per year and per farmer, which is close to 23,000 forints. On this basis, the measure is directed towards a large number of small producers. It is probably that a large portion of the public expense will directly help agricultural farmers and forest managers in their activities, a smaller portion of the sources shall serve the purpose of providing advice to producer groups and participants of the social land programme. As valuers, we agree with this.

### Conclusions, suggestions

The aim of the advisory measure is to provide knowledge for those agricultural farmers and forest managers who cannot, either due to the lack of time they can allocate to information access or due to their limitations in terms of professional skills, apply the state-of-the-art skills in their business. The measure is able to reach these communities of producers, in terms of the subareas covered and on the basis of its budget. For the farmers, access to the support under this measure does not represent a burden, because they do not participate in its administration. The advisory activity can intermediate not only the freshest, generally usable information to the producers, but novelty solutions as well, in order to increase their competitiveness and their capability to adapt themselves.

### **1.2.1. Modernisation of agricultural plants**

Identification of the problems

Analysis of the current situation

Those who are involved in the planning are studying the issue of an imbalance between plant growing and animal husbandry. The fact is that a larger stock of fodder-consuming species facilitates the market placement of corn, while a lack of such animals increases the corn market problems. And Hungary clearly is situated in the corn producing zone of Europe. The extremely high harvests of the years 2004 and 2005 contribute to the present market situation (especially high levels of intervention stocks) and this resulted in a “corn surplus”, due to the reducing number of animal stock. In our opinion, we cannot speak in this form about a balance between the two main sectors. It is not that the two main sectors shall be in balance, but we shall rather speak about a balance between sectoral production and market opportunities. From this point of view, in the case of certain basic materials, imbalances can be observed and this is closely connected with the system of three criteria, mentioned in the introduction (e.g. 2005 was the first year when Hungary was a net importer in pigs for slaughter). That is, the task is not to re-establish a balance between the main sectors, but we shall rather adapt production within the sector to the market opportunities and transform market behaviour in a way to make possible an economical utilisation of the production capacities. And the aid system shall address the development of the partial elements of competitiveness, on the one hand, and to serve an expansion of market opportunities, on the other. An increase in the production can follow only after that.

Parallel to that we shall be aware of the fact that a further drop in the present, reduced and reducing level of animal stock was caused not by a former absence of rural development measures, but rather by sector-independent regulations and a change in the circumstances. Animal husbandry, as recognised by the professional audience, recognisedly was a labour-intensive main sector, and an increase in the burdens connected with manpower (tax, social security contribution) brought about a reduction in the number of the employees. Due to the lack of funds (caused partially by the fact that the banks in Hungary held no interest in the development of agricultural activities after the systemic change – there were no major ownership stakes in their portfolios), the farmers were not able to implement the technology development projects required to set off the decrease in the number of the employees, and so, there came a decrease in the number of animals.

Another reason for the decrease in the number of animals was a squeeze in demand, which was a consequence of a drop in income after the systemic change and, as a result of that, of a decrease in food consumption, coupled with a squeeze in the former eastern markets. In Hungary, the decrease in the consumption of animal products is about to stop and, in the case of some products, an increasing trend has started, but domestic producers can satisfy only a smaller portion of this demand, with regard to the price competitiveness of the imported goods and the particularly high price sensitivity of the Hungarian consumers. On the basis of our definition for competitiveness, in this respect, the forwarding of the products to the consumers and

its enhancement first of all in respect of marketing are the issues holding a strategic development potential. The appropriate price is a short-term tool (taking into account the sourcing and pricing policies of the retail networks), and in strategic terms, it cannot be clearly identified. Of course, farmers striving for competitiveness shall keep their prices below or close to the prices of the decisive players of the market, but strategic opportunities exist in this respect in the “control” of the consumers. As to the development of the external markets, development opportunities are connected with the exploration of the markets, their realistic valuation, and in the development of appropriate products.

In connection with the production structure, the main issue represent the size of the farms and the characteristics of the agricultural produces/ products originating from them. In this respect, especially in plant growing, the main problem is that basically in all plant sizes, the produces grown are identical, and these are the ones that are eligible for territory-based support under SAPS and the national supplements, that can be sold in an intervention and where, on the basis of the current level of mechanisation, a large portion of the farmers holds a machinery line usable for their production. And these are those arable corn species, where profitability is largely determined by the economies of scale. This is supported not only by the technical tasks connected with soil cultivation and plant nursing and, in recent years, in terms of produces, the growth in market demand for uniform species, but the technical/ technological development of the mechanisation background also serves this objective (larger and more expensive combines, larger and mnore expensive tools for the cultivation of soil, etc.) With larger and more expensive machines one can operate only on larger areas, parallel to technical development, the lower limit of areas for efficient cultivation is increasing. This is weakening the competitiveness of the smaller-size farms in respect of these produces and there is a possibility that the production structure of plant growing becomes one-sided (extreme farm concentration), that weakens considerably the support capacity of the sector. A weakening of the support capacity cannot be a target, therefore, parallel to the spontaneous economic (concentration) processes, the aid system shall provide a possibility for and stimulate the farm-level changes in product patterns, in order to allow the sustenance of the diverse farm sizes, with the development of a diversified product pattern, meeting the market demand and corresponding to the farm sizes. This is how the structure of the agricultural production can be maintained in the Hungarian rural areas – an integrant portion of the European culture. The objective shall be, instead of a conservation of a production structure full with problems, the maintenance of the farm structure, but the development of a product structure corresponding to a sizes of the farms, in order to maintain the support capacity of agriculture, the development of a product pattern that is based on the utilisation of the current local characteristics and can be changed dynamically, if necessary. From a strategic point of view, for these farms, the development potential for these farms means a full-scale organisation of the market placement of plants they can produce, the organisation of trainings, of an advisory network, the development of the sales organisations, and of the entrepreneurial, risk-taking abilities and initiation capabilities.

Production structure and farm size have similar importance in animal husbandry as well. In this sector, the basic issues represent the breeding/ forage technologies and the use of species. As it is well-known, the species with high genetic performance react to production conditions substantially below their needs not only with respectively reduced output, but their production decreases even more than that extent, while forage use and healthcare problems are increasing. In this respect, the development potential is in the creation of breeding technology systems, in accordance with farm size, providing efficient operation and the use of the appropriate species.

In a strategic approach to the development of product patterns, a premium role shall be played by the valuation of market opportunities, because the product pattern – due to the efficiency criteria – also has an impact on farm size. In respect of market opportunities, an important issue is the distance between production/ processing/ market, in geographic terms, as the price of the products is largely influenced by their transportation needs and costs. In this respect, the development possibility is to create a farm structure sufficiently close to the processing plants/ market and the exploration of market possibilities close to the present location of production/ processing, with the mobilisation of these market opportunities.

In connection with restructuring, an important phenomenon is the separation of land ownership and land use, even though Regulation (EC) No. 1698/2005 does not contain measure in this respect. We establish, also as preliminary valuations, a concentration of the landholding structure. The concentration results in the disappearance of the smaller size farms, together with an expansion of the larger size farms. Accordingly, the product pattern of the main sector of crop production shall be further simplified and the steps to serve product diversification are not associated with an increase in labour use, i.e. an increase in the support capacity of the sector. A development opportunity is to stimulate the production of the products that correspond to the present landholding structure, making farmers capable to identify, subject to their farm sizes, the market opportunities and to transform their product patterns, as well as their cooperation with other producers, in line with that.

The problems to be targeted

The most important problem of recent years is the relative overproduction of corn, the clearly export-oriented – and lately, intervention-oriented – corn production. The system of intervention purchases is undergoing a transformation now, while our export markets depend strongly on weather. This situation needs to be changed in the long term, in order to make use of the natural characteristics of the country and to create long-term market safety. Such changes, the change of utilisation and production orientations requires a thorough market analysis.

In the field of animal husbandry, due to low profitability, in recent years, priority was given to productive investments, as opposed to investments that do not serve directly the maintenance of competitiveness.

The reducing number of animals and the increase in the intensity of arable production implies an increasing exit of manpower. The outflow of agricultural

manpower can be used partially by the sector of horticulture, subject to market opportunities.

#### Identification of the target group

The target group of the measure includes agricultural producers, PSCs formulated by them, producer groups, training farms, training plants, Regional Advisory Centres.

In the Programme, it is not shown how a PSC shall demarcate the investments relating to its operating programme and the ones financed by ERDF. On the basis of the Programme, it cannot be identified exactly why the Regional Advisory Centres are included as beneficiaries in a measure where the purpose is to develop the competitiveness of agricultural farms.

The measure does not restrict the target group any further, neither on the basis of size, nor based on activities. Nevertheless it can be expected that farmers who make use of the tender will be the units with larger funds and of a larger size.

#### Objectives of the measures

##### Comprehensive objectives

The comprehensive target of the measures is to strengthen the competitiveness of the agricultural farms.

##### Specific objectives

The objective of the measure is the modernization of the agricultural production structure, including the restoration of the imbalance between plant growing and animal breeding. Modernisation of the genetics background, of the breeding technology and the creation of facilities, solutions ensuring compliance with the EU provisions. Improvement of the efficiency and competitiveness of plant growing (including the post-harvest phase as well) and horticulture, introduction of new technologies for the improvement of product quality, as well as of information systems facilitating production and sales, promotion of the use of information and communication technologies. A new opportunity is the implementation and development of the equipment required for alternative energy production. Another essential aim is that domestic agricultural holdings should comply with the high consumer and social expectations, as well as with those imposed by EU legal regulations in the fields of environmental protection, animal welfare and food hygiene.

The first specific objective of the measure is not presented in a marked manner in the presentation of the measure, a modernisation of the production structure is not mentioned as a requirement in the case of any subareas, with the exception of the field of renewing plantations. As we already established earlier, our opinion, as valuers, is that agricultural production shall be adapted to the actual market opportunities and, taking account of this, the competitiveness of the farmers can be directed towards certain production orientations.



### Coherence with the Strategic Plan

The measure contributes to the objective of increasing competitiveness, included in the Strategic Plan.

### Actions proposed in the measure/ submeasure

#### The proposed actions

In the framework of the measure, the Programme proposes 5 subareas, which are as follows:

1.2.1.1. Investments in plant farming and horticulture

1.2.1.2. Investments in animal breeding

1.2.1.3. In the case of supports granted for the purchase of machinery and technological equipment used in plant farming, horticulture, animal breeding and forestry – independent machinery and equipment not involving any construction work

1.2.1.4. GAZDANet Programme

1.2.1.5. Plantation of orchards

The contents of the different subareas are not identical with the rational answers to the sector problems that we consider most important, in the quality of valuations. The Programme does not include a market-oriented approach to problem solving and to the utilisation of the opportunities.

The GAZDANet programme does not contain a system of criteria applicable to the use of computers.

### Experiences of the previous period

The subareas of the measure mostly mean a continuation of the measures concerning the investments of agricultural farms in the period between 2004 and 2006.

In the framework of plant growing investments, in the ARDOP period, the construction of corn storage facilities represented a large share. In this field, considerable progress was made in Hungary in the last 3 years, the modern corn storage capacities cover most of the country's production capacities.

There is a considerable lag from the point of view of investments into animal husbandry. The reason for that is low profitability observed in animal husbandry. In the course of ARDOP, development projects were directed towards income-generating investments, primarily the renovation, expansion, technology upgrade of animal accommodation spaces, and non-productive investments were underplayed.

In the framework of the measure concerning the machinery and technology equipment not requiring construction, a large portion of the applications received were aimed at the development of machinery for arable crop production. A major progress was made in respect of the basic machinery for arable production, while in the post-harvest phase, the need for development was lower.

In the field of orchard plantations, ARDOP supported the replacement, change of species and expansion of apple, pear and peach plantations, similarly to the present Programme. The previous tender was quite popular, the source for the submeasure was soon depleted, in a comparison with the ARDOP period.

The GAZDANet programme is a new measure within the modernisation of the agricultural plants.

#### Coherence between the measures

The measure has an impact on the measure of start-up for young farmers, due to the creation of a parallel application possibility and because of the compliance with Community provisions.

It could improve the effectiveness of the product pattern change if the Programme would prescribe an obligation to complete a training in connection with the investments of the agricultural plants.

#### Expected effects of the measure

According to our expectations, the results shall include the appearance of a vivid interest towards machinery development, because that measure was “closed” two years ago. The same applies to the investments relating to buildings and technology. This is exactly why it is important to apply a strong market-oriented approach in the implementation phase and to filter out development projects lacking real grounds. The same situation shall be expected in connection with the forestry-related measure.

#### Community value added

##### Compliance with Community objectives (relevance)

The declared objectives of the measures partially comply with the Community objectives. The compliance of the Programme can be evaluated in the light of the project mix and this latter is determined first of all by the terms of applications and evaluation.

#### Cost efficiency of the measure

##### Reality of the financial plan

The planned public expense of the Programme is 1,646,885,538 euro for the measure, representing about 65% of the public expenses under Measure Group 1.

#### Cost efficiency

The about 1.6 million euro allocated to the measure, shall mobilise during these 7 years, entrepreneurial capital to the amount of 2.4 billion euro. In the course of the

evaluation, the efficient use of the public funds shall be ensured, in this case, the implementation of the Programme will be cost-efficient.

The cost-efficiency of the Programme shall be influenced also by the survival chances of the aa plants, an incorrect assessment of the market opportunities might lead to a series of bankruptcies at firms having won tenders and so, public funds might get lost.

The cost efficiency of the Programme is influenced by the deadweight-loss as well, i.e. by the case when the farmer would be in a position to implement the investment in the absence of aid as well.

#### Conclusions, suggestions

In the case of eligible PSCs, the Programme shall provide guidance on the proper separation of the PSC operating programme from the investments realised from the ERDF support.

The Programme shall present how the investments of the Regional Advisory Centres contribute to the competitiveness of the agricultural units.

We recommend that the Programme shall determine methods to be used for the evaluation of the development projects taking account of the market opportunities.

In order to ensure the sustainability of the impact exercised by the funds, we suggest that the Programme shall formulate certain expectations regarding the use of IT development projects by the farmers.

Regarding the evaluation of the investments, we recommend that the Programme shall create a concordance between the size of the machine and the business size of the applicant and its realistic market opportunities.

In order to enhance the impacts exercised by the measure groups, we suggest that the Programme shall create the basis for a prime evaluation system of the investments, from the point of view of the environment.

### **1.2.3. Value increase of agricultural and forest products**

Identification of the problems

Analysis of the current situation

On the Hungarian food market, the share of imports exceeds 25 per cent. There is a constant decrease in the number of processing plants and even the ones still on the market tend to show two, increasingly different groups, based on their capital strength and size, into viable or slivering entities. A significant portion of those who belong into this second group would be able to transfer to the first group, due to these aids.

Large companies, where a large portion is in the hands of international businesses, find it easier to adapt themselves to the market challenges, as they have the appropriate capital, development and marketing capabilities to remain on the market. This is exactly what small and medium businesses are missing. In order to follow a sustainable path of development and to remain on it, it is indispensable to supplement for the postponed investments. Innovation capability required for progress, professional skills and the availability of market information mostly are decisive from the point of view of viability. Both domestic and international experiences show that small and medium-size enterprises also have an important role to play in the production of food. An important element of globalisation is that products satisfying specific consumer needs (bioproducts, local specialties, narrow market segments etc.) shall be produced by such businesses.

In a reaction to the opening of new market opportunities, several initiatives were made to establish plants of bioethanol and biodiesel. The launch of such investments is subject to the tender opportunities to be opened.

#### The problems to be targeted

In the Hungarian food market, ever since the accession of the country to the European Union, the presence of foreign food is expanding at an accelerating rate. This clearly indicates the competitiveness problems of the domestic processing sector. In a substantial portion of the domestic food processing plants, the technical and technology level of processing is inadequate, too low. The lack of technological homogeneity, as well as the obsolete, old buildings are characteristics for almost each of the small and medium-sized plants, but also for many large plants. The postponement of investments have an effect on the related logistics and storage capacities, IT technology as well. These represent hindrances for the development of product able to better comply with the market demand, their launch on the market and these also deteriorate the chances for remaining on the market.

Similar problems are observed in the processing of the forestry products as well.

The production characteristics in agriculture, the difficulties with sales, as well as the newly emerged market opportunities direct the attention towards energy-purpose uses.

Each of the above-mentioned deficiencies represent an intervention area, in order to increase the value of the aa products. The achievement of a value added, as high as possible, shall be motivated through new products, processing methods.

#### Identification of the target group

The Commission's concept of providing support to small and medium-sized enterprises is fully reflected in the programme. The target group consists of processing plants that were already able to show in some respect their viability. This can be successful operation in previous years, the idea of a new product, access to a new market. In the Hungarian food processing industry, this applies to about 1000 businesses.

The production of primary biodiesel and bioethanol products may concern about 40 plants.

#### Objectives of the measures

##### Comprehensive objectives

In the context of the problems explored, the measure is aimed at the production of more competitive marketable products. Research and development, the conditions for quality assurance tracking, modern packaging methods and high quality, the enhancement of hygiene represent the objectives. Due to a comprehensive approach, the applicants will have access to the funds in accordance with their own characteristics.

Adaptation to the diversification of the agricultural product markets appears as an objective also through afforestation and uses in the quality of basic materials for fuels.

A premium objective is to improve the income relationships for entities carrying out forestry operations, with technological progress to be made.

##### Specific objectives

In order to achieve the above objectives, the competitiveness of the applicants shall be improved from as many aspects as possible. These include a moderation of the unit costs of processing, an optimisation of the product range and flexible maintenance thereof, an optimisation of the production size, management of labour. But environmental, waste management, hygiene, work safety and social issues also belong here.

In order to allow small and medium enterprises to find the market segments appropriate for them and to let them be sensitive towards any changes therein, it is indispensable to ensure a flexible production structure, the proper market knowledge.

#### Coherence with the Strategic Plan

There will be no increase in the profitability of agricultural activities, if the competitiveness of the processing sector is inappropriate. Therefore, for the implementation of the objectives included in the strategy, it is indispensable to provide support for the value increases. From this point of view, this particular measure of the programme is coherent with the Strategic Plan.

#### Baseline and impact indicators

For the measurement of the impact exercised by the measure, it makes sense to use the number of business entities, the value of the investments realised by them, the number of new products, technologies.

Taking account of the experiences with the previous programmes, it is an achievable target that the three submeasures shall concern 900 business entities and investments shall amount to 730 million euro. It is also based on experience to say that about half of these will be connected with new products or technologies. For the measurement of the impact, the net value added and the gross value added per labour unit can be used.

#### Actions proposed in the measure/ submeasure

##### The proposed actions

##### Subareas of the measure:

- Value increase in agricultural products
- Value increase in forestry products
- Value increase in agricultural products by means of generating semi-finished products for the purpose of producing bioethanol
- Value increase in agricultural products by means of generating semi-finished products for the purpose of producing biodiesel

#### Experiences of the previous period

In the previous programmes, most of the applications concerned modernisation. Among operative targets, a reduction of environmental burden was still frequent. We think it is because of the above market difficulties and competitiveness problems that applications regarding the development of new products, regarding innovation are less characteristic. This indicated that the enterprises focused, for instance, in the case of opportunities offered by ARDOP, primarily on the struggle with technological backlogs. This is what shall be expected in the case of NHRDP, too.

#### The requirements and goals of the measure

All chances are there that the measure will achieve its goal, that it will be used in the targeted group. In the previous programmes, the enterprises demonstrated adequate readiness and willingness to submit applications. It is difficult to give an estimate on

the fund requirements, but it is certain that the level indicated in the programme will be covered by applications, without any problems.

#### Coherence between the measures

Development projects in the food industry can receive support from other measures only with a supplementary character. The source is the common support source for food industry, the production of raw oil and raw spirit, and for wood processing.

#### Expected effects of the measure

Due to the grants under the measure, an expansion is expected in the scope of food industry enterprises where market viability is ensured in the medium term. There shall be slowdown in the decline of the number of employees in that industry. More domestically produced food enters the sales channels. There is a reduction in the sales concerns of agriculture. Increase in the size of the forest-covered areas. Emergence of the processing background for biodiesel and bioethanol. Improvement in the technology of wood processing. Increase in the profitability of these industries, contributing to the retention of rural population, to an improvement in their living standards.

#### Community value added

With an average aid intensity of 35 per cent, the Community makes possible development, investment for enterprises, unable to implement these from their own means or through their banking partners. This impact appears on the whole of the food path and presents itself in the society. In the absence of this, activities and enterprises can disappear from the market, because they cannot get support from anywhere else.

#### Compliance with Community objectives (relevance)

The measure directly or indirectly contributes to the multi-purpose character of agricultural production the enhancement of its competitiveness, the retention of rural population, the improvement of its living standards, an improvement in the quality of the environment and of the rural regions.

#### Supplement with other measures

The measure aimed at a value increase of the agricultural products is connected with further two measures: support to cooperation within the product path (Art. 29 of Council Regulation No. 1698/2005) and support to development projects required for the processing of products of agricultural producers operating quality assurance systems (Art. 32. of Council Regulation No. 1698/2005). The first one supplements value increase with support given to vertical cooperations, the latter one supports quality assurance.

### Cost efficiency of the measure

With an average aid intensity of 35 per cent, the measure can support the optimum number of development projects. With an aid intensity above that level, there would be a major decrease in the number of eligible projects and that would mitigate the measurable effects. And with a level lower than that, no adequate motivation could be provided for its use.

### Reality of the financial plan

It shall be expected that demand will strongly exceed the financial framework.

### Monitoring and evaluation

In monitoring, special emphasis shall be given to the issue that in the case of an expected early drain of the funds, a regrouping of the further funds shall be initiated. This evaluation can be done with the use of five selected indicators. The distribution of the needs can be examined in a geographic and sectoral breakdown. Emphasis can be modified accordingly in the course of the evaluation of the applications.

### Conclusions, suggestions

As the increase of the food industry competitiveness meets strong limitations, indispensable is to grant Community funds to orient enterprises, directly or indirectly, towards objectives suggested by the Community. In the course of a value increase at agricultural products, food industry can not only provide a safe marketplace for the primary sector, but it is indispensable also in the intermediation of consumer demand in the right time and in the prefinancing of production. But market challenges shall be met not on a sector level, but at the levels of the businesses. This is why it is appropriate to apply a minimum of limitations. The management of the food industry companies is in a position to make a decision on how to use the possibilities offered by the measure. As a consequence, the measure shows an appropriate openness for the implementation of very different market strategies.

The openness of the strategy serves better the interests of the food industry than an eventually irrational demarcation would do, for instance, premium support to different special sectors or activities. As the improvement of competitiveness can be best interpreted at a corporate level, it makes sense to formulate the general objectives only. This is what the measure also does, by value increase, restructuring, development, satisfaction of special consumer needs, improvement of quality, safety and hygiene in the food industry, improvement of profitability and increase of the technology level in the wood processing industry.



The objectives set by the measure can be easily tracked and measured by the number of the projects, the increase in value added. Quantifiable effects can be measured on the same basis.

The agricultural economy badly needs such a measure. This is also proven by its successes achieved in previous programmes. It is evident that it is an illusion to ensure funds covering the entire need, but taking into consideration the indirect and direct favourable effect of food processing in the achievement of Community objectives, we think it is rational to regroup further resources, either from the submeasures or from other measures.

The tender possibilities offered for small and medium enterprises does not suggest, correctly, exact strategic directions. This is the task of the market and of the given enterprise and it is impossible to orient these towards a uniform channel among the different products and services.

### **1.2.5. Improvement and development of infrastructure related to the development and modernization of agriculture and forestry**

Identification of the problems

Analysis of the current situation

Investments into the infrastructure relating to agricultural and forestry production are on the one hand, non-productive investments, therefore, the producers used less funds for its maintenance and on the other hand, there is a productive infrastructure connected with agriculture. A good status of these is a cost-cutting item for producers, on the one hand, and promotes the safety of harvest, on the other.

We agree with the description of the situation in the Programme.

The problems to be targeted

In decisions made by farmers, non-productive infrastructure investments have a lower priority than productive investments.

Identification of the target group

In the framework of the measure, the target group consists of agricultural producers, PSCs, producer groups, associations of business organisations, water management associations, forest managers and local municipalities. Within the framework of the measure, a reduction of the target group or a specification of the beneficiaries is not justified.

## Objectives of the measures

### Comprehensive objectives

Development of the infrastructure of agriculture and forestry production, development of costcutting factors.

### Specific objectives

The specific objectives of the measure are: (1) ameliorative protection of agricultural land, improvement of the efficiency of local prevention of water-related damages, the local retention of water reserves and an improvement of the storage possibilities, (2) promotion of the use of biomass in energetics for agricultural plants, water and energy supply for the sites, development of the road network, improvement of the forestry infrastructure, (3) integration of agricultural land parcels.

## Coherence with the Strategic Plan

### Actions proposed in the measure/ submeasure

#### The proposed actions

1.2.5.1. submeasure: Irrigation, development of agricultural plants and community facilities

1.2.5.2. submeasure: Melioration, development of agricultural plants and community facilities

1.2.5.3. submeasure: Collective investments in water-flow regulations, elimination of water damages, regulation of excess surface waters

1.2.5.4. submeasure: Development of forestry infrastructure

1.2.5.5. submeasure: Development of agricultural access roads and exploration roads

1.2.5.6. submeasure: Water and energy supply for agricultural plants

1.2.5.7. submeasure: Land use arrangements

1.2.5.8. submeasure: Energy supply within the site, with the use of renewable energy resources

The subareas of the measure cover the development needs of the agricultural and forestry units and their community infrastructure.

The content of the measure does not appear in full size in the subareas (e.g. the development of the construction, renovation of narrow-gauge railways, forest schools,

private-ownership forestry information centres is excluded from the submeasure of development of forestry infrastructure.)

#### Experiences of the previous period

The experiences of the period 2004-2006 are different in respect of infrastructural development projects. Local municipalities relatively quickly used up the sources of the submeasure aimed at the reconstruction of agricultural roads for projects, while the community-purpose and -participation development projects were less popular in the same period. Land arrangement, due to historical reasons, is a less favoured intervention in Hungary.

#### Coherence between the measures

The subareas of the measure are connected only in a leveraged way to the measures Modernisation of agricultural plants and Improvement of the economic value of forests.

#### Expected effects of the measure

As valuers, based on the period 2004-2006, we expect that the development of agricultural roads shall be the most popular measure.

Support to energy supply modalities at the sites is a somewhat modified measure in a comparison with ARDOP, in Hungary, we have no experience with this type of intervention, but due to an expected increase in energy prices, we believe that this subarea will be popular.

#### Community value added

##### Compliance with Community objectives (relevance)

The measure complies with Council Regulation (EC) No. 1698/2005.

#### Cost efficiency of the measure

##### Reality of the financial plan

The Programme plans about 226.7 million euro in terms of public expense. Aid intensities are 60-70-80% and, in the case of agricultural roads and land arrangements, aid intensity is 40%, but the finalisation of the land use arrangements can be expected only when the respective law will entered into force and, based on the planned total investment level, representing almost double of the public expense, the Programme considers the development of agricultural access and exploration roads to be of prime importance. This corresponds to the ARDOP experiences of the period 2004-2006.

In a comparison, ARDOP appropriated almost 53 million euro for the period 2004-2006, with 560 winning projects. The present financial and output target value (2,500

winning projects) are proportionately identical with the estimate under ARDOP. Between 2004 and 2006, the applications covered successfully the sources, and so, the financial plan of the measure is realistic.

### **1.4.1. Support to semi-subsistence farms under restructuring**

Identification of the problems

The problems to be targeted

Due to the large variety of agricultural producers, there is a stratum unable to make the shift from a partially market-oriented farm into a fully market-oriented farm.

Identification of the target group

The target group of the measure consists of agricultural producers who have a farm size of 2-4 EUME and who sell part of their products on the market, and who wish to become a fully market-oriented farm.

Objectives of the measures

Comprehensive objectives

The comprehensive objective of the measure is restructuring of agricultural production structure, an increase in the plant sizes and a stabilisation, improvement of the market situation through that, with a decrease in the number of semi-subsistence farmers, partially by becoming market players.

Specific objectives

(1)The provision of assistance to small farms, (2) the subsistence and development of agricultural activities performed by such farms, (3) the improvement of their income-generation opportunities, (4) the facilitation of their transition to market-oriented production.

Coherence with the Strategic Plan

The objectives of the measure comply with the Strategic Plan, actively contributing to the development of competitiveness, and more strictly, to land arrangements.

Actions proposed in the measure/ submeasure

The proposed actions

The measure does not include subareas.

Experiences of the previous period

Support to semi-subsistence farms was granted in the framework of NRDP. The measure was a popular one, the full amount was used, through applications.

Coherence between the measures

Only such farmers shall qualify for the support of semi-subsistence farms who hold appropriate agricultural qualifications. This condition weakens the coherence with the measures aimed at training and consulting, but we agree that market circumstances create a new situation for farmers who were not primarily market oriented earlier,

Expected effects of the measure

As valuers, we expect a significant popularity in the case of this measure, even if the obligatory requirement of agricultural qualification shall be evaluated as a considerable restriction factor.

Conclusions, suggestions

We recommend to determine agricultural qualifications for the date of becoming a viable business.

### **1.4.2. Support for setting up of producers' groups**

Identification of the problems

Analysis of the present situation, problems to be targeted

We agree with the analysis of the present situation and the identification of problems regarding producer groups.

Identification of the target group

The target group of the measure consists of producer groups holding government recognition.

## Objectives of the measures

### Comprehensive objectives

The comprehensive target of the measures is to strengthen the market safety of the agricultural producers, to stabilise their income and to cut their costs.

### Specific objectives

The specific objective of the measure is to provide support to the (1) creation, (2) operation and (3) growth of producer groups.

### Coherence with the Strategic Plan

The objectives of the measure comply with the Strategic Plan, because they contribute to the improvement of agricultural producers, the stabilisation of their market situation, and so, they have a positive effect on employment and, when the rules set by the producers' group cover environmental issues as well, they might imply environmental advantages.

### Actions proposed in the measure/ submeasure

#### The proposed actions

The measure does not include subareas.

### Experiences of the previous period

Producers' group were set up, gradually, since the creation of such legal possibility.

Producer groups are set up first of all for the sale of mass products, with low value added, jointly, with a quality that can be homogenised already in the production phase or, for that purpose, certain preparations can be made (production of identical species)

On the basis of research, producer groups are very important on the sales side, in their price setting roles, but their importance is far bigger in Hungary for a reduction of the purchase prices. Advantages for the producer groups are realised mainly on this line.

### Community value added

#### Compliance with Community objectives (relevance)

The measure contributes to the system of Community objectives, enhances the competitiveness of producers, contributes to the maintenance of agricultural production.

### Cost efficiency of the measure

#### Reality of the financial plan

The Programme plans about 76.8 million euro in terms of public expense, with support granted to 300 producer groups. On an average, this is 36,500 euro per producer group in a year. This is an average aid, corresponding to the lowest category.

## **Axis II. – Improving the environment and the countryside**

### **Payments to agricultural producers of less favoured areas, other than mountainous areas**

#### **Identification of the problems**

##### *Analysis of the current situation*

For agricultural activities performed in less favoured areas, as defined by the characteristics determined by the European Union (which represent 14% of agricultural land in Hungary) the yields are lower in our country as well. Due to a simplification of the agricultural production's structure, on a portion of these areas, there is arable food production. The experiences of NRDP have shown that part of the farmers prefer not to use the LFA measure, because they are hardly willing to change their product patterns. In the LFA areas, in spite of low profitability, production is not given up entirely, for historical and emotional reasons. In addition, the land user and the owner are also liable for cultivation, and on this basis they are required to keep the land in their ownership/use free of weed, at least.

##### *The problems to be targeted*

In less favoured areas (less favoured due to natural or economic reasons), profitability of the local economy is below the national average, because of the high dependence on agriculture. In a portion of the less favoured areas, in order to protect the environment, the traditional use of the territory, agricultural cultivation shall be maintained, even if this is not sustainable in the short term, from an economic point of view.

##### *Identification of the target group*

Those agricultural producers who carry out farming activities in certain territories specified by legislation on parcels larger than 0.3 hectares, on a total area of at least 1 hectare, in arable forage production and do not produce wheat, maize, sunflower, sugar beet, potato, industrial plants, vegetables and rice. The demarcation of the target group is essentially identical with the one described in the LFA measure in NRDP.

#### **Objectives of the measures**

##### *Comprehensive objectives*



The main purposes of the measure are: (1) development of a production pattern in accordance with the specificities of the production area, environment-conscious management and sustainable landscape use; (2) expansion and improvement of rural employment and income generating opportunities, development of a new, alternative rural economic environment, complying with the requirements of environmental protection, and (3) ensuring the continuation of agricultural activities and the maintenance of agricultural-purpose land use on less favoured areas, as well as contribution to the preservation of viable rural communities.

#### *Specific objectives*

Revenue compensation aid for farmers of LFA regions.

#### *Coherence with the Strategic Plan*

The measure fits the Strategic Plan's system of objectives, it contributes to the protection of environmental elements, their long-term sustenance, it produces public goods, has a positive impact on employment, strengthens the population retention capacity of the rural regions and motivates for a diversification of revenues. By the same, it mitigates the problems of the Hungarian agriculture in terms of production structure.

### **Actions proposed in the measure/ submeasure**

#### *The proposed actions*

There are no sub-areas within the measure.

#### *Experiences of the previous period*

In 2004-2006, the LFA support was programmed and announced in the framework of NRDP. The popularity of the measure was lower than expected. The main reason for that was a restriction in terms of production, first of all, in respect of wheat production. The relative safe market placement of corn, as opposed to lower forage requirements, was the reason for a low popularity of the previous LFA support. Now again, the production of these crops is a reason for exclusion in the system of criteria for this measure, primarily in respect of the 5-years LFA contracts concluded on the basis of the NRDP. In this respect, the present Programme specifies that the LFA measure of the Programme is a continuation of the NRDP's LFA measure, at least until December 31, 2009.

#### *Coherence between the measures*

The measure has no direct connection with other measures, they only strengthen with their effects the same system of objectives.

## **Expected effects of the measure**

According to the criteria set, we do not expect from the LFA measure a significant increase in popularity. Even though the market regulations of the Common Agricultural Policy are subject to reforms, including direct intervention on the product mix, no major strengthening is expected in the availability of funds for farmers in the medium term, and therefore, they will not make changes in their production structures in favour of forage production in large numbers (ie. in excess of 14% of the arable land). A precondition for that is the development of animal husbandry, an issue to which the Programme grants much attention, but the marketing possibilities for animal products in large volumes are not supported by market analyses.

## **Community value added**

### *Compliance with Community objectives (relevance)*

The measure assists the achievement of Community objectives in several aspects, including environmental, economic and social issues. It has a positive impact on the preservation of landscape, the maintenance of farming helps to maintain the productivity of soil, it strengthens rural employment, provides revenue-compensation benefits, improves the living conditions in rural regions, generates income in areas with unfavourable economic conditions.

## **Cost efficiency of the measure**

### *Reality of the financial plan*

The Programme set apart 24.6 million euro for the measure. The eligible area is 350,000 hectares; this means an aid of 10 euro per hectare and per year, on average. This amount is lower than the lowest appropriation for support (25 euro), even calculating with the maximum degressivity, the output indicator and the public expense appropriation are not in maximum accordance. The measure calculates with 7,800 beneficiaries, this means an average land area of 45 hectares per producer, and this entitles, according to the data of the degressivity table, to the full amount of the aid.

## **Conclusions, suggestions**

We suggest harmonising the output target values, the public expense appropriations with the established calculation method of the amount of the support.

## **Agro-environment payments**

### **Preservation of genetic resources**

#### **Identification of the problems**

##### *The problems to be targeted*

In the case of environmental measures, the main problem is the priority given to short-term economic interests as opposed to long-term environmental interests, and, in the case of the preservation of the genetic resources, the reduction in biodiversity and the danger that certain species might disappear.

##### *Identification of the target group*

The target group of the measure consists of agricultural producers who, in the case of horizontal programmes, comply with the provisions of the special programmes, and in the case of zonal programmes, those who carry out farming activities in the physical blocks, selected for the programme. Beneficiaries can be natural and legal persons, in the case of forests, private individuals, local municipalities and their associations, as well as agricultural producers and organisations performing activities relating to the preservation of genes.

In the case of forestry, the target group under the Programme does not cover legal persons.

#### **Objectives of the measures**

##### *Comprehensive objectives*

The main objectives of the measure are: assistance to sustainable development of rural areas, preservation and improvement of the environment's condition, reduction of environmental load originating from agriculture, provision of environmental services, strengthening of agricultural practices based on a sustainable development of natural resources.

##### *Specific objectives*

In agriculture and forestry, the measure intends to support in particular (1) the preservation of genetic diversity, (2) protection of the nature, waters and soil, with the development of a production structure appropriate for the local characteristics, environment-conscious farming and sustainable landscape management, (3) preservation of the genetic resources in agriculture ex situ and in situ, (4) records of the genetic sources and ex situ collections (gene banks) based on the Internet, and

furthermore, (5) information, the dissemination and knowledge and advisory activities as well.

#### *Coherence with the Strategic Plan*

The measure promotes the achievement of the environmental targets set in the Strategic Plan, it is in harmony with these.

### **Actions proposed in the measure/ submeasure**

#### *The proposed actions*

The measures apply to the following sub-areas:

In agro-environment, in a horizontal or zonal approach, arable crop production, grassland management, plantations and waterside habitats.

In the forestry-environmental measure, the sub-areas were determined as special programmes.

The sub-areas of the measure for the preservation of genetic resources are: preservation in collections and in the agricultural plants, and third, promotion of the repatriation of a prime aboriginal species of wild bird, partridge.

#### *Experiences of the previous period*

Regarding the measure of gene preservation and in the forest-environmental measure, there are no local experiences in connection with plans funded by the European Union or on the basis of a development programme.

The special programmes for agro-environmental issues were included in NRDP for 2004-2006. The basic-level programmes (not included in the sub-areas or special programmes of the Programme for the period 2007-2013) were particularly popular. This was due to the fact that the set of rules, created on a national basis, actually represented a basic level, without intending to intervene significantly in everyday farming practice, which could have been a holdback from the point of view of granting the aid. Therefore, in that programme, there was/ is a significant number of farmers and a large size agricultural land involved. These five-year contracts expire in 2009. For the farmers, the complicated documentation is a difficulty, but the NRDP advisory network, set up in the meantime, takes over this concern.

#### *Coherence between the measures*

The measures are closely connected with the measure of non-productive investments, because in that measure, one of the criteria for eligibility is participation in agro-environmental programmes. In terms of their impacts, they interlock with other measures, while the measure on advisory services used covers agro-environmental advisory services as well. In addition, the training measure within Measure Group 1 also contains the topic of agro-environmental issues, as an eligible topic.

### **Expected effects of the measure**

The advanced special programmes will be less attractive, according to the experience of the basic special programmes in the previous period. Applications from a wider range are expected in the case of special programmes where the least deviation takes place in a comparison with general farming practice, and where the professional rules and consumers' demand provoke, on their own, a shift in practice towards the directions supported according to the special programmes.

### **Community value added**

#### *Compliance with Community objectives (relevance)*

The objectives of the measures comply with the Community system of objectives.

### **Cost efficiency of the measure**

#### *Reality of the financial plan*

Within Measure Group 2, the measure with the largest public expense is the agro-environmental measure, representing 39% of the sources in this measure group: about 656 million euro. For the preservation of genetic resources, the Programme earmarks 12 million euro, while for forest-environmental payments, the public expense shall be almost 18 million euro under the Programme.

The eligible area in agro-environmental farming is 2.1 million hectares; this means an aid of 45 euro per hectare and per year, on average. This is substantially less than the upper limits indicated in Regulation (EC) No. 1698/2005. In gene preservation, the Programme calculates with 150 actions, this means public expenses of 80,000 euro per action, or 20 million HUF, on average. On the basis of information included in the Programme, we believe this is too much.

In respect of the forests, the 18 million euro support is planned by the Programme for an area of 160,000 hectares, meaning an average support of 16 euro per hectare, per year. This amount is also far below the planned support values of the Programme.

## **Assistance provided to non-productive investments**

### **Identification of the problems**

#### *Analysis of the current situation*

We agree with the snapshot on the non-productive investments.

#### *The problems to be targeted*

The basic problem targeted by the measure is the priority of production, even in detriment of biodiversity, in terms of the sourcing of the farmers. In this respect, non-productive investments do not bring direct benefits in the short run that the producers would consider equivalent to monies invested into the expansion of the production. Due to that, few or no sources are allocated to these development projects, but in the long run, they generate important public assets.

#### *Identification of the target group*

The target groups of the measures, in the case of non-productive investments concerning agriculture, represent agricultural producers participating in the agro-environmental programme, in the case of non-productive investments in forestry, the local municipalities, the small region associations, civil organisations.

### **Objectives of the measures**

#### *Comprehensive objectives*

The main target of the measures is to maintain the rural landscape, to preserve biodiversity.

#### *Specific objectives*

The specific objectives of the measure, in the field of agricultural production are: (1) to promote the conservation of the rural landscape, (2) to increase of the richness in species of the fauna and flora, (3) to improve the environment's condition, (4) to facilitate the fulfilment of the commitments made on a voluntary basis and (5) to assist compliance with the provisions and to increase the public welfare value of the Natura 2000 areas and other high natural value areas.

The target of the measure in the field of forest management is (1) to implement the proper level of mix, multi-level stocks in the forests, (2) to improve the natural character, biodiversity, health condition of the forests, (3) to stimulate and to support of the transformation of forests with neglected pattern or the ones consisting of foreign-origin tree species into indigenous forest combinations.

### *Coherence with the Strategic Plan*

The measures comply with the detailed strategy described in connection with Measure Group 2 of the Strategic Plan, they contribute to the increase of biodiversity, to the conservation of the water reserves and of the landscape.

### **Actions proposed in the measure/ submeasure**

#### *The proposed actions*

In the case of non-productive investments relating to agriculture, the measure contains the following sub-areas:

Non-productive investments required for voluntary commitments to agro-environmental provisions and for liabilities connected with mandatory provisions prescribed in the Natura 2000 areas and their implementation:

Non-productive investments implemented on the territory of the farms, increasing the public welfare value of the Natura 2000 areas or other high natural value areas. Restoration of small-size erections, image elements, landscape elements in the grassland, ploughland, cultivation sector territories of the farm.

Sub-areas for non-productive investments in the forests are as follows:

- Restructuring with afforestation stock
- Restructuring after cutting
- Restructuring with stock replenishment
- Improvement of the forest structure by growing stocks within indigenous, deciduous forests.
- Creation of forest borders
- Creation, renovation of public welfare facilities in forests

The sub-areas include the scope on non-productive investments. The basic problem with the identification of sub-areas is that neither sources nor an exact indicator are associated with these and this shall make evaluations far more difficult, later on.

#### *Experiences of the previous period*

The agro-environmental measures in NRDP did contain similar special programmes, primarily in respect of creating grass lands. These were supplementary measures, which can be combined with the basic programmes. The popularity of the measures was not significant. As opposed to the present Programme, support was different, established in a normative way, without an application to the actual costs of the investments.

### *Coherence between the measures*

The measures are closely connected with the agricultural and forest-related environmental and the Natura 2000 measures, enhance their impact and eligibility for non-productive investments is granted only to those persons who participate in some environment management measure.

### **Expected effects of the measure**

Aid intensity reaches 100% in the case of these measures and this can be attractive for the farmers, especially because this is an investment-type support, not a revenue-compensating aid, to counterbalance an increase in costs. Another incentive for farmers can be that the result of the investment may mean a direct economic advantage for them.

### **Community value added**

#### *Compliance with Community objectives (relevance)*

Non-productive investments contribute to the Community targets with the increase of biodiversity. To that end, the measure provides efficient help, because the attractive aid intensity stimulates farmers to make investments.

### **Cost efficiency of the measure**

#### *Reality of the financial plan*

Non-productive investments in agriculture received an allocation of almost 437 million euro, representing 26% of the public sources of Measure Group 2 in the financial plan, in the case of forestry investments; the amount is about 45 million euro. In the case of agricultural investments, an eligible farmer would receive investment support to an average value of 43,700 euro, and in the case of forestry, this value is much lower, 4,500 euro. If the national sources are available, this size of sources allows significant progress to be made.

The method of establishing the size of the support is not included in the Programme, it only refers to the fact that in each project, the size of the support shall be established based on professional valuations. Also, it gives a 100% value for aid intensity in the case of agricultural investments, in respect of forestry, even that is missing.

### **Conclusions, suggestions**

We suggest supplementing the Programme with a presentation of the calculation method to be used for the size of the support.



## **Axis III: Quality of rural life and the diversification of rural economy**

### *Problems to be targeted*

The plan should focus on the enlargement of employment (even for groups of multi disability status), primarily and as a first step with less significance to rural life quality. It is important to look for synergies in case of measures that improve the life quality of the countryside - e.g. it can be a village development to improve the market and its surrounding selling local goods, this in the same time improves the life quality and can have effect on tourism. Employment can be achieved in areas important from other points of views. e.g. to save the state of the environment, the natural-cultural inheritance. Employment will be shifted by other programmes (GOP, ROP, EMEROP, HIOP etc.).

The possibility of rural tourism is overemphasized.

## **Objectives**

### *General aims*

The Programme, according to our evaluating opinion, from this respect does not cover fully the problems related to rural areas. It emphasises in case of Axis III. the profitability of agriculture, and the perquisite of those living from agriculture, though the aim of this axis is to assist the economic diversification. This contradicts to other parts of the Programme.

### *Specific aims*

Specific aims are not denominated in the Programme.

### *Coherence with the Strategic Plan*

The Programme specifies points connecting to the Strategic Plan and to the regional development plan, however this is not enough for the evaluation of the coherence. It would be necessary to precisely specify the connections and to demonstrate the realization and difficulties of harmonization.

## **Proposed actions in the measure/sub-measure**

### *Proposed actions*

In case of 4.6.6.2. – The maintenance and modernization of rural inheritance -, the preparation of Natura 2000 maintenance/development plans and learning the Abilities of 4.3.7., and in case of the inspiration and elaboration of local developmental strategies and their achievement sub-point determination of proposed actions and classification of the participants should be enlarged and specialized.

### *Coherence among measures*

It is not detailed in the Programme, further specialization is needed.

## **Community added value**

The community added value is not detailed in the plan. The lowest level conciliation of the planning process is unknown. Specialization of the communication strategy and the strategy of determining the economic and social partners only partly reflects the policies of the Union. The plan formally implants within its frames the relevant policies of the Union relating to democratic planning, minorities, discrimination of women and its elimination, and does not provide specialized measures and guarantees to actually keep them. All these must be supplemented.

### *Relevance to community aims*

Formally it is proper, based on its content there is no guarantee to keeping the policies, measures of significant policies are missing.

### *Supplement with other measures*

It is missing from the plan.

## **The cost effectiveness of the measure**

The financial decomposition of the sub-measures of Axis III. is missing from the financial plan, most probably it must be supplemented.

## **Conclusions and Recommendations**

The measure group is proposed to be modified, based on the evaluation proposals listed below:

1. The Programme determines the rural areas and rural small areas.
2. The Programme should identify the specific problems of the settlement categories, and it should analyse the problems of economic sectors.
3. The Programme should give details of the reasons of immigrations and emigrations and their consequences.
4. The Programme should identify more precisely the target groups, and those involved, and map and analyse their values and interests.
5. The Programme should guarantee the establishment of evaluation possibilities from the intervention, employment and income increase point of view, and in the same time should provide the strengthening effect together with the other measure groups.
6. The Programme should give in more details the intervention aiming at the development of rural tourism.
7. The Programme should specify the overall goals related to rural inhabitants, should determine specific targets, and should demonstrate their connections to the Strategic Plan.
8. The Programme should introduce the measures in more details, using the causes and consequences of the rural development measures of the former periods and those of the failed interventions.
9. The Programme should include the measures and guarantees relating to the special handling of the problems of the multi-disabled groups.
10. The Programme should show the financial dissociation referring to the measure group.

## **Axis IV. – Leader**

### **General remarks**

The phrasing of the main objectives complies with the principles of LEADER and the relevant practice of the EU. The strategy is definitive; it has clear objectives and priorities. Therefore, the text gives a wide scope for “subsequent interpretation” during implementation, that provides opportunity for centralized alteration of the programme according to the dynamic agricultural needs.

LEADER may not be stressed enough in respect of the budget and elaboration of the programme elements as the LEADER approach could manage a considerable part of the Hungarian rural problems according to the international experiences. In the course of preparations the question has been raised whether the whole or a certain part of the IIIrd axis should be spent along the LEADER rules, with involvement of the LAGs in the fields where LAGs are in operation.

The LEADER programme appears in the Hungarian plan not as a separate axis but as a “derivate” of axes I-III, that is it gives an opportunity for (bottom up) application of the same measures by the LEADER method. It is an important question whether the implementation and accounting rules as well as the bureaucratic organization controlling of the implementation move apart from the other parts of the NHRDP or not in the course of implementation. (In implementation of the current ARDOP LEADER the greatest problem is caused exactly by the fact that, though its nature is rather different but its administration is not markedly segregated from the other parts of the programme. Therefore, the Regional divisions of the Paying Agency are burdened by too much surplus work and simultaneously, they exercise too strict bureaucratic control on the LAGSs by which, at least in certain regions, they considerably impede the implementation of the programme.)

In the current programme, the LEADER LAGs implicitly depend on the Local Rural Development Communities (LRDCs) at several points (alongside the statistical micro regions, centrally, „top-down” established areas and the partnerships established by them). This involves that the LAGs will be connected to the system of the statistical micro regions. It also gives the possibility that LRDCs will be prepared for the implementation of the LEADER approach, and the most innovative LRDCs will become LEADER action groups as a development. Through the trainings and the elaboration of the overall plan for the micro region, LRDCs will prepare the rural actors to get ready for the implementation of the three axis of NHRDP, and the LEADER approach. The Local Development Strategies, as a frame will facilitate the elaboration of LEADER action plans, and in the evaluation of the action plans there will be emphasis on the linkage with the strategies elaborated by LRDCs. It will give

the possibility of the improvement of the existing experiences and developments of LRDCs. The LRDOs will provide trainings and advisory services linked to the available measures of NHRDP before the announcement of the LEADER, which will affect the aggregation of knowledge at the beginning of the LEADER. (We propose making clear the equal relation of the Local Action Groups (LAGs) and the Local Rural Development Communities (LRDCs)). It would also be worth considering whether parallel work of the LRDCs and LAGs does not unnecessarily double the institution network, education, etc.

It might be useful to look at EU best practices (the example of Finland, Spain) and, to provide plus funds to the existing LAGs from the available surplus funds, on the one hand, and launch new programmes based on domestic (or converted EU) funds, working according to LEADER principles in areas not covered by the LEADER, on the other.

According to the NHRDP, the next round of LEADER tenders should be invited within one year after approval of the programme. The evaluators see a risk in the late start of the tenders; successful implementation of the LEADER needs time. Until now, due to the late tendering, conclusion of contract, delayed definition of the central requirements, short time remained available for the local tendering and implementation of the projects (as yet, selecting the beneficiaries has not been successful in the ARDOP LEADER in some places ). In this way, also the future LAGs will be able to prepare the applications (they will know exactly what kind of criteria they have to fulfil) and the relevant departments of the Ministry of Agriculture and Rural Development (MARD) and the Agricultural and Rural Development Agency (ARDA) will be able to better prepare for receipt of the applications (for the same reason). If one year is granted as a final deadline for invitation of applications, then it will not be done earlier either according to the “usual process of matters” because the task always occupies the time available.

### **Situation analysis and analysis of the former experiences**

The analysis of the current situation regarding LEADER could be more comprehensive. It is not properly explained that the solution of the complex social-economic problems of the Hungarian rural areas as well as the conservation of the natural, cultural, community values in the countryside and its involvement in the development process is possible only by the LEADER approach.

The domestic experiences relating to the LEADER have been analysed in more details. There are remarks included in the NHRDP both in respect of the experimental and the ARDOP- LEADER. One of the major benefits of implementation of the currently applied ARDOP-LEADER programme could be the better preparation of the next round of application.

## **Amount of the assistance and the financing system**

The LEADER does not constitute a separate axis in the Programme, its resources will come from the other three axes. It is not clear from the Programme whether, accordingly, the LAGs may spend funds to programmes fitting to the individual axis according to a certain ratio specified in advance and what should be the ratio of allocation of contribution to the administration costs or to the normally legitimate projects but not fitting to any of the axes, etc. among the axis I-III. Summarizing the above, any similar limitation may greatly encumber the implementation of LEADER and it is important that “independence” from the other three axes of the funds designed to the LEADER should explicitly appear in the Programme. On the other hand, it gives the chance that the LEADER-type methodology can be an implemented principle in case of all the other three axis of NHRDP.

It is not clear from the Programme according to what a logarithm the available funds will be allocated among the groups of different size, similarly to the fact what kind of incentive will be available for establishment of the “bigger LAGs”.

The financing and control system of the LEADER could be specified more in the NHRDP, according to the programme document the detailed provisions will be contained in the “rules of procedure” to be elaborated later. The applicability of the Programme will basically be determined by these rules of procedure, therefore, in addition to the colleagues of MARD and ARDA, the active participation of external experts (also international!), the Leader Centre in Hungary and the actual employees of LAGs is also necessary in their elaboration. It would be necessary to give guarantee for it in the Programme since the success of LEADER will largely depend on the quality and user-friendly character of the “rules of procedure”.

The EU rules (Common eligibility rules for Axis III measures) allow accounting the own work, service, products, etc. as costs (investment in kind). This allowance is not part of the recent Hungarian rural development practice; however, it could largely promote the successful implementation of LEADER in the Hungarian rural areas with lack of funds. We deem it important that this possibility should not appear only in the future rules of procedure but explicitly already at the level of the programme.

According to the Programme only the municipality investments are for “public purposes” what is, in our opinion, not the right approach. In the case of local action group level cooperation projects, if they are not profit-oriented, serving the public benefit as well as the local economic, social development or protection of the local values, we suggest that they should receive 85% aid. We also suggest that participation of all three sectors (municipal, civil, enterprise) should not be a criterion.

## **Activities eligible for support**

The range of activities eligible for support is determined by the measures of the other three axes as well as contribution to projects not supported by these but otherwise fitting to the local rural development strategy is also possible. However, it would be desirable to explicitly emphasize some activities that are usually not supported:

- The importance of the social economy, the non-profit activities, the community development are hardly emphasized;
- Though capacity building is mentioned in the programme, but exclusively in terms of trainings, education and physical developments. In the LEADER philosophy the local participation, the strengthening of civil life and, at last instance, development of a governance level is a similarly important element of the programme, and this from Hungarian materials.

## **Criteria of the implementation system, the selection, work and control of LAGs**

The most important progress against the ARDOP LEADER is that the LAGs will work as associations with legal personality in the future. It may largely contribute to the efficiency of their work, to the involvement of further resources, etc. On the other hand, in relation to selection, control and work of the LAGS, a great number of points can be found that may bring the bottom-up character of the programme, the independence and operability of the LAGs into question.

We want to make the following remarks in relation to the selection of the LAGs to be supported:

- The current version of the Programme still contains the previously already criticized sentence: “The verification of formal eligibility and completeness as well as the content-related pre-valuation of the local development strategies is performed by the Paying Agency”. We deem it disquieting anyhow and suggest the restitution of the Section included in the version of January 29 of the NHRDP: “The verification of formal eligibility and completeness as well as the content-related pre-valuation of the local development strategies is performed by competent regional branch offices of the MARD. The content-related evaluation of the strategies is made by the MA, by involvement of the affected partner ministries. The list of the selected local action groups will be approved by the head of the MA.”
- We suggest that the indicative number of LAGs be defined in maximum 100 groups as planned originally (but anyhow in a greater number than the number of the currently operating LAGs). On the other hand, reasonable (but not

excluding the smaller ones!) incentives are necessary in the interest of increase of the number of groups.

- “Innovativity” is a central definition in the LEADER method and is also indicated in the Programme as one of the main selection criteria. However, it must be made clear that innovation in the rural development is a relative definition: what has "expired" in one area, still can be innovative in another. The paragraph referred to above is suggested to be amended as follows: “content and/or methodological novelty, innovativity of the developments included in the local rural development strategy within the given geographical frames.”
- According to international experiences, the main objective and possible result of the Leader is the establishment of management capacities. “In a normal case” the work of a LAG was started in general so that an office was established from LEADER fund and 2-4 colleagues were employed (project manager, administrator, bookkeeper, etc.) whose task was nothing else but implementation of the LEADER. By now, the number of these offices has increased to their multiple and has become the most significant results of building of the local rural development capacities. It can be well observed in the current ARDOP LEADER programme that the responsible organizations work dominantly as a part of the municipalities. Thus, there is a risk that the municipalities get a too strong role.
- It is important to clear the relation, independence and co-ordination of the LAGs and LRDCs. Since the LRDCs are established earlier because the next round of LEADER is invited, they will presumably be dominated by municipalities and have a relatively good financial and management basis, there is a risk that they will crowd out the LAGs that are really built bottom-up, and the LRDCs will strongly approach the LEADER regions to the statistical small-regions. This may raise concernment in respect of equitableness of LEADER for the future.

### **Domestic and international experience exchange**

In case of domestic and international cooperation projects it is very useful to motivate the LAG's on the way that the projects will be financed from a different budget. In this way there will hopefully be more international and domestic cooperation, and LAG's can manage the cooperation projects separately, which gives the possibility to put enough emphasise on the elaboration of them.



## **The results expected and quantified targets**

### **Expected outcomes of the Programme**

The evaluation of the expected results of the „New Hungary” Rural Development Programme was undertaken in accordance with Article 85 of Council Regulation 1698/2005/EC, and the relevant guidelines of the CMEF. The tasks required were the following:

- The evaluation of the suitability of the indicator system
- Evaluation of the quantification of objectives

The evaluators’ – as the planners’ – point of departure were the measure level (output, result and impact) indicators. The use of these indicators was discussed with the planners, and the targets individually verified. This measure-level basis was then used to establish programme-level indicators, by aggregating the appropriate targets. Other programme-level targets were obtained by using trend data from national statistics. These tasks were done by the evaluators in collaboration with the planners (MARD planners and AKI/VÁTI experts) on numerous workshops.

### **The suitability of the use of common base indicators**

The Commission requires all rural development programmes to use the common indicators listed in guidance “F” of the Common Monitoring and Evaluation Framework. The CMEF defines a set of output, result and impact level indicators, as well as context and baseline indicators that are used to measure the socio-economic and environmental context, in which the Programme operates. The exact definitions, the methodology to be applied, and the unit of measurement of the indicators are set out in the indicator fiches “G”-“J” of the CMEF.

The planners of the “New Hungary” Rural Development Programme complied with the obligations concerning the common indicators, and the quantified targets were drafted accordingly.

In the evaluated draft version of the Programme only the indicators linked to the separate priorities were given. Later, the programming authority however has added the required programme level impact, and baseline indicators (derived from the Strategic Plan). Accordingly, these indicators, and their respective targets, have been assessed only at a later stage by the evaluators, with the results not included in the original ex ante evaluation.

As required by the Commission, the indicator for employment creation has been replaced to reflect full time equivalent (FTE) jobs, the indicator for biodiversity has

been replaced to measure “farmland birds”, while the indicators for measuring water quality refers to “gross” nutrient balance in the latest, updated version of the Programme.

The common indicators were mainly interpreted and used by the planners according to the CMEF guidance. However, although the ex ante evaluators and the planners have made many common efforts, there are still some indicators where the definition or the methodology of data collection (eg.: for gross value added at company level, the timing for data collection, the setting of the reference year, the detailed definitions for jobs created) need further efforts. The CMEF itself does not provide sufficient guidance in these cases. Therefore, the ex ante evaluators advised further reconciliation with the Commission, and possibly at workgroup level between each member state.

Further tasks may be defined in the area of data collection methods: the evaluators deem it necessary that ARDA should have precise guidance as concerning obligatory data supply for each measure at project level (from project managers), and concerning the practical methods for the monitoring of the indicators.

### **The suitability of the additional national indicators**

During the preparation of the Strategic Plan, the programming authority has defined a set of additional indicators, linked to the base indicators. The content of each indicator has been reviewed by the evaluators, and they are regarded as generally clear and well defined.

The common and additional indicators together cover the Programme appropriately, and are relevant from the perspective of overall and specific objectives to be achieved. All objectives have been quantified adequately, and all measures have a set of output and result, and sometimes impact, indicators. At measure level, the Program only uses a few additional indicators, an approach that the evaluators fully support, as these would over-complicate the monitoring and evaluation system. Providing too much data could be unnecessary pressure for both the beneficiaries and the programme implementation system. This also means that the balanced proportion suggested in the CMEF concerning the output, result and impact indicators will be met.

### **Evaluation of the quantification of objectives**

The evaluation of the quantification exercise was done by the evaluators on numerous internal workshops with the planners. This contained the examination of the measure level result and impact indicator’s target values have been planned reasonably

and verifiably. The assessments are adequate and during the execution the data considering the indicators are trustable and can be obtained in time.

During the task the evaluators verified that the actions and the indicators can be reasonably linked and that there is a verifiable numerical coalition between the indicator levels. The methods and base indicators used for assessing target values have been reviewed and discussed (eg.: unit costs, project sizes of previous programming, applicant interest).

As a result of the work done many missing target value got formed and the ones existing got more precise. In the ex ante evaluator's opinion the system of target values have developed significantly, mostly realistic and verifiable. The system of each target value is consistent, only the different type of measurements and data collection can cause inconsistency.

The indicators well describe the change in the role of agricultural economic, the rural population and rural economy and the effects of the agricultural rural development subventions. The Programme probably will just moderately affect the decrease of employment as increase can only be expected in the non-agricultural service sector. The agricultural, food processing and forestry output has a slower development compared to the national economic average, but it does develop. The balance between crop farming, animal husbandry and food processing have shifted, the product lines and the production is shifting towards the high added value activities.

The decreasing inactivity and the increasing profitability helps to increase the income level of the rural population, which is further stabilized by the diversification of the activities. The environmental effect of the agriculture is decreasing, which ensures an increasing environmental service to the other sectors.

### **Expected impacts of the Programme**

At the level of overall impacts, the programming authority has used conservative estimates in setting the targets.

The targeted net added value of €393.5 mn (in PPS) is a cautious target, compared to the €737 mn public expenditure to be disbursed annually, in average, as of the financial plan of the Programme (total cost of interventions, including private funds is estimated to reach in average €1,163 mn annually). Though only a limited amount of expenditure will be linked to income-generating activities, and added value at company level will be dependent on numerous other factors, the estimate is regarded as rather cautious.

The target for the net additional FTE jobs created is however quite ambitious, with 11.5 thousand jobs. Especially the estimates for Axis III are ambitious – rural development shall contribute with 8.6 thousand FTE jobs to the overall target. Considering that the estimated annual expenditure will be at around €164 mn under Axis III, and some measures will not contribute much to job creation (e.g. village

renewal), project expenditure per FTE jobs will be at around 10-15 thousand for the measures focusing on rural employment.

The labour productivity indicator (change in GVA per FTE employees of €4,940) was derived from statistical trends, and does not seem to be over-ambitious. Here, the verification of a close link between the interventions and the value of the indicator may pose a problem later (during ex post evaluation).

The change in trend in biodiversity decline as measured by farmland bird species has been again derived from available national statistics. The value for 2003 was 108% (2000=100%), and an additional increase by 4%-points seems feasible, taking into account the size of the areas affected under Axis II measures, while also taking account of expected adverse developments (spread of non-agricultural use of land, etc.).

The target for the change in areas with high natural values (517 thousand ha) has been simply obtained by aggregating specific measure-output targets. This method was verified by the ex ante evaluators.

Changes in gross nutrient balance will be targeted at 17.5. This is regarded as a balanced approach, taking into account the relatively low fertiliser use in Hungary (as compared to some other EU countries), and the developing needs of agriculture. The Hungarian authorities also suggest a target for phosphor surplus, where it should be noted that there is generally a lack of phosphor in the soil in Hungary, thus the surplus is expressed in negative numbers.

## **Expected results by Axes**

### **I. Improving the competitiveness of the agricultural and forestry sector**

Due to the financial allocation and the two-year period without development subsidies we expect a high intention in investing in machinery. But, it will not be completed fully with reasonable structural improvement in machinery. The Program has a weak effect in the field of increasing employment in rural areas. The decrease of number of workplaces is expected to continue, which is not direct effect of the Program, but the general restructuring of the economic sectors. The manure-handling systems of the animal farms will improve, as well as the technological status will reach a higher level. We expect a further concentration in production, decrease in number of farms, mainly family farms. The Program itself has some effect in structural production change, but does not utilise sufficiently the possibilities the measures offer.

### **II. Improving the environment and the countryside**

Afforestation of agricultural land will support to increase the areas of the short rotation coppice, instead of the forests, which would supply long term positive effect on environment. We expect a lower interest in agri-environment programs, due to the structure of the measure with ending the low requirement basic programs and introducing integrated and bio-production. The forestry measures of the Axis 2. will attract high interest. The measure supporting Less Favoured Areas will have a lower interest, since the crops which cannot be produced in these areas are the main products of the present production structure. The popularity of producing feed would need a stronger market demand from animal production, finally towards animal products. Although the environmental effects of the basic rules of the Axis 2 measures are definitely positive, but the real effects strongly depend on the detailed rules of the implementation.

### **III. The quality of life in rural areas and diversification of the rural economy**

The significant increase of number of new workplaces in rural areas is not expected. The technological improvement of rural businesses will be of a high interest, but the enterprises will struggle with low capital endowment. In the field of rural services we do not expect a spectacular improvement. The maintenance of the rural built heritage is expected to reach a significant progress. We do not expect a significant progress in improvement of the situation of the rural women, romas and other disadvantageous groups.

### **IV. LEADER**

The LEADER has a great potential in Hungarian rural development, nevertheless, this approach does have not quiet has a great emphasis within the Programme. Some uncertainties about financial resources, connection to domestic rural development institutions and sometimes inadequate (too strict) practices in central administration and control might decrease the overall positive results. The presented system of Leader at some parts does not support sufficiently a development structure based on local resources and targeting local problems in an integrated way.

The development of the rural economy and society, including agriculture, does not specify clear directions too deeply; therefore a structured development of rural areas, in terms of economy, environment and rural life might not emerge. This is reinforced by the fact that other national rules influence the quality of rural life to such a great extent that may not be only balanced with the measures of the present Programme.

## **Coherence with relevant guidelines and other programming documents**

### **Complementarities with Other Programmes**

In the elaboration of the New Hungary Rural Development Strategic Plan (NHRDSP), targeted at the utilization of the European Agricultural Fund for Rural Development (EAFRD), and in the development of the Programme, established on this basis (NHRDP), integrated approach is a requirement and a method. This means a connection of NHRDP to the EU strategies, action programmes, to the different national operational programmes, on the one hand, and the creation of the programme's internal consistence, on the other. The requirement of establishing synergies between the different programmes, plans and planning levels, the elimination of contradictions applies to all phases of planning.

## Connection with Community policies and priorities

The New Hungary Rural Development Programme takes largely into account the market regulation and rural development objectives of the new Community Agricultural Policy, amendments in the proportions and in the system of objectives. The purpose of the reform of the Common Agricultural Policy, launched in 2003 was to realize an aid system that is independent from production, and to increase the population retention capacity of the rural regions and the strengthening of rural development (Pillar II). The New Hungary Rural Development Programme continues to consider the modernization of agricultural production, of the conditions of food economy (mainly the quality ones) and a mitigation of technical-technological disadvantages to be a priority. Parallel to that, measures serving rural development, sustainable development, the retention of population, an improvement of the quality of life are enhanced and applied in a comprehensive way.

### Connection with the Common Agricultural Policy

One of the most important structural concerns for the Hungarian agriculture is the disharmony between plant production and animal husbandry (a surplus of crops, a major reduction in stock-raising). The planned change in the CAP reform – due to a strengthening of variability, of landscape – may have a favourable impact on the structure of crop production, but – without the use of other funds and without further development targets – it is not expected to reduce structural tensions, in actual terms. On the basis of the production's conditions, the production of the COPF-plants (corn, oil, protein, fibre) shall remain determinant, and animal husbandry shall lose even more from its weight, representing an even lower demand for forage crops.

The Rural Development Programme is in harmony with the measures funded from EAGF.

From among the areas listed in Annex I of Commission Regulation 1974/2006/EC, there is no danger of a duplication of the assistance in the following sectors:

- **Wine:** the CMO's restructuring measure is operational, but there are no overlapping measures in the Rural Development Programme
- **Tobacco:** During 2007, Hungary plans to give a production-related supplementary aid to tobacco producers, but they cannot benefit from the agri-environmental measures of the Rural Development Programme



- **Hop:** During 2007, Hungary does not plan to provide a production-related national supplementary aid (there is only one hop producer, on an area of 40 ha)
- **Direct payments:** Hungary applies SAPS
- Olive oil and specific measures: not relevant

In the following areas, duplication of assistance shall be eliminated:

- **Fruits and vegetables:** the supplementary character is ensured in line with the measures. Operational Programmes submitted by the producer groups contain information on the use of the Operational Fund.

▪

**No aid shall be given to:**

- Investments (qualifying under Art. 16, c) of Regulation 1432/2003/EC) included in the recognition plan of the preliminarily recognized producer groups (on the basis of Art. 14 of Regulation 2200/1996/EC),
- Investments financed from the Operational Fund (determined in Art. 5 of Regulation (EC) 1433/2003) by a recognised producer group (in accordance with Art. 11 of Regulation (EC) 2200/1996).

The recognition plans and the Operational Programmes containing the measures to be financed from the Operational Fund can be found at ARDA (Paying Agency) that shall eliminate eventual duplications of payments.

- **Sugar:** The Sugar Restructuring Fund (RF), created by the reform of the sugar CMO has one component that might be overlapping with the diversification measure of EAFRD. The timing of the use of these two funds shall be implemented as follows: the applicant can make use of the EAFRD diversification measure only if the project funded from RF is completed. The call for applications of the EAFRD diversification measure shall contain the requirement that no applicant benefiting from RF can apply as long as the payments from RF were terminated.
- **Bee keeping:** An application submitted under the measure included in Art. 2, paragraph (c) of Council Regulation No. 797/2004 may contain an investment that would be eligible for financing from EAFRD as well. In order to exclude a duplication of assistance, Regulation 81/2006 FVM obliges the applicants to issue a statement that they use no aid from other sources for the same investment.

**Production-related national supplementary aids (top-up)** Hungary studied the references included in Annex I to Commission Regulation No. 1974/2006 in terms of

aid for bovine, as well as sheep and goat (Council Regulation No. 1782/2003, Articles 114, 119 and 132). In respect of measures included in Articles 132 and 114, supplementary aid planned for the year 2007 shall be allocated on a historical basis, decoupled from production. In respect of the aid form mentioned in Art. 119, Hungary does not plan to grant national supplementary aid. On the basis of the above, no distinction is required.

The rational use of development funds of the New Hungary Rural Development Programme offers several possibilities for a mitigation of structural tensions. The use of the product surplus in crop production for energy generation, the launch of energy crop production promotes the change of production structure, the application of modern technologies, as well as job creation in the rural regions. A restructuring of crop production is justified also by an unfavourable change in the corn intervention system. The programme intends to ensure a restructuring role to the development of horticulture, and it considers a development of animal husbandry in line with the EU requirements, the creation of the conditions for quality production and the full use of the production potential. Incentives for environmental protection, environmental management, and landscape management are also areas of outstanding importance.

### **Connection to the Fisheries Operational Program**

The measures of the Fisheries Operational Program (FOP), which is co-financed by the European Fisheries Fund (EFF) are the followings:

- Modernization of existing and creation of new fish production and storing capacities
- Acquisition and renewal of fisheries implements
- Building and modernization of fish processing facilities
- Research and quality control
- Promotion campaigns and actions
- Pilot research projects

Demarcation in Axis 1 and 3 is not necessary; there is no possible overlapping between the measures of FOP and NHRDP. However, the similar measures of the two programs can reinforce the effect of each other, the measures of FOP can contribute to the targets of rural development.

Art. 38 of Reg. 1698/2005 allows compensation for respecting the Natura 2000 directives –costs incurred and income foregone resulting from respecting commitments going beyond the relevant standards - only in the case of Utilised Agricultural Area (UAA). Therefore Natura 2000 compensation of wetlands and fishponds on the account of the NHRDP is not possible.

FOP does not include measures neither for the compensation of Natura 2000, nor for the environment conscious utilisation of lands/fish ponds.

Among the measures of Axis 2 of the NHRDP – similar to the Rural Development Plan 2004-2006 – in Art. 39 agri-environment payments the support of extensive fish ponds is eligible. The support can be claimed for respecting requirements going beyond standards in connection with environment conscious utilisation of fish ponds.

### **Connection to EU policies**

In the realisation of the New Hungary Rural Development Programme, another possibility – in some cases, criteria for the use of such assistance – is a connection to the different EU strategies. The implementation of competitive agricultural production, restructuring, the creation of food safety are consistent with the Bio-farming Action Programme (COM 2004 - 415), the commitment to enhance the use of renewable energy resources (COM 2004 – 366). Sources for rational land use, development of agricultural and forestry systems can increase by participation in Natura 2000 and the programmes of the Water Framework Directive. In order to provide conscious compensation for the effects of climate change, another possibility is offered by the EU's forestry strategy and action plan (COM 2005 – 84), which is particularly important in the implementation of measures connected with sustainability and job creation. All of the priorities of the New Hungary Rural Development Programme are indirectly or directly related to the environmental action programme of the EU (Regulation No. 1600/2002/EC). The tools of technical assistance, affecting all groups of measures may provide significant help already in the preparation phase of programming, in the coaching of the affected persons, in up-to-date information.

In accordance with the domestic and European conceptual documents and the Community Strategic Orientation, NHRDP pays special attention to the validation of horizontal policies and to programme-level implementation (sustainability, equal chances, social/ economic/ environmental safety, territorial principle). These policies shall be taken into account in the planning of the strategy, in the preparation of the programme, in the assessment and the control process, equally.

## Connection with the operational programmes in Hungary

The New Hungary Rural Development Programme is organically connected with the planning processes, concepts applicable to the other areas of the national economy. The Government, by approving the Government Regulation No. 1076/2004 (VII. 22.) made a decision on the contents and the organisational framework for the elaboration of the Europe Plan (2007-2013). In accordance with this decision, long-term (2005-2020) development policy documents were prepared – the National Development Policy Concept (NDP) and the National Regional Development Concept (NRDC) – to determine the areas and objectives for the use of the EU's structural funds and of its Cohesion Fund. The strategic framework laying down the basis for an effective and efficient use of the funds allocated for the period 2007-2013 from the Cohesion Fund and the structural funds of the EU is included in New Hungary Development Plan (NHDP), which is the equivalent of the National Strategy Reference Framework (NSRF), provided for by the European Union. The actual implementation of the development strategy outlined in NHDP and in NSRF is provided by operational programmes, with the respective details. There are seven operational programmes for the priority development areas, and another seven operational programmes for the development regions. Parallel to these operational programmes, prepared for the use of the Cohesion Fund and of the structural funds, the New Hungary Rural Development Strategic Plan was prepared. Its implementation takes place on the basis of the New Hungary Rural Development Programme. Most of the financing of NHRDP is provided by the European Agricultural Fund for Rural Development (EAFRD). It finances integrated development projects, through different comprehensive development projects, using the available resources of the structural funds and of the Cohesion Fund, as well as national aids, preferential loans.

The objectives of the national concepts and of the groups of rural development measures are interrelated, on the one hand, and represent a continuation, extension of each other, on the other hand. As a result, a basic requirement to implementation is to create the coherence of the development projects – in order to avoid any duplication of aids –, with a clear separation, demarcation of the areas.

The main characteristics of the connections of the New Hungary Rural Development Programme to the operational programmes, of the demarcation of the development projects can be summarised as follows:

- The Axis for environment and rural development (Axis 2) of the NHRDP is connected in several aspects to the Environment and Energy Operational Programme (EEOP). A considerable portion of the activities to be financed from EAFRD are connected with the protection of nature and of the environment, land use, production of renewable energy, biomass utilisation and the development of infrastructure. The scope of utilisation of the EAFRD, however, is limited in respect of the eligible activities and beneficiaries, therefore, harmonisation, combination of the targets and measures in NHRDP and in

EEOP are of prime importance. Between the two programmes, coordination is necessary, in order to supplement the resources and increase the efficiency of the measure:

- Measures to protect the environment in agriculture and forestry, in order to finance the Natura 2000 network, water management,
- Measures to preserve the values of the protected natural areas, for a new type of floodplain management relating to VTT,
- Deferred environmental protection investments at the animal husbandry sites,
- The primary processing of biomass,
- Development of infrastructure,
- The beneficiaries of NHRDP are agricultural producers, the projects can be implemented in outskirt territories for agricultural use. The sources for EEOP are used for the environmental and energy development of the enterprises carrying out non-agricultural activities. Development projects in renewable energy are eligible for EAFRD assistance only in the case of small-size processing sites, owned by the producers. EEOP supports energy production intended for sale. The synergy between the two areas is a prime condition for the use of the resources. The preservation of the natural values in protected areas managed by the state, the infrastructural investments there are financed by EEOP,
- An important objective of NHRDP is to keep the rural population locally, to create the means of living, the possibility of alternative income-earning. The financing of measures aimed at the construction, modernisation of rural infrastructure takes places from the resources of the Transport Operational Programme (TOP). These investments can generate economic growth also in rural regions, by improving the possibilities of product sales (markets) and by bringing jobs “closer”, by improving the quality of the entrepreneurial environment. Construction, modernisation of the agricultural service and access roads, forestry roads, the construction, modernisation of facilities shall be implemented from EAGF,
- In the programmes, the development of the activities of micro-businesses is of prime importance, with special regard to the rural regions. For the development of agricultural activities and food processing micro businesses, the EAGF sources shall be used. For the support of businesses belonging to other sectors of the national economy, the operational programmes for Economic Development and the regional operational programmes shall be used,
- Significant quality improvement can be achieved by the application of modern technologies and know-how based on the results of research and development and innovation activities. Synergy between the programmes can be strengthened with the promotion of technology transfers between sectors, where important roles can be played by both the R&D Measures of the Competitiveness Operational Programme and the regional operational programmes,

- The resources of the Social Renewal Operational Programme (SROP) and Social Infrastructure (SIOP) are connected with the EAGF Axis I and III via the improvement of education, culture, employment, the social sphere, the improvement of the quality of life in rural regions, support to tourism-related activities. The sources of operational programmes expand the scope of the beneficiaries and create an environment with a higher knowledge level and expectations for the rural population, in particular, agricultural population,
- The measures of the Electronic Public Administration and State Reform Operational Programmes (EPAOP, SROP), through a renewal of the social, public administration services, exercise direct and indirect influence on a more efficient, smooth operation of the agricultural investments, businesses,
- The measures of Axis III (Quality of life in rural regions and rural economy) and Axis IV (LEADER) are connected in many aspects to the regional operational programmes (ROP). The measures aimed at rural development targets, in particular, local capacity increase, a strengthening of local partnerships, shall be implemented in connection with the government programme aimed at the development of the 28 most disadvantaged small regions. The implementation of the LEADER programme takes place in close coordination with the comprehensive programme, where the special considerations of the most disadvantaged small regions receive particular attention in the programme,
- According to the demarcation of tasks, based on inter-ministry consultations, the sources of the EAGF Axis III and IV give priority to agricultural and agriculture related development projects. The infrastructure, road and utility development projects for the rural population are not eligible for funding from EAGF sources,
- In the field of tourism, for the infrastructure of accommodation and services for non-commercial purposes and sizes, using the principle of horizontal integration, EAGF sources can be used. Support to other investments in tourism, in coordination with the previous projects, is the task of the regional operational programme,
- Measures aimed at the renewal of villages shall be concentrated on villages with buildings representing significant cultural values, having obtained protection. When aid is used, the list of the villages selected for support, as well as the size, complexity of the project shall be considered a criteria for the demarcation. Towns and villages in the country and the simple project shall receive support from EAGF,
- Infrastructure development in villages is outside the scope of the eligible projects. The development sources for the basic services in the country can be used, depending on their origin, subject to the size of the towns and villages. The centres of the small regions shall receive support from the regional programmes, the development of services in small villages shall receive support from the Rural Development Programme. Development projects with synergy effects shall receive priority.

Coherence between the New Hungary Rural Development Programme and sectoral OP's of the New Hungary Development Plan			Priority	Economic Competitiveness OP				Environment & Energy OP						Transport OP				Electronic Government			State Reform Op			Social Infrastructure OP				Social Renewing OP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
				R&D	1	2	3	4	Healthy, clean cities	Water Management	Preservation of natural resources	Renewable-energy	More efficient energy usage	Sustainable production and consumption culture	International accessibility of the country and centres of regions	1	Regional accessibility	Infrastructure of intermodal economic centres	3	4	Renewing infrastructure for the organisations in public administration	1	2	3	Renewing institutional procedures	1	2	3	Improving quality of human resource	Improving governance and renewing ability	Educational infrastructure	1	2	3	4	Matching demand and supply on the labour market	1	2	3	4	Decreasing regional disparities of activity	2	3	Adapting ability to changes	4	Life long learning	Improvement of healthcare and ability to work	5	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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1	Competitiveness in the agricultural, food processing and forestry sectors																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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"S" as Synergy: UHRDP measures support or are supported by UHDP priorities (complementary or multiplicative effect)  
"D" as Demarcation: Similar UHRDP measures are supported at UHDP priority, demarcation has been clarified

Coherence between the New Hungary Rural Development Programme and regional OP's of the New Hungary Development Plan			Priority	Central-Hungary OP					West-Transdanubia OP					South-Transdanubia OP				Middle-Transdanubia				North-Hungary OP					North-Plains OP				South-Plains OP				
				1	2	3	4	5	1	2	3	4	5	1	2	3	4	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5			
No.	Priority	Measure	Development of knowledge based economy	Development of competitiveness	Development of the attractivity of the region	Development of human public services	Renewing urban territories	Regional economic development	Tourism	Development of urban areas	Environment protection and infrastructure in small regions	Local public administration and health-care services	Development of competitive economy based on urban areas	Strengthening touristical potential	Human public services and public urban development	Regional development of infrastructure	Regional economic development	Tourism	Integrated development of urban areas	Development of infrastructure supporting local and regional cohesion	Competitive local economy	Regional logistical networks	Rehabilitation of urban areas	Development of Human public infrastructure	Development of regional transport	Improvement of operational conditions of economy	Development of transport infrastructure of local and regional importance	Strengthening touristical potential	Development of urban areas	Regional economic development	Tourism	Transport infrastructure	Human infrastructure	Development of urban areas	
1	Competitiveness in the agricultural, food processing and forestry sectors																																		
	1.1	Promoting information dissemination																																	
	1.2	Age-restructuring																																	
	1.3	Farm and production restructuring	S	S									D					D				D				D									
	1.4	Support for investment and quality measures																																	
	1.5	Support for infrastructure		D				D				D										S											D		
2	Improving the environment and the countryside by supporting land management																																		
	2.1	Support for agri-environment, Natura 2000 and forest environment										D																							
	2.2	Preserving LFA territories and the traditional agricultural landscape										D																							
	2.3	Investment support for environmental standards and water management										D																							
	2.4	Support for afforestation and fast growing species										D																							
	2.5	Ensuring the balanced quantity of high quality water										D																							
	2.6	Strengthening the protection of soils										D																							
	2.7	Ensuring the animal welfare payments																																	
3	Improving the quality of life in rural areas and encouraging diversification of economic activity																																		
	3.1	Support for diversification, micro-business and tourism, building on the natural and cultural heritage;			D				D				D						D									D				D			
	3.2	Improving access to basic services and village renewal										D			D								D											D	
	3.3	Support for local capacity building																																	

"S" as Synergy: UHRDP measures support or are supported by UHDP priorities (complementary or multiplicative effect)

"D" as Demarcation: Similar UHRDP measures are supported at UHDP priority, demarcation has been clarified

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## Coherence with CSG

As set in the Community Strategic Guidelines, support in the area of rural development based on Council Regulation 1698/2005/EC has to contribute to the key community priorities, to other measures defined for cohesion and environment and furthermore to the implementation of the CAP reforms. The measures set in the “New Hungary” Rural Development Programme resulting from the Community Strategic Guidelines are widely coherent with the documents mentioned above.

The Community Strategic Guidelines (CSG) summarise the Community’s aims, as well recommended ways and means of rural actions under three intervention areas, corresponding to the three compulsory axes of measures, as prescribed by Regulation 1698/2005. The fourth axis concerns local capacity building for employment and diversification, and is based on the experience with the Leader programme. Additionally, two horizontal guidelines cover the aim of ensuring consistency of programming (including the use of technical assistance), and the complementarity between Community Instruments.

The Programme, as the Strategic Plan itself, shows a high degree of consistency with the priorities of the Community in relation to, and within the framework of its rural development policy.

The Guidelines put particular emphasis on growth and jobs (the Lisbon agenda) and sustainability (the Göteborg goals), resulting in a slight refocusing of rural development support as against pre-2007 programmes. The Hungarian rural Development Programme pays attention to this – albeit not always explicitly – by creating a link to these main EU priorities in the description of the strategy, and under a number of measures, with corresponding reference in the ‘rationale for intervention’ section. The evaluators suggest the links to be elaborated more explicitly in the implementation phase of the programme (this concerns inter alia further consideration of whether and to what extent projects creating sustainable jobs shall be given preference in project selection; and the elaboration of adequate methodologies for assessing the credibility of job creation promises).

The Programme respects environmental sustainability goals, providing for relatively ambitious plans on re-forestation and the spreading of environmentally friendly agricultural practices. Community regulations on emission on greenhouse gases were also paid due account in the Programme.

The EU policy in support of regional cohesion has also been taken into account. Certain rural development actions in regions and micro-regions that are lagging behind enjoy preferential regimes in terms of a higher rate of support – to an extent allowed under the Regulation.

An area where the Programme showed significant progress as against the previous programming period and earlier draft programme versions, but where further work might be needed is the complementarity between other Community instruments. The

rural development programme has established links to the Structural Funds and Cohesion Fund with a comprehensive coverage, for all axes and measures.

However, a number of concrete links (most notably in agri-logistics, but also combined interventions in support of the rural economy and society in the most deprived micro-regions) could not yet be established in detail, as the relevant Operational Programmes (transport, social infrastructure, regional programmes) are still under elaboration, and may be subject to amendments in consequence of the negotiations with the Commission Services.

The CSG stresses the need for incorporating into the programmes the support by means of the EU's rural development policy to the future restructuring in agriculture that is fostered, or brought about, by the new market-oriented CAP. This has been duly considered by the Programme, which put emphasis on exploiting new opportunities in relation with energy crops, a more effective and efficient horticultural sector, market potentials for bio-products. It has also adopted reinforced and renewed actions in favour of diversification into non-agricultural activities. For the latter, a flexible approach has been followed, allowing for a range of bottom-up initiatives, which was welcomed by the evaluators, but they also think that there might be a case to link these effectively to sound local economic development strategies (see Axis IV, and related Axis III-measures 3.3 and 3.4) in order to avoid fragmented, ad-hoc, and ultimately, economically less viable projects.

Existing structural problems with the market potential and opportunities for animal husbandry, and to some extent arable crops, have not been fully resolved – therefore, the Programme is still a little vague in addressing the future restructuring needs that will arise here. Here, further input from the national agricultural policy is needed and expected.

The Programme also contains the seven common impact indicators, linked to the objectives of the CSG, that were envisaged by the “Rules for Application of Council Regulation 1698/2005”, in order to monitor the impact of measures (measuring the contribution of the Programme to growth, jobs, productivity, biodiversity, high nature value areas, water and climate change).

The following table demonstrates the coherence of the various measures with the 1698/2005/EC Regulation, the Community Strategic Guidelines and the National Strategy Plan

Code	Name of the measure	1698/2005/EC EAFRD Regulation	Community Strategic guidelines	National Strategy Plan
Axis I: Improving the competitiveness of the agricultural and forestry sector				
111	Training, information and diffusion of knowledge	+	+	+
112	Setting up young farmers	+	+	+
113	Early retirement of farmers and farm workers	+	o	+

114	Use of farm advisory services	+	+	+
121	Modernization of agricultural holdings	+	+	+
122	Improving the economic value of the forest	+	+	+
123	Adding value to agricultural and forestry products	+	+	+
125	Infrastructure related to the development and adaptation of agriculture and forestry	+	0	+
141	Semi-subsistence farming	+	0	0
142	Setting up producer groups	+	+	+
<b>Axis II: Improving the environment and the countryside</b>				
212	Payments to farmers in areas with handicaps, other than mountain areas	+	+	+
213	Natura 2000 payments on agricultural areas and payments linked to the implementation of the Water Framework Directive 2000/60/EC	+	+	+
214 (A)	Agri-environmental payments	+	+	+
214 (B)	Preservation of genetic resources	+	+	+
216	Assistance provided to non-productive investments	+	+	+
221	First afforestation of agricultural lands	+	+	+
222	First establishment of agro forestry systems	+	+	+
223	First afforestation of non-agricultural land	+	+	+
225	Forest-environment payments	+	+	+
226	Restoring forestry potential and preventive actions	+	+	+
227	Non productive investments	+	+	+
<b>Axis III: Quality of life in rural areas and diversification of the rural economy</b>				
311	Diversification into non-agricultural activities	+	+	+
312	Support for business creation and development	+	+	+
313	Encouragement of tourism activities	+	+	+
321	Basic services for the economy and rural population	+	+	+
322	Village renewal and development	+	+	+
323	(323.1) Conservation and upgrading of the rural heritage (323.2) preparation of Natura 2000 maintenance/development plans	+	+	+
331	Training and information	+	+	+
341	Skill acquisition, animation and implementation	+	+	+
<b>Axis IV: LEADER</b>				
411 412 413	Implementation of the local development strategies	+	+	+
421	International and transnational cooperation	+	+	+
431	Running costs, acquisition of skills and animation	+	+	+

**Legend:**

+ showing a strong coherence

0 low level of coherence

## Community added value

As far as community added value is concerned it is important to understand the difference it would make if the problems and solutions given addressed by the programme would be looked at purely at national level, and what is the added value of community support. For Hungary, in the process of catching up it is crucial that she can stronger rely on the experience of other member states, she can participate in joint actions and common problems can be solved in partnership with other member states.

There is financial added value in the present circumstances of Hungary; national resources would not be able to support the level of rural development investment taking place under the programme without the support of the European Union.

A programming added value can also be identified. In the absence of EU funds and the related programming requirements, it is unlikely that the Hungarian authorities on their own would enter into a multi-annual commitment to invest in this sector over a seven year period. Linked to this, any purely national investment would also not involve the same level of monitoring including use of performance indicators, of formal evaluation, or of partnership in planning and implementation.

A third added value relates to policy. In the absence of EU funding and regulatory requirements many of the priorities and measures in the programme would be unlikely to attract national Hungarian public investment, or attract it to the same extent. This is especially so in the case of some of the newer or more innovative interventions in such areas as the environment, rural tourism, other alternative farm enterprises or ICT.

A further added value lies in networking. Participation in rural development programming at an EU level also gives rise to networking and associated learning opportunities involving the relevant Commission services, national authority counterparts in other member states, and international experts.

Szintén hozzáadott érték a horizontális szempontok és közösségi célok érvényesítése. A Program keretében kiemelt figyelmet kell fordítani a horizontális elvek – különösen az esélyegyenlőség és környezeti fenntarthatóság – érvényesítésére. „Külső kényszer” (jogszabályi előírások, a környezeti fenntarthatóságot kiemelten vizsgáló SKV) nélkül ezen elvek valódi gyakorlati érvényesülésére sokkal kisebb lenne az esély. Fontos azonban annak a mechanizmusnak a megteremtése, amely az intézkedések szintjén is biztosítja a horizontális elvek tényleges érvényesülését.

A közösségi hozzáadott értéket az értékelési intézkedés szinten is megvizsgálták, mely a korábbi, az intézkedéseket tárgyaló fejezetekben került bemutatásra.

## **Quality of the procedures**

### **Introduction**

Major changes took place in the 2007-2013 planning period within the system of agricultural and rural development grants. These also resulted in the need to revise the institutional framework. An important aim of this work was to introduce a unified approach in order eliminate parallelisms, to simplify the procedures, and to improve the efficiency of the system. In the course of this work, the institutions established in the previous planning period, including the knowledge and experiences accumulated there, were also built upon.

By establishing this new institutional structure, a way and opportunity was created to preserve or further develop good solutions, while eliminating earlier problems.

The aim of the evaluation is to assess whether the proposed institutional structure and regulatory mechanisms are suitable for the reliable, efficient and compliant implementation of the programme, and whether the transparency of the system, as well as the Community and Hungarian principles of partnership and agricultural and rural development policy can be ensured.

The evaluation is based on the critical analysis of the programme document. We draw a parallel between the individual measures and the organisations in charge of implementing these measures. We have evaluated the rules applicable to the tasks and responsibilities at the organisations, the existence of their regulated operating documents and their capacities.

In addition to the programme, we also used information gathered from the experts of MARD, and for the purpose of evaluating the elements of the institutional structure, the analyses and draft versions prepared by MARD. In evaluating capacities, the basis of our evaluations was the performance indices of similar measures of the earlier and the current programme. The evaluation was organised around four main criteria: legal compliance, organisational completeness, the availability and quality of procedural orders and regulations, as well as the well-founded nature of the IT side of implementation.

## **Experiences related to the institutional structure of the rural development programmes in the period 2004-2006, preparation for the 2007-2013 programme**

In the period between 2004 and 2006, two rural development programmes operated in Hungary, in fundamentally different institutional structures. ARDOP, similar to the other structural funds, belonged to the National Development Agency in terms of coordination, while the Ministry of Agricultural and Rural Development was responsible for NRDP. Despite the above arrangement, the actual management was delegated in both cases to the Ministry. Beginning from 2005, they belonged to the same main department, which acted as the managing authority in the case of ARDOP, and as the programme coordination unit in the case of NRDP, but the two organisations were not separated. The actual implementation in the case of both programmes belonged to ARDA, at separate directorates. In the case of ARDOP, ARDA functioned as a cooperating organisation, in the institutional system set up for the implementation of SAPARD (Directorate of Rural Development, regional offices), its IT system was EMIR. NRDP, by contrast, was coordinated by a single department within the Directorate of Direct Payments. The IT system used was IMCS, which is fundamentally not a monitoring programme, but was designed for maintaining records and controlling payments related to the first pillar of CAP. It is suitable for monitoring purposes only in a limited way. In the 1-2 years following accession, since the most important result in terms of public opinion is the implementation of the payments, ARDA concentrated all its efforts on ensuring that payments related to CAP should be implemented by the deadlines and in a verifiable manner. This required extremely hard work, and since payments for NRDP were not in the focus of attention, the provision of the resources for this programme was assigned a lower priority.

The management of ARDOP, since more attention has always been given to it by all administrations, functioned much more smoothly from the beginning than NRDP did. The organisation of the managing authorities was provided for within the ministries by government decisions; the National Development Office conducted continuous consultations, while the development of the monitoring and information systems was coordinated centrally. In the case of problems related to the programmes (e.g. with timely payments), immediate governmental interventions took place (e.g. allowing payments in instalments), and the competent minister for a long time was required to report weekly on the results achieved (the first priority of which was the results relating to financial performance). On the implementation of the ARDOP, and on day-to-day problems, of course the Managing Authority (MA) also had to report to the administration. When justified by the problems, the supplementary resources were provided by both the ARDA and the Managing Authority.

In the case of NRDP, the development of the capacities lagged behind, not only in the human resources, but also in the IT sense. However, the payments in the case of the agricultural-environmental management measure, the traceability of the beneficiaries and the possibility for retrieving the data was only available to a limited extent. This was partly due to the fact that NRDP was in practice under continuous modification, and the IMCS system was also not set up for the quick introduction of individual modifications. As a result, the announcement of the measures and the performance of the payments became protracted.

This problematic management of the NRDP was also manifested in the practice of the onsite audits: in the case of the ARDOP, the extensive system of onsite audits, based on the SAPARD experience, worked well, while in case of the NRDP, only “remote-sensing” audits were carried out.

Due to the lagging behind in the development of the IMCS system, preparing the annual progress reports became almost impossible tasks for the staff of both the MA and ARDA.

The EU regulations pertaining to the 2007-2013 period have a fundamental influence on the operation of the institutional system. By way of ARDA becoming a payment agency also with respect to rural development sources, the role of the MA was further reduced, even if the EU rules gave it the same rights and obligations as in the previous programming period. In terms of the management of the measures, ARDA basically builds on its experience gained in the field of direct payments. This is how the legal title decrees, applications, decisions, project evaluation on the basis of norms and standards, which were previously typical of payments of normative basis, were now brought to the foreground; and this is why the rights of MA to provide supervision over ARDA had to be laid down in writing time and again, since there is no MA in the case of the Guarantee Fund.

The same situation seems to be reflected in those developments of IMCS that prepared it to be able to meet the requirements related to rural development programmes. ARDA is, in fact, developing the IMCS with the use of significant resources, but serving this aim even more is the fact that the programme is capable of managing the applications submitted to rural development measures almost automatically, linking them to direct payments to the applicants and ensuring that receivables can be collected in the form of taxes, etc. Much less attention was devoted, however, to ensuring that the monitoring activity, which constitutes one of the most important elements of the implementation of the development programmes should also be supported.

What certainly simplifies the institutional structure is that there will be one MA and one Payment Agency, although ARDA still intends to manage grants of direct payment in the framework of a separate directorate. So the amount of work expended on coordination activities is unlikely to be reduced.

## **The institutional framework of the implementation of the NHRDP**

Chapter 11 of the programme dealing with the system and rules of implementation, entitled “ DESIGNATION OF COMPETENT AUTHORITIES AND BODIES RESPONSIBLE” lays out the bodies functioning as the Certification Body, Managing Authority and Payment Agency and their main tasks. It also discusses the delegated tasks and identifies the bodies in charge of them. The institutions in charge of the management and execution of the programme reflect the endeavour of the common agricultural policy, that agricultural and rural development measures should be implemented in a coordinated manner and complementing each other, but also paying attention to special differences. The same institutions are responsible for the implementation of both the measures of the first pillar of the CAP, and the NHRDP (CAP 2nd pillar). The programme also sets forth the tasks and responsibilities related to monitoring and evaluation (NHRDP, Chapter 12), informing the public (NHRDP, Chapter 13), and compliance with the principle of partnership (NHRDP, Chapter 14).

### **Legal compliance of the description of the execution system**

In the course of the evaluation, it was examined whether the description of the executing institutions and their tasks comply with the relevant provisions of law on the basis of the description of the programme document. On the basis of this examination it was found that the chapters of the NHRDP describing execution (the implementing bodies, monitoring, the payment system and the evaluation) comply with the relevant EU regulations in effect (Regulations 1698/2005/EC and 1290/2005/EC). The summary certifying compliance is attached separately.



## **Appointment of the competent authorities and responsible bodies, their cooperation**

The Managing Authority tasks of the programme are carried out by the Agricultural and Rural Development Main Division at the MARD Secretariat for EU Affairs. This main division is also in charge of the management of ARDOP and NRDP. The tasks are clearly separated within the organisation. The programming, the financial and monitoring activities and the management of the rural network are provided for in a separate organisational unit.

The Payment Agency of the programme is the Agricultural and Rural Development Agency (ARDA). Extension of the accreditation of the Agency to ERDA payments has taken place. An action plan has been prepared for the elimination of the low-risk deficiencies exposed in the course of the accreditation.

The Certification Body for the programme is KPMG Hungária Kft., which is entirely independent from the Managing Authority and the Payment Agency.

At the time of the evaluation, on the basis of the recommendations on the local system of institutions and the information available in the programme, the following statements can be made on the system under construction:

The description of the National Rural Development Network (NRDN) belonging to the institutional system of Axes III and IV (in accordance with Articles 66 and 68 of Regulation 1698/2005/EC) is given in the chapter on Technical Assistance. The implementation significantly depends on the participation of local communities (existing and new institutions). For the implementation of the three measures of Axis III, the structure to be realised in accordance with the proposition creates a network of unified Local Rural Development Communities (LRDCs) and their operative bodies called Local Rural Development Offices (LRDOs) on the level of microregions. The creation of the Local Action Groups (LEADER) implementing the measures of Axis IV further increases the number of specific institutions in the local structure.

The two institutions are organised along similar principles. Both are built on strong local initiative and the principle of partnership. Their territorial scope, however, can be different, since LRDC is organised according to statistical microregions, whereas the action group performs its tasks in microregions that are to be handled as units from an economic point of view. The proposition attempts to settle the issue of hierarchy between them by placing the action group above the LRDC.

Also adding to the diversity of the local structure is the fact that ARDA also has a local and regional network.

The network in the countryside is not without its antecedents in Hungarian institutional structure. Even today there are several microregional organisations in the country functioning with similar tasks. There is a regional development network drawing up a microregional level development policy concept, there are microregional

commissioners, and the network of “NDP Coming to You” also carries out information and project generation tasks on a microregional level. One of the difficulties in establishing a countryside network, therefore, is the coordination of already existing institutions, and the setting up of the organisation most appropriate to the new task. In the course of the establishment of the rural development network, one can draw upon the institutional experience of the earlier programme, but attention should also be paid to efficient cooperation with other local institutions.

An established, well-prepared and regulated local institutional system is the precondition of the implementation of the programme. When setting up the system of HNRRN, one must pay attention to the NHRD institutions concentrating on the tasks of the programme and clearly dividing tasks, at the same time as settling the rules of possible cooperation between them and other institutions functioning in the microregion and carrying out similar tasks.

It is the position of those preparing the evaluation that the operation of the two types of network can only be efficient if both carry out their own tasks, as defined, and they also cooperate in the implementation of any joint tasks, which must also be clearly defined. Emphasis is on the accurate and clear delimitation of tasks and on the obligation of cooperation. The network can only be effective if the participating organisations have clearly defined procedures and hierarchies of tasks, and the rules of cooperation between them are also properly defined.

As regards the relationship between LRDC and the Action Groups, the evaluators do not deem it necessary to declare the hierarchical relationship between the two types of networks, since their tasks and activities can be clearly separated, their regional scopes are different, and their scheduling is also separate. Partnership, however, can be prescribed between these organisations. This can take the form of agreements of cooperation, joint actions, common conduct, e.g. in the field of communication. These obligations can be demanded of both organisations.

Since the networks are built on bottom-up partnerships, their organisation cannot be significantly accelerated by way of administrative tools. The finalisation of the system is, therefore, an urgent task, since delay may be a risk factor. The launch of the system is already behind the schedule laid down in the draft version defined in the programme.

## **Procedures**

In addition to legal compliance, another important condition of the efficient, reliable and compliant operation of management and execution is that the internal procedural orders ensuring regulated operation, as well as clear rules enabling access to the grant sources, and the well-prepared human resources are all available and in place.

### **Institutional procedures**

With the exception of the local institutions, the organisations in charge of the management of the programme have the necessary procedural orders.

In view of the fact that the existing institutions are responsible for the management and execution of the programme between 2007 and 2013, in the drawing up of the procedural orders, a primary task was accommodation to the new system of grants. In the course of the accreditation of the Agricultural and Rural Development Agency (ARDA), also carrying out the task of the Payment Agency, the review of the procedures was also carried out. Also, the subject of the review was the well-founded nature of the internal environment, the controlling activities, information and communication, and monitoring activities from the point of view of internal procedures, IT, administration and human resources. The external consultancy company in charge of the examination proposed extending the accreditation to ERDA, as they found their level of preparation appropriate for this. They raised certain minor concerns in connection with the security of the IT system; however, these were of an extent that could pose an impediment to systematic operation. The documents relating to the controlling activity and the handling of irregularities were found to be acceptable. The process of accreditation with respect to all measures has not yet been completed.

### **Procedures for support**

The restructuring of the system of aid meant an extraordinary quantity of codification work, part of which has already been completed, another part is still pending. The chief characteristic feature of management and execution was the legal regulation of the processes. This means that almost all elements of the use of the aid took some sort of legal form. The grant announcements are published in the form of ministerial decrees, and the rules of submission, evaluation, decision-making,

contracting, payment and data supply are also legally regulated. There is relatively little leeway in terms of institutional deliberations.

The advantage of legal regulation is that the beneficiaries were familiar with a similar system from before. It also provides a uniform framework for the procedures, which simplifies the evaluation and decision for those institutions in charge of execution. The disadvantages, on the other hand, are that there is little room for exceptions to be made even for professional reasons. The procedures are also more bureaucratic and less flexible in following changes. It follows from the principles of legislation, the hierarchy of provisions of law and from legal language that finding one's way among the rules is more difficult, meaning that the system is less user-friendly. It is the position of the evaluators that efficient communication may compensate for the cumbersome regulation, and so can a local support system providing assistance by way of good project generation and implementation.

As the first step of legal preparation, Act XVII on certain issues of the procedure relating to the agricultural, rural development and fisheries aid and other measures was promulgated on 30 March 2007. This provides a uniform framework for the domestic institutional, information and procedural rules of the national implementation of the EAGF, ERDA, EFF aid programmes. The law defines the domestic institutions of management and execution, the rules for data handling and registration, as well as the most fundamental rules of the procedures necessary for using the aid. It is advantageous that all agricultural and rural development aid is presented within a uniform structure. The uniform regulation and institutional system of implementation improves the transparency and calculability of the system, as well as helps to take advantage of the synergies inherent in the common regulation.

Government Decree 82/2007 (IV.25.), which is the implementing decree of the Act, defines further rules for the financial, accounting and controlling system, while FVM Decree 23/2007 (IV.17.) defines the legal titles of the ERDA aid and the detailed rules of use for all grant applications. It was also on this legislative level that the special rules arose from the differences between the aid structures (area- and animal headcount-based grants, investment aid, etc.).

### **Rules pertaining to individual aid structures**

The ministerial decrees on the aid structures available in the framework of the various legal titles are published continuously. Three grants of the NHRDP had been published by the time of evaluation, which represents only a fragment of the total of 58 measures. The evaluators have not found a plan for the scheduling of the grant structures.

The structures published so far, apart from the relatively cumbersome management due to the binding nature of the legal form, contain the necessary information

including all details. The two-step application submission, also used in case of non-area-based aid, is different to the procedural order applied in the case of the programmes of the Structural Funds. A more detailed evaluation of the contents of the aid structures can be carried out after they have been drawn up. The implementation of the programme could be significantly improved if the issuing of the decrees could be accelerated.

## **The administrative capacity ensuring the implementation of the NHRDP**

The resource capacity at the Agricultural and Rural Development Main Division which functions as the Managing Authority within the MARD is available. Smaller organisational changes are possible, but these would not significantly change the order of tasks and responsibilities.

The Payment Agency is divided into the central organisation of Agricultural and Rural Development Agency (ARDA) and 19 county offices. There are several directorates within the central agency, from among which it is the Directorate of Direct Aids and the Directorate of Rural Development Aids that are responsible for the professional implementation of the NHRDP measures. The units in charge of financial, legal, IT and controlling tasks are situated in different organisations within the agency. The classification of the units in charge of the aid reflects the axes of NHRDP and the legal titles of payment of CAP. The total headcount of the agency is 1,630, and more than 20% of those already deal with tasks relating to the NHRDP.

The 19 county offices primarily deal with tasks relating to the acceptance of applications and the provision of the controlling function. The headcount varies from one office to another. The new tasks are usually assigned to a group of between 10 and 50, correlating to the size of the population in the given county.

With respect to several legal titles, especially for implementing those onsite inspections requiring special expertise, as well as for producing the necessary certificates and other documents, ARDA also cooperates with other authorities (Veterinary and Food Control Stations, Plant and Soil Protection Services, National Park Directorates). These forms of cooperation are regulated by agreements of delegation between the organisations. In the case of a single measure, the forestation of agricultural areas, ARDA delegated the entire permit issuing procedure to an external organisation, the State Forestry Service.

The preparation of farmers and the professional consultancy activity is performed by the Ministry mainly through the advisory network of NRDP (with the help of the village agronomists).

The Office has a human resource development plan. According to this plan, an increase in the workforce in both the headquarters and the local offices is necessary due to the increasing amount of work. The hiring of new employees has started and will continue into 2008. An annual workforce increase of 100 persons per year is planned, approximately a quarter of which will be realised in the headquarters.

In view of the fact that the system builds upon the institutions of the earlier programmes, we can say that ARDO, as the Implementing Body of SAPARD, ARDOP and NRDP, has acquired the necessary expertise, organisational knowledge and basic skills to successfully implement the programme. This, however, does not mean that there are no further tasks in the field of preparing their workforce.

Employees have to be prepared for the new programme, and for following the changes. The preparation of the non-governmental and social organisations and other partners also participating in the rural development network, however, has emerged as a new task.

The assessment of the capacities can be primarily evaluated in view of the capacity needs of the earlier programmes (number of measures, resources, number of beneficiaries) and the relevant data of the NHRDP. On the basis of the above, it is our position that – especially in the case of newly formed institutions – it is necessary to increase the capacities. We also consider it indispensable to provide (further) training and skills development to both the new and the existing workforce. The setting up of effective and efficient intra- and (with a view to the risk factors induced by the many stakeholders as indicated above) inter-agency processes and information flows require special attention, as these were regarded as serious institutional bottlenecks in the implementation of past programmes.

## Monitoring system, IT background

The aim of monitoring tasks is to keep track of the financial and physical progress of the entire programme, and within that the individual measures and projects, comparing them against the plans, identifying any differences, and providing an early warning with respect to problems with source use. Also related to monitoring tasks are the identification of the causes of problems, if possible, the analysis of these, the provision of information necessary for interventions ensuring appropriate progress, drawing up recommendations for interventions, as well as decision-making on interventions.

In principle, the following monitoring activities can be identified:

- gathering of data and information
- processing and analysis of data and information
- making recommendations for interventions
- making decisions on interventions

The data and information gathering activity, on the one hand, is built on data and information supplied by the applicants and the users of grants; on the other, it also draws upon external (statistical) data.

Some of the monitoring tasks, therefore, are carried out by the Payment Agency (collection of data and processing of information), others by the Managing Authority. The tasks of the Monitoring Committee of the programme include approving the criteria of project selection, accepting reports and making recommendations for the redistribution of resources.

The monitoring of the programme, therefore, will become comprehensive through the provision of the monitoring tasks of the abovementioned organisations.

In our opinion, the information system plays a key role in the effectiveness of the monitoring activity. In the IMCS system, the collection, storage and forwarding of data from the applicants has been solved. In the course of any further development, solutions must be found for integrating the functions of data collection and processing in compliance with the aims of monitoring and evaluation, of the monitoring module, into the system. So far, the identification of the necessary basic data for the generation of the monitoring indices has taken place. In order to be able to move on, the accurate formulation of professional expectations and technical requirements is indispensable.

In its composition, the Monitoring Committee maps all the areas, interest-representation bodies, regional organisations, social partners and organisations representing the criteria of equal opportunity involved in the programme. The committee has almost 80 members, which is on the border of operability. It would be worth considering the introduction of subcommittees according to the special measure axes.



## **Activities related to the provision of information and publicity**

The information activity coordinated by the Managing Authority shows significant progress, and has become more systematic and continuous. The main channels of information include the websites of MARD and ARDA, the NRDP advisory network, professional events and forums. The Communication Plan of the NHRDP is currently facing the finalisation stage. The provision of information is of utmost importance in aware-raising of the programme and in the diffusion of knowledge to potential users. In this respect, there are well-established and properly functioning channels of information, the activities of which must be continuously kept at a high level and up-to-date.

## **Partnership**

### **Partnership consultations**

Extensive partnership consultations took place during the preparation of the development plan. Consultation in workgroups was conducted according to topic. Apart from direct professional consultations, NGOs, advisory and interest-representing bodies, chambers and academic workshops were also given an opportunity to share their opinions.

A list of the most important social and economic partners is included in the Programme Annex. These organisations represent a wide spectrum of stakeholders. They also include such related organisations that gave expression to their interest, but had not previously participated in the consultations with the Ministry of Agriculture and Rural Development.

The partners gave voice to their comments regarding the Strategic Plan and Rural Development Programme rather than proactively participating in the phase when the draft version was drawn up. Their comments were registered and examined by the Ministry, which then decided on accepting or rejecting these in the course of its own internal controlling procedure (with the final responsibility in the hands of the State Secretary in charge of the programme).

Certain concerns relating to the efficiency of the partnership programme and the adequacy of feedback provided are still being evaluated. While the Ministry has processed a large number of comments, questions and recommendations, and also ensured that partners receive answers and feedback to their questions as to whether their propositions are acceptable in the course of the negotiations, there is still room for improvement in the field of partnership.

On the basis of the propositions of the ex ante evaluators, we must arrive at an interpretation of the aims, instruments and processes of the partnership consultations, together with the most important social and economic partners (through seminars, training programmes and brochures). The agenda of the consultation could be supplemented with background materials on the national agricultural and rural development policy and the relevant EU system of legislation, such as pillars I and II of the CAP, sustainable development and equality of opportunity, as well as the methodology of programme preparation. In the case of some partners, the absence of a proper understanding of the use of the instruments and the related rural development regulations could be observed. However, in most cases, the traditional social and economic partners of the Ministry were properly informed. These materials should be written in an easy-to-understand way.

The evaluators have urged a more efficient involvement of the partners in various stages of the planning (e.g. in the early phase), which includes the definition of the

agenda and the scheduling as early as possible, as well as setting specific deadlines for the partners. In addition to the above, clear scheduling of the planning stages would be needed in order to avoid the problem of partners providing their opinions on earlier versions of the plan, such as the fundamental objectives of the plans and the programmes, whereas these had in fact been finalised before. If this cannot be achieved, future partnership consultations will not be suitably efficient. In terms of the process of the current partnership consultations, we can say that the partners received materials on the Programme in appropriate quantity and quality. Nevertheless, they were not able to provide new and substantial opinions on the plan in the various stages of planning.

In addition to personal consultations with social and economic partners, public hearings were held at different points in the country on the Strategic Plan and the Draft Programme, which were also accessible via the Internet. Obtaining written opinions was also one of the methods used. This approach, in the opinion of the evaluator, significantly contributed to the favourable reception of the developments, making them publicly accessible, and in general, rendering them more transparent.

This can be registered as a significant result in awareness of the antecedents: on 20 June 2006, the ex ante evaluators initiated the summoning of the Project Leading Committee, and they called the attention of the PLC to the fact that the then current practice of planning did not ensure the observance of the principle of partnership. The evaluators subsequently experienced continuous improvement, as the involvement of the partners became more systematic and intensive. Thus the management of partnership was turned from one of the weaknesses of the programme into a real strength. If it also remains so during implementation, this will greatly contribute to the success of the programme.

## Summary of findings

In our opinion, on the basis of the evaluation, we can state that the system of institutions for the management and execution of the NHRDP is on the whole suitable, or will be suitable, for the successful and efficient implementation of the programme.

The institutional structure described in the programme complies with the requirements laid out in the framework rules. The central bodies of execution have been designated in a concentrated manner, also taking into consideration the earlier programming experience. The Managing Authority has the appropriate professional competences and experiences.

An accredited Payment Agency is responsible for a large part of the execution tasks. Geographically balanced access to the system of aid and the provision of services on a similar level in each area is ensured through the local organisation of ARDA and HNRN. The professional organisations involved in the work have the documents and experiences necessary for the tasks delegated to them.

The system handles local initiatives and the maintenance of contacts with the partners well. A clear strength of the execution is the support and generation of projects locally. Despite the fact that a complicated, multi-player network is being built up around the country, the organisation of the LRDCs, LRDOs, action groups and other partnership organisations into a network significantly contributes to execution in an efficient, quick and user-friendly manner. At the same time, it also facilitates the proper flow of information on the mediation of aid, which has emerged as one of the biggest problems from the point of view of potential beneficiaries.

Most of the domestic provisions of law and procedures in compliance with the new Community rules in effect from 2007 have been created.

The extension of the human capacities and the transfer of professional expertise is taking place in a programmed manner.

In the organisational completeness of the institutional system and in the field of regulations, however, there are still a number of things to be done.

The accreditation of the ARDA has not yet been completed; in fact, it is still pending with respect to most of the measures.

Only 3 calls for applications have been announced so far, which means that the task of announcing the rest is still ahead of us. We found no timetable for the scheduling of the tasks. The delay will result in a piling up of tasks, unsatisfied expectations, uneven use of resources, and in the final analysis, unfavourable assessment of the programme.

The setting up of the new institutions and the issuing of detailed regulations on them is delayed in comparison with the schedule provided in the programme. The degree of completeness and the regulations pertaining to the relationships between elements of the network in the countryside, a potential strength of the programme execution, is not yet satisfactory.

On the basis of the evaluation conducted, with a view to the increased funds and tasks, it is also recommended that the development of human capacities be accelerated and the training activity reinforced.

The IT development is one of the most urgent tasks. Establishing the IT background of the monitoring and evaluation activity is still in its early stages. This could cause serious difficulties in the monitoring of the programme, assessing the effectiveness of the measures and evaluating the programme.

It is recommended that the tasks of institutional development still pending should be fully taken into account, and that a timetable should be drawn up in the interest of catching up with backlogs and ensuring that all outstanding tasks are completed within the shortest possible time.

## **Annexes**

### **Technical milestones of the evaluation process**

#### **Technical kick-off meeting**

8. May, 2006

At the technical kick-off meeting the colleagues of the Ministry of Agriculture and Rural Development's Strategic Planning Group, the colleagues of the Managing Authority and the advisors attended. The output of the meeting included the setting up of the project's structural units with the allocation of colleagues within the units; the setting of the circumstances of the meetings with the appropriate technical conditions; and the setting of the meeting order and the discussion of the tasks to be undertaken during the planning process

#### **Professional Managing Workgroup (PMW) meeting**

24. May, 2006

The first PMW meeting started with the discussion of the questions arisen in connection with the preparation of the Project Starting Document (PSD). The work phases of the evaluation process, the scheduling of the reports to be handed in and the list of relevant documents to be used have been accepted by all parties

#### **Project Starting Document (PSD)**

29. May, 2006

The Project Starting Document is the foundation document of the ex ante evaluation of the New Hungary Agriculture and Rural Development Programme, which has been ratified by both the client and the advisors. It assures an appropriate, professionally based frame for a successful ex ante evaluation process. The PSD, among the general introduction of the project, includes the detailed evaluation methodology and work schedule, the project management's detailed structure and the communicational plan. The 1<sup>st</sup> version of the PSD has been handed over for client acceptance on the 22<sup>nd</sup> of May, 2006. The document has been finalized and accepted on the 29<sup>th</sup> of May, 2006.

#### **1<sup>st</sup> SWOT workshop**

7. June, 2006

During the partnership meeting the questions and comments on the SWOT analysis of the programme were discussed with the participants of the following partner organizations:

- Ministry of Agriculture and Rural Development (MARD) Managing Authority

- MARD AVKF
- MARD ÉLIP F O.
- MARD Forestry Department
- MARD Mp. Department
- MARD HP
- Agricultural Economics Research Institute (AKI)
- Hungarian Public Nonprofit Company for Regional Development and Town Planning (VÁTI)
- Agriculture and Rural Development Agency (MVH VTI)
- National Society of Conservationists
- Western Hungarian University -MÉK Mosonmagyaróvár
- Hungarian Academy of Sciences, Institute of Economics
- Agricultural and Rural Youth Association Hungary (AGRYA)
- Szent István University Research Institute (SZIE-KTI)
- Agrár Európa Kft.
- PricewaterhouseCoopers Kft.

### **2<sup>nd</sup> SWOT workshop**

12. June 2006

Discussion of the 3<sup>rd</sup> and 4<sup>th</sup> priority axis in coordination of VÁTI has taken place. The representatives of Agrár Európa Kft and PricewaterhouseCoopers Kft have attended this meeting. This was the closing meeting of the SWOT discussions.

### **Project Steering Committee (PSC) meeting**

20. June, 2006

Beside the acceptance of the 2nd version of the Project Starting Document, the changes implicated has been discussed. The consortia leader representative have informed the client about the experiences of the workshops and drawn the attention on the importance of the SWOT analysis to be integrated into the New Hungarian Rural Development Strategic Plan.

The evaluators indicated the need for stronger partnership commitments. As a part of that scope regional partnership discussions have also been on the topic list.

Important technical matters have also been discussed on the meeting: the composition of the Monitoring Committee; the setting up of the Strategic Environmental Analysis (SEA) and the contact representative and its accessibility of the Committee.

### **Ex ante workshop**

14-15. September 2006

On the first day the evaluators have discussed the current version of the New Hungary Rural Development Strategic Plan and the state of the evaluation. During the

day the evaluators have discussed the relevant Community and National objectives, the subsistence of the intervention and the fund allocations. On the second day topics on the indicator system and the methodology of the goal setting have been discussed. As for the closing of the day the efficiency of the measures in means of the set of strategic goals and the expected outcomes have been discussed by the participants.

### **Commission meeting**

18-19. September 2006

Representatives from the Committee:

- José M. Sousa Uva
- Anikó Németh
- Giulia Medico
- Eva Viestova

The representatives have informed the ministry representatives about their comments on the strategy and advised on the further development of the document. During an organized discussion day the relevant organizations and social partners had a chance to inform the Commission representatives about their expectancy from the programme. After the arguments the evaluators had a chance to present the current state of the evaluation and their expectation from the strategy.

### **Indicator meeting**

27. September, 2006

The first part of the discussion handled questions arising from the defined baseline indicator system set in the Strategic Plan. In the second part of the meeting indicators identified for the measures have been analysed with the focus on the requirements defined by the community, methodology and goals to achieve.

### **Expert meetings on the proposed Axis**

10. October 2006: Axis I.

18. October 2006: Axis II.

26. October 2006: AxisIII-IV

The discussions followed the proposed measures of the Programme with justification of the priorities and the goals to be achieved with regard to the Community strategic guidelines and the national strategy plan.

### **Workshop on the implementation system**

9. November 2006

The workshop was held in four different groups where diverse topics have been discussed by the experts, planners and evaluators. The issues of the workshop have



been the following proposed implementation procedures, including monitoring, evaluation and financial management

### **Interim report**

27. November 2006

The document is the 1st Interim report of the ex ante evaluation of the National Agricultural and Rural Development Programme.

The document analyzes the adequacy of the situation analysis and the SWOT analysis and reviews the situation analysis of the programme. It also contains general evaluation allegations concerning the structure, contents and quantifiability of the situation analysis. It also comments the layout of the document and other technical type of questions.

### **Meeting on horizontal issues**

8. January 2007

Due to Commission requirements also the horizontal issues have been taken into account while the programming. The key topics discussed were the following: equality between men and women, roma population, environmental protection connected to the different measures.

### **Finalization and official submission of the Programme**

Between 8 January and 19 February the evaluators focussed on the finalization of the Programme and the ex ante evaluation report. A series of workshops took place on the SWOT analysis, the coherence and consistency of the strategy, the quantification of objectives and the revision of the set of indicators. The evaluators worked together with the planners on a daily basis.

### **Meetings with Commission Services**

Several technical meetings have taken place between DG AGRI and the MoARD with the participation of the evaluators since the official submission of the programme. The evaluators have reflected to the comments of the Commission and their report has been verified, amended and modified accordingly.

## The institutional evaluation of the “New Hungary” Rural Development Programme

Aspects of evaluation

- I. Compliance of legal framework with EU provisions
- II. Institutions (HR, functions, tender handling, communication, supervision, background, preparedness)
- III. Procedural rules (regulations, clear rules)
- IV. IT background (including supervision)

### I. The institutional system for the implementation of the NHRDP and its compliance with the legal background:

Based on Regulation 1698/2005/EC					
Regulation Article	Provision of the Regulation	NHRDP Chapter	NHRDP content		Qualification
Article 74 Section (2)	Member States shall designate, for each rural development programme, the following authorities:	11.	Designation of competent authorities and bodies responsible		It complies.
a)	<b>the Managing Authority</b> , which may be either a public or private body acting at national or regional level, or the Member State itself when it carries out that task, to be in charge of the management of the programme concerned;	11.2.	<b>The Minister of Agriculture and Rural Development was designated by the Hungarian Government as Managing Authority of the NHRDP.</b> The Minister delegated the specific implementation of this task to the State Secretary for EU Affaires within the Ministry. The State Secretary is assisted by the Department for Rural Development (DRD) in performing his tasks as Managing Authority.		It complies.

Regulation Article	Provision of the Regulation	NHRDP Chapter	NHRDP content		Qualification
b)	<b>Accredited Paying Agency</b> , within the meaning of Art. 6 of Regulation (EC) No. 1290/2005	11.3.	<b>The Agricultural and Rural Development Agency will act as accredited Paying Agency</b> concerning EAFRD in accordance with Regulation (EC) No 1290/2005. The accreditation of ARDA is, in line with Art. 1, paragraphs (2)-(3) of Regulation (EC) No. 885/2006, in the competence of the Minister of Agriculture and Rural Development.		It complies.
c)	<b>Certifying Body</b> within the meaning of Article 7 of Regulation (EC) No 1290/2005	11.1.	In accordance with Art. 5 of Regulation (EC) No. 885/2006, the Certification Body was appointed by the Minister of Agriculture and Rural Development acting as Competent Authority, after a public procurement procedure. <b>The Certifying Body – KPMG Hungary Kft. – is a Hungarian limited liability company</b> , and a member firm of the KPMG network of independent member firms affiliated with KPMG International, Switzerland. The Certifying Body is totally independent from the Paying Agency and from the Competent Authority. As an auditing firm, it has the necessary technical expertise as required by Article 5 of Regulation (EC) No 885/2006. The contract concluded with the Certifying Body assures that it will conduct its examination on the Paying Agency – including IT system assessments – and the audit of the annual report and the issue of the certificate according to internationally accepted auditing standards taking into account any guidelines established by the Commission.		It complies.
(3)	Member States shall ensure for each rural development programme that the relevant management and control system has been set up ensuring a clear allocation and separation of functions between the Managing Authority and other bodies. Member States shall be responsible for ensuring that the systems function effectively throughout the programme period.	11.2.	The Managing Authority in respect of EAFRD measures approves the management and control systems applied by the body providing agricultural and rural development support, as well as the agreements concluded on the basis of the law.		It complies.

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
(4)	Member States shall undertake controls in accordance with detailed implementing rules fixed in accordance with the procedure referred to in Article 90(2), notably regarding the type and intensity of controls, adapted to the nature of the different rural development measures	11.2.	The Managing Authority supervises and controls the implementation of the NHRDP in compliance with the resolutions of the programme's monitoring committee, the relating legal acts, the conditions determined in the programme and the demands of the target groups.		It complies.
Article 75 (1)	The Managing Authority shall be responsible for managing and implementing the programme in an efficient, effective and correct way and in particular for:	11.2	According to Article 75 of Council Regulation (EC) No. 1698/2005, the Managing Authority of the NHRDP is responsible for the effective, successful and regular control and management of the programme and has the authority to perform all the tasks rendered to the Management Authority by the Regulation mentioned above.		It complies.
a)	ensuring that operations are selected for funding in accordance with the criteria applicable to the rural development programme	11.2.	ensures that operations are selected for funding in accordance with the criteria applicable to the NHRDP and in accordance with the Community and national legislation.		It complies.
b)	ensuring that there is a system to record and maintain statistical information on implementation in computerised form adequate for the purposes of monitoring and evaluation;	11.2.	ensures that there is a system to record and maintain statistical information on implementation in computerised form adequate for the purposes of monitoring and evaluation;		It complies.
c)	ensuring that beneficiaries and other bodies involved in the implementation of operations: i. are informed of their obligations resulting from the aid granted, and maintain either a separate accounting system or an adequate accounting code for all transactions relating to the operation; ii. are aware of the requirements concerning the provision of data to the Managing Authority and the recording of outputs and results;	11.2	ensures that beneficiaries and other bodies involved in the implementation of operations are informed of their obligations resulting from the aid granted, are aware of the requirements concerning the provision of data to the Managing Authority and the recording of outputs and results.  For that purpose, the communication plan included in the programme shall be implemented.		It complies.

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
d)	ensuring that programme evaluations are conducted within the time limits laid down in this Regulation and conform to the common monitoring and evaluation framework and for submitting evaluations undertaken to the relevant national authorities and the Commission;	11.2.	ensures that programme evaluations are conducted within the time limits laid down in Regulation (EC) No 1698/2005. In order to do so, DARD shall prepare the detailed rules of procedure for its tasks as a managing authority.		It complies.
e)	leading the Monitoring Committee and sending it the documents needed to monitor implementation of the programme in the light of its specific objectives	11.2.	leads the Monitoring Committee and sends it the documents needed to monitor implementation of the NHRDP in the light of its specific objectives. ensures the consideration of the interests of all social players affected by agricultural and rural development in the implementation processes of the programme.		It complies.
f)	ensuring compliance with the obligations concerning publicity referred to in Article 76;	11.2.	ensures compliance with the obligations concerning publicity referred to in Article 76 of Regulation (EC) 1698/2005. For that purpose, the communication plan included in the programme shall be implemented.		It complies.
g)	drawing up the annual progress report and, after approval by the Monitoring Committee, submitting it to the Commission;	11.2.	It draws up the annual progress report and, after approval by the Monitoring Committee, submits it to the Commission.		It complies.
h)	ensuring that the paying agency receives all necessary information, in particular on the procedures operated and any controls carried out in relation to operations selected for funding, before payments are authorised	11.2	ensures that the Paying Agency receives all the necessary information, in particular on the procedures operated and any controls carried out in relation to operations selected for funding, before payments are authorised.		It complies.
<b>Article 76</b>	<b>Information and publicity</b>	<b>13</b>	<b>Provisions guaranteeing publicity of the programme</b>		<b>It complies.</b>

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
(1)	Member States shall provide information on and publicise national strategy plans, rural development programmes and the Community contribution. This information shall be aimed at the general public. It shall spotlight the role of the Community and ensure the transparency of EAFRD assistance.		Provisions to ensure that the programme is publicised Pursuant to Article 76 of Regulation (EC) No. 1698/2005 the Managing Authority provides information about the New Hungary Rural Development Strategic Plan (NHRDSP), the New Hungary Rural Development Programme (NHRDP), as a part of the contributions made by the Community, and makes those public. This information is aimed at the general public. It spotlights the role of the Community and ensures a mobilisation for and the transparency of EAFRD assistance.		It complies
(2)	The Managing Authority for the programme shall be responsible for its publicity as follows:	13.	The Managing Authority is responsible for the publicity of the programme as follows:		It complies
a)	it shall inform potential beneficiaries, professional organisations, the economic and social partners, bodies involved in promoting equality between men and women and the non-governmental organisations concerned, including environmental organisations, of the possibilities offered by the programme and the rules for gaining access to programme funding;		- informs potential beneficiaries (especially rural population) professional organisations, the economic and social partners, bodies involved in promoting equal treatment and the non-governmental organisations concerned, including environmental organisations, of the possibilities offered by the programme and the rules for gaining access to programme funding;		It complies
b)	it shall inform the beneficiaries of the Community contribution;		- it informs the beneficiaries of the Community contribution;		It complies
c)	it shall inform the general public about the role played by the Community in the programmes and the results thereof.		- it informs the general public about the role played by the Community in the programmes and the results thereof.		It complies

Regulation Article	Provision of the Regulation	NHRDP Chapter	NHRDP content		Qualification
Article 77	<b>MONITORING</b>	<b>12.</b>	<b>A description of the monitoring and evaluation system, as well as the envisaged composition of the Monitoring Committee</b>		<b>It complies</b>
(1)	For each rural development programme a Monitoring Committee shall be set up within a maximum of three months following the decision approving the programme. Each Monitoring Committee shall draw up its rules of procedure within the institutional, legal and financial framework of the Member State concerned and adopt them in agreement with the Managing Authority in order to perform its duties in accordance with this Regulation.	12.1.1	The Monitoring Committee shall be set up within a maximum of three months following the decision approving the NHRDP, in order to follow-up the implementation of the NHRDP and to make certain that it is effectively proceeding.		It complies
(2)	Each Monitoring Committee shall be chaired by a representative of the Member State or of the Managing Authority. Its composition shall be decided by the Member State and shall include the partners referred to in Article 6(1). At their own initiative, Commission representatives may participate in the work of the Monitoring Committee in an advisory capacity.	12.2.  12.1.1.	NHRDP Monitoring Committee Chairman – Head of the MA (State Secretary) Deputy Chairman – Head of Department, Department for Rural Development, MARD  According to Article 6. (1) of Council Regulation (EC) No 1698/2005 the Managing Authority ensures that regional, local and other authorities, economic and social partners, organisations representing the civil society, non-governmental organisations, environmental organisations, and bodies promoting equality between man and woman are extensively involved in the work of the NHRDP Monitoring Committee.		It complies

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
Article 78	Responsibilities of the Monitoring Committee: The Monitoring Committee shall satisfy itself as to the effectiveness of the implementation of the rural development programme. To that end, the Monitoring Committee	12.1.1.	The Monitoring Committee shall be set up within a maximum of three months following the decision approving the NHRDP, in order to follow-up the implementation of the NHRDP and to make certain that it is effectively proceeding.		It complies
a)	shall be consulted, within four months of the decision approving the programme, on the selection criteria for financed operations. The selection criteria shall be revised according to programming needs;	12.1.1.	shall be consulted, within four months of the decision approving the NHRDP, on the selection criteria for projects to be financed. It shall revise the criteria according to programming needs;		It complies
b)	shall periodically review progress made towards achieving the specific targets of the programme, on the basis of the documents submitted by the Managing Authority	12.1.1.	it shall – according to its rules of procedures – periodically review progress made towards achieving the specific targets of the NHRDP, on the basis of the documents submitted by the Managing Authority;		It complies
c)	shall examine the results of implementation, particularly achievement of the targets set for each axis and ongoing evaluations;	12.1.1.	shall examine the results of implementation of the NHRDP, particularly achievement of the targets set for each axis and ongoing evaluations;		It complies
d)	shall consider and approve the annual progress report and the last progress report before they are sent to the Commission by the Managing Authority;	12.1.1.	it shall consider and approve the annual progress report and the last progress report before they are sent to the Commission by the Managing Authority;		It complies



<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
e)	may propose to the Managing Authority any adjustment or review of the programme aimed at achieving the Objectives of the EAFRD defined in Article 4 or improving its management, including its financial management;	12.1.1.	it makes suggestions to the Managing Authority regarding any adjustments or the review of the NHRDP aimed at achieving the Objectives of the EAFRD defined in Article 4 of Council Regulation (EC) No 1698/2005, or improving its management, including financial management as well;		It complies
f)	shall consider and approve any proposal to amend the content of the Commission decision on the contribution from the EAFRD	12.1.1.	shall consider and approve any proposal to amend the content of the Commission decision on the contribution from the EAFRD based on (4) Article 69 of Council Regulation (EC) No 1698/2005.		It complies
<b>Article 79</b>	<b>Monitoring procedures</b>	12.	---		It complies
(1)	The Managing Authority and the Monitoring Committee shall monitor the quality of programme implementation	12.	The Monitoring Committee shall be set up within a maximum of three months following the decision approving the NHRDP, in order to follow-up the implementation of the NHRDP and to make certain that it is effectively proceeding.		It complies
(2)	The Managing Authority and the Monitoring Committee shall carry out monitoring of each rural development programme by means of financial, output and result indicators.	12.1.1.	The Managing Authority and the Monitoring Committee shall carry out monitoring activities by means of financial-, output- and result indicators.		It complies

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
Article 80	Common monitoring and evaluation framework The common monitoring and evaluation framework shall be drawn up in cooperation between the Commission and the Member States and adopted in accordance with the procedure referred to in Article 90(2). The framework shall specify a limited number of common indicators applicable to each programme.	12.	The monitoring and evaluation activity of the NHRDP shall be established on the basis of the ruling of the Common Monitoring and Evaluation Framework (CMEF). Indicators used in the NHRDP are - as much as possible - based on the specifications of the CMEF, complementing it with further indicators specific to the NHRDP.		It complies
<b>Article 81</b>	<b>Indicators</b>			?	
(1)	The progress, efficiency and effectiveness of rural development programmes in relation to their objectives shall be measured by means of indicators relating to the baseline situation as well as to the financial execution, outputs, results and impact of the programmes.			?	
(2)	Each rural development programme shall specify a limited number of additional indicators specific to that programme.			?	
(3)	Where the nature of the assistance so permits, the data relating to the indicators shall be broken down by sex and age of the beneficiaries.			?	
<b>Article 82</b>	<b>Annual mid-term report</b>	<b>12.1.1.</b>	<b>Annual progress report</b>		<b>It complies</b>

Regulation Article	Provision of the Regulation	NHRDP Chapter	NHRDP content		Qualification
(1)	For the first time in 2008 and by 30 June each year, the Managing Authority shall send the Commission an annual progress report on the implementation of the programme. The Managing Authority shall send a last progress report on the implementation of the programme to the Commission by 30 June 2016.	12.1.1.	The Managing Authority, for the first time until 30 June 2008, thereafter until the 30 <sup>th</sup> of June each year will send an annual progress report on the implementation of the NHRDP of the previous year to the European Commission. In 2016 this report has to present the implementation of the NHRDP in the form of a final report and sent to the Commission.		It complies
(2) a)	Each annual progress report shall contain the following elements: any change to the general conditions having a direct impact on the conditions for implementing the programme as well as any change to Community and national policies affecting consistency between the EAFRD and other financial instruments;	12.1.1.	Main elements of the annual progress report:  - any such change to the general conditions of the NHRDP affecting consistency between EAFRD and other financial instruments;		It complies
b)	the progress of the programme in relation to the objectives set, on the basis of output and result indicators	12.1.1.	the progress of the NHRDP in relation to the objectives set, on the basis of output and result indicators		It complies
c)	the financial implementation of the programme giving, for each measure, a statement of the expenditure paid to beneficiaries; if the programme covers regions eligible under the Convergence Objective, expenditure shall be identified separately;	12.1.1.	- the financial implementation of the NHRDP, with special regard to the expenditure paid to the beneficiaries;		It complies
d)	summary of the ongoing evaluation activities in accordance with Article 86(3);		- a summary of the ongoing evaluation activities;		It complies

Regulation Article	Provision of the Regulation	NHRDP Chapter	NHRDP content		Qualification
e)	the steps taken by the Managing Authority and the Monitoring Committee to ensure the quality and effectiveness of programme implementation, in particular: i. monitoring and evaluation measures; ii. a summary of the major problems encountered in managing the programme and any measures taken, including in response to comments made under Article 83 iii. use of technical assistance; iv. steps taken to ensure that the programme is publicised in accordance with Article 76;	12.1.1.	the steps taken by the Managing Authority and the Monitoring Committee to ensure the quality and effectiveness of the implementation of the NHRDP, in particular:  - monitoring and evaluation measures;  - a summary of the major problems encountered in managing the NHRDP and any measures taken, including in response to comments made by the Commission under Article 83 of Council Regulation (EC) No 1698/2005;  - use of technical assistance;  - steps taken to ensure that the publicity of NHRDP		It complies
f)	a declaration on compliance with Community policies in the context of the support, including identification of the problems encountered and the measures adopted to deal with them;			?	
g)	where applicable, re-utilisation of aid recovered under Article 33 of Regulation (EC) No 1290/2005			?	

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
(3)	The report shall be judged admissible with a view to applying Article 26 of Regulation (EC) No 1290/2005 if it contains all the elements listed in paragraph 2 and enables programme implementation to be appraised. The Commission shall have two months to comment on the annual progress report after it has been sent by the Managing Authority. That time limit shall be increased to five months for the last report of the programme. If the Commission does not respond within the time limit set, the report shall be deemed accepted.	12.1.1.	The Commission shall have two months to comment on the annual progress report after it has been sent by the Managing Authority.		It complies
<b>Article 83</b>	<b>Annual examination of programmes</b>	<b>12.1.1.</b>	<b>---</b>		It complies
(1)	Each year, on presentation of the annual progress report, the Commission and the Managing Authority shall examine the main results of the previous year, in accordance with procedures to be determined in agreement with the Member State and Managing Authority concerned.	12.1.1.	Beyond the above comments – in line with Article 83 of Council Regulation (EC) No 1698/2005 – each year, on presentation of the annual progress report, the Commission and the Managing Authority shall examine the main results of the previous year, in the form of a bilateral meeting.		It complies
(2)	Following that examination the Commission may make comments to the Member State and to the Managing Authority, which will inform the Monitoring Committee thereof. The Member State shall inform the Commission of action taken in response to those comments.	12.1.1.	Following that examination the Commission may make comments to the Member State and to the Managing Authority, which will inform the Monitoring Committee thereof. The Member State shall inform the Commission of action taken in response to those comments. .		It complies
<b>CHAPTER II:</b>	<b>EVALUATION</b>	<b>12.1.2.</b>	<b>Evaluation</b>		It complies

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
Article 84 (1)	Rural development programmes shall be subject to ex ante, mid-term and ex post evaluations in accordance with Articles 85, 86 and 87.	12.1.2.	The forms of evaluation are ex ante, mid-term and ex post evaluation. The mid-term and the ex-post evaluation form part of an ongoing system of evaluation.		It complies
(2)	The evaluations shall aim to improve the quality, efficiency and effectiveness of the implementation of rural development programmes. They shall assess the impact of the programmes as regards the strategic guidelines of the Community provided for in Article 9 and the rural development problems specific to the Member States and regions concerned, taking into account sustainable development requirements and environmental impact, meeting the requirements of relevant Community legislation.	12.1.2.	The evaluation aims to improve the quality, efficiency and effectiveness of the implementation of the NHRDP.		It complies
(3)	3. The evaluation shall be organised, as appropriate, under the responsibility of either Member States or the Commission.	-	---	-	.
(4)	The evaluations referred to in paragraph 1 shall be carried out by independent evaluators. The results shall be made available subject to Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents (1).	12.1.2.	The evaluation is carried out by independent evaluators.		It complies

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
(5)	Member States shall provide the human and financial resources necessary for carrying out the evaluations, shall organise the production and gathering of the requisite data, and shall use the various pieces of information provided by the monitoring system.	12.1.2.	The Managing Authority ensures the human and financial resources required for carrying out the evaluations, the production and gathering of the requisite data, and use the various pieces of information provided by the monitoring system.		It complies
(6)	Member States and the Commission shall agree evaluation methods and standards to be applied at the initiative of the Commission within the framework provided for in Article 80.	-	---	-	-
<b>Article 85</b>	<b>Ex ante evaluation</b>	<b>12.1.2.</b>	<b>Ex ante evaluation</b>		It complies

Regulation Article	Provision of the Regulation	NHRDP Chapter	NHRDP content		Qualification
(1)	Ex ante evaluation shall form part of drawing up each rural development programme and aim to optimise the allocation of budgetary resources and improve programming quality. It shall identify and appraise medium and long-term needs, the goals to be achieved, the expected results, the quantified targets particularly in terms of impact in relation to the baseline situation, the Community value-added, the extent to which the Community's priorities have been taken into account; the conclusions drawn from previous programming, the quality of the procedures for implementation, monitoring, evaluation and financial management.	12.1.2.	The ex ante evaluation makes part of the drawing up of the NHRDP and its aim is to optimise the allocation of funds and improve programming quality.  It shall identify and appraise _medium and long-term needs, _the goals to be achieved, _the expected results, _the quantified targets particularly in terms of impact in relation to the baseline situation, _the extent to which the Community's priorities have been taken into account, _the conclusions drawn from previous programming, _the quality of the procedures for implementation, monitoring, evaluation and financial management.		It complies
(2)	Ex ante evaluation shall be carried out under the responsibility of the Member State.			?	
Article 86	Mid-term and ex post evaluation	12.1.2.	Mid-term and ex post evaluation		It complies



<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
(1)	Member States shall establish a system of ongoing evaluation for each rural development programme.	12.1.2.	For the NHRDP Hungary establishes a System of Ongoing Evaluation.		It complies
(2)	The Managing Authority for the programme and the Monitoring Committee shall use ongoing evaluation to:	12.1.2.			It complies
a)	(a) examine the progress of the programme in relation to its goals by means of result and, where appropriate, impact indicators;	12.1.2.	It examines the progress of the NHRDP in relation to its goals by means of result and, where appropriate, impact indicators.		It complies
b)	improve the quality of programmes and their implementation;	12.1.2.	The mid-term and ex post evaluations examine the degree of utilization of funds, the effectiveness and efficiency of the programming of the NHRDP, and its socioeconomic impact.		It complies
c)	examine proposals for substantive changes to programmes;	12.1.2.	They cover the goals of the NHRDP and aim to draw lessons concerning rural development policy of the Community.		It complies
d)	prepare for mid-term and ex post evaluation.	12.1.2.		?	

<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
(3)	From 2008, the Managing Authority shall report each year on the ongoing evaluation activities to the Monitoring Committee.  A summary of the activities shall be included in the annual progress report provided for in Article 82.	12.1.2.	From 2008, the Managing Authority reports each year on the ongoing evaluation activities to the Monitoring Committee. A summary of the activities is included in the annual progress report.		It complies
(4)	In 2010, ongoing evaluation shall take the form of a separate mid-term evaluation report. That mid-term evaluation shall propose measures to improve the quality of programmes and their implementation.  A summary of the mid-term evaluation reports shall be undertaken on the initiative of the Commission.	12.1.2.	In 2010, ongoing evaluation takes the form of a separate mid-term evaluation report and in 2015, a separate ex post evaluation report. The mid-term and ex post evaluations examine the degree of utilization of funds, the effectiveness and efficiency of the programming of the NHRDP, and its socioeconomic impact.		It complies
(5)	In 2015, ongoing evaluation shall take the form of a separate ex-post evaluation report.	12.1.2.	In 2010, ongoing evaluation takes the form of a separate mid-term evaluation report and in 2015, a separate ex post evaluation report.		It complies
(6)	The mid-term and ex post evaluations shall examine the degree of utilisation of resources, the effectiveness and efficiency of the programming of the EAFRD, its socioeconomic impact and its impact on the Community priorities. They shall cover the goals of the programme and aim to draw lessons concerning rural development policy.  They shall identify the factors which contributed to the success or failure of the programmes' implementation, including as regards sustainability, and identify best practice.	12.1.2.	The mid-term and ex post evaluations examine the degree of utilization of funds, the effectiveness and efficiency of the programming of the NHRDP, and its socioeconomic impact. They cover the goals of the NHRDP and aim to draw lessons concerning rural development policy of the Community.		It complies

Regulation Article	Provision of the Regulation	NHRDP Chapter	NHRDP content		Qualification
(7)	Ongoing evaluation shall be organised on the initiative of the Managing Authorities in cooperation with the Commission. It shall be organised on a multiannual basis and cover the period 2007-2015:	.		?	
(8)	The Commission shall organise measures on its initiative to provide training, exchanges of best practice and information for ongoing evaluators, experts in the Member States and Monitoring Committee members, as well as thematic and summary evaluations.	-	---	-	.
Article 87	Summary of the ex ante evaluation	12.1.2.			It complies
(1)	A summary of ex post evaluations shall be made, under the responsibility of the Commission, in cooperation with the Member State and the Managing Authority, which shall gather the data required for its completion	12.1.2.	A summary of ex post evaluations shall be made at the latest by 31 December 2016, under the responsibility of the Commission, in cooperation with the Member State and the Managing Authority, which shall gather the data required for its completion.		It complies
(2)	The summary of ex post evaluations shall be completed at the latest by 31 December 2016.	12.1.2.	A summary of ex post evaluations shall be made at the latest by 31 December 2016, under the responsibility of the Commission, in cooperation with the Member State and the Managing Authority, which shall gather the data required for its completion.		Megfelel

**Based on Regulation 1290/2005/EC**

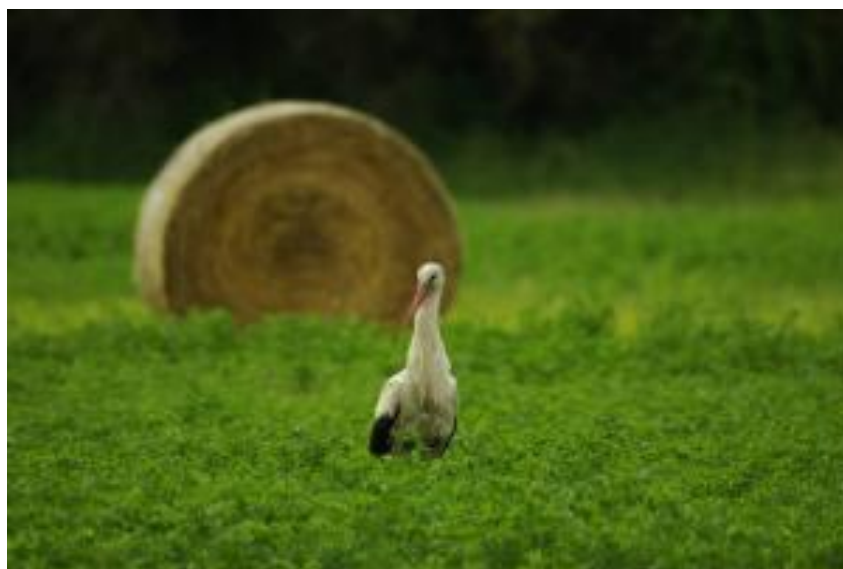
<b>Regulation Article</b>	<b>Provision of the Regulation</b>	<b>NHRDP Chapter</b>	<b>NHRDP content</b>		<b>Qualification</b>
Article 6	Accreditation and withdrawal of accreditation of paying agencies and coordinating bodies	11.3.			com plie
(1)	Paying agencies shall be the departments or bodies of the Member States which, in respect of payments made by them and as regards communicating and keeping information, provide sufficient guarantees that:	11.3.	The Paying Agency ensures that:		It complies
a)	the eligibility of requests and, in the framework of rural development, the procedure for allocating aid, as well as their compliance with Community rules are checked before payment is authorised;	11.3.	the eligibility of requests and the procedure for allocating aid, as well as their compliance with Community rules are checked before payment is authorised;		It complies
b)	accurate and exhaustive accounts are kept of the payments made;	11.3.	accurate and exhaustive accounts need to be kept of the payments made;		It complies
c)	the checks laid down by Community legislation are made;	11.3.	the checks laid down by Community legislation need to be made;		com plie
d)	the requisite documents are presented within the timelimits and in the form stipulated by Community rules;	11.3.	the relevant documents need to be presented within the time-limits and in the form stipulated by Community rules;		It complies
e)	the documents are accessible and kept in a manner which ensures their completeness, validity and legibility over time, including with regard to electronic documents within the meaning of Community rules. With the exception of the payment of Community aid, the execution of these tasks may be delegated.	11.3.	the documents are accessible and kept in a manner which ensures their completeness, validity and legibility over time, including with regard to electronic documents within the meaning of Community rules.		It complies

(2)	Member States shall accredit as paying agencies departments or bodies which fulfil the conditions laid down in paragraph 1. Each Member State shall, taking into account its constitutional provisions and institutional structure, restrict the number of its accredited paying agencies to the minimum necessary to ensure that the expenditure referred to in Article 3(1) and Article 4 is effected under sound administrative and accounting conditions.	11.3.	The accreditation of ARDA is, in line with Art. 1, paragraphs (2)-(3) of Regulation (EC) No. 885/2006, in the competence of the Minister of Agriculture and Rural Development. Prior to the accreditation, a check shall be carried out by an independent auditing firm. The Minister, acting as competent authority, _ is entitled to give the accreditation to the Paying Agency and to withdraw it, if necessary, _ The Certification Body and the Department for Rural Development of the Ministry perform permanent control over the compliance of the Paying Agency with the accreditation criteria, _ is entitled to give instructions to the Paying Agency, if it considers that the latter does not comply with the accreditation criteria.		It complies
(3)	Where more than one paying agency is accredited, the Member State shall communicate to the Commission the particulars of the department or body to which it assigns the following tasks:	-	----	-	,
a)	collecting the information to be made available to the Commission and sending that information to the Commission;	-	----	-	,
b)	promoting harmonised application of the Community rules. This department or body, hereinafter referred to as the 'coordinating body', shall be subject to specific accreditation by the Member States as regards the processing of the financial information referred to in point (a).	-	----	-	,
(4)	Where an accredited paying agency does not meet or no longer meets one or more of the conditions laid down in paragraph 1, the Member State shall withdraw accreditation unless the paying agency makes the necessary changes within a period to be determined according to the severity of the problem.	-	----	-	,
Article 7 Certification Bodies	The certification body shall be a public or private legal entity designated by the Member State with a view to certifying the truthfulness, completeness and accuracy of the accounts of the accredited paying agency, taking account of the management and control systems set up.	11.1.	In accordance with Art. 5 of Regulation (EC) No. 885/2006, the Certification Body was appointed by the Minister of Agriculture and Rural Development acting as Competent Authority, after a public procurement procedure. The Certifying Body – KPMG Hungary Kft. – is a Hungarian limited liability company, and a member firm of the KPMG network of independent member firms affiliated with KPMG International, Switzerland.		It complies

## **Annex 4: PART II. – Strategic Environmental Assessment**



# STRATEGIC ENVIRONMENTAL ASSESSMENT of the New Hungary Rural Development Strategic Plan and Programme



**Ministry of Agriculture and Rural Development**



**July 2007**

**Environmental report  
to the Strategic Environmental Assessment of the New Hungary Rural Development  
Strategic Plan and Programme**

***Commissioned by:***

Ministry of Agriculture and Rural Development

***Contractor:***

PricewaterhouseCoopers Hungary

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## **ABBREVIATIONS**

ARDOP	Agricultural and Rural Development Operative Program
BAT	Best Available Techniques
EEA	European Environmental Agency
EiC	Env-in-Cent Consulting Ltd.
EAFRD	European Agricultural Fund for Rural Development
MARD	Ministry of Agriculture and Rural Development
EEOP	Environment and Energy Operative Programme
MEW	Ministry of Environment and Water
MC	Monitoring Committee
HAS	Hungarian Academy of Sciences
NSC	National Society of Conservationists
NAEP	National Agri-Environmental Programme
NDP-1	National Development Plan-1
NDA	National Development Agency
NEP-II	National Environmental Programme-II
NRDP	National Rural Development Plan
NDPC	National Development Policy Concept
NWMP	National Waste Management Plan
NEC	National Environmental Council
NIENW	National Inspectorate of Environment, Nature and Water
NRDC	National Regional Development Concept
PWC	PricewaterhouseCoopers Hungary
ROP	Regional Operative Programme
SF	Structural Funds
SEA	Strategic Environmental Assessment
SROP	Social Renewal Operative Programme
SIOP	Social Infrastructure Operative Programme
NHDP	New Hungary Development Plan
NHRDP	New Hungary Rural Development Programme
NHRDSP	New Hungary Rural Development Strategic Plan
WFD	Water Framework Directive

# INTRODUCTION

## Antecedents and legal background of strategic environmental assessment

The Ministry of Agriculture and Rural Development (MARD) – as the responsible planning organisation of the New Hungary Rural Development Strategic Plan and of the New Hungary Rural Development Programme based thereon – officially initiated the preparation of the environmental report and the strategic environmental assessment (SEA) according to the 2/2005 (I. 11.) Government Decree (hereinafter: SEA Decree) toward the National Inspectorate for Environment, Nature and Water (hereinafter: NIENW) on 13 October 2006. The MARD submitted the draft content of the SEA according to the subsections (1)-(6) Section 7 of the SEA Decree to the NIENW for approval. The draft was approved by the NIENW with minor amendments. **This environmental report was elaborated by taking into account of the views and suggestions of the NIENW.**

## The object of the strategic environmental assessment

On the basis of the Council Regulation No 1698/2005/EC on support for rural development by the European Agricultural Fund for Rural Development (20 September 2005) (hereinafter: Regulation 1698/2005/EC) the MARD has started the elaboration of the New Hungary Rural Development Strategic Plan and Programme (hereinafter: NHRDSP and NHRDP as well as Plan and Programme). In accordance with the subarticle (2) Article 12 of the Regulation 1698/2005/EC planning and programming should be performed in two steps:

1. The **national strategic plan of rural development** should be elaborated and sent to the Commission for analysis. This document is the New Hungary Rural Development Strategic Plan that has been finished and its negotiation is in progress with the European Commission during the elaboration of the environmental report.
2. By taking into account of the opinion of the Commission as well as of the partnership opinions according to the subarticle 3 Article 6 of the Regulation 1698/2005/EC the **rural development programme** should be elaborated. This document is the New Hungary Rural Development Programme whose negotiation with the partners is in progress during the preparation of the environmental report and the floor is open to integrate the SEA proposals.

In our approach the subject of the SEA is the EAFRD-sourced rural development policy, namely we prepared the SEA **as integrated on the Plan and the Programme, with the same approach and unified methodology, through common stakeholder's consultation.** The two-step rural development planning gives adequate ground **to perform substantive decisions on behalf of the MARD on the proposals explored by the SEA**, since the integrated SEA approach opens the door the elaboration and integration of the comments in line with the opinion of the Commission (so of the SEA proposals) into the programming process.

## **The feature, mission and objective of the strategic environmental assessment**

The European Commission intends to take into account the requirements of both Lisbon and Goteborg Strategy in a more powerful way as earlier in the programming period from 2007, namely the programmes should stressfully support **the environmentally sustainable improvement of competitiveness and social cohesion**. An important element of the new programming approach is to ensure that – among others – the agriculture and rural development policy of the EU as well as the implementation at member state level should contribute to the implementation of the EU's Sustainable Development Strategy at community, member state, regional and local levels, too. According to the sustainability policy of the EU **the strategic environmental assessment (SEA) is an instrument of the proactive environmental protection**: it filters out the interventions, measures potentially causing risk to the environment already in the strategic phase of programming.

The starting point of the elaboration of the SEA is that the **rural development measures** getting support from community sources **should be as useful as possible in environmental terms** and the adverse effects on the individual environmental elements, schemes should be minimised. Thus the mission of the SEA prepared to the Plan and the Programme is the “early warning” function that enables the stakeholders (including the planners, decision-makers and the actors of the implementation, too) to improve the environmental performance of the rural development policy, to promote the implementation of the environmental policy objectives as well as to help in avoiding the latter corrections that are usually expensive by considered decisions.

**The ultimate goal of the SEA prepared to the New Hungary Rural Development Strategic Plan and Programme is to compile an environmental report that provides realisable proposals in order to improve the environmental performance of the rural development measures and to enforce sustainable development in agriculture and rural development.**

At the development of the final version of the New Hungary Rural Development Programme to be submitted to the Government, the MARD considered the outcomes of the SEA environmental report and undertook that it will submit the Programme together with the environmental report and the summary of the partnership notes to the Government.

# 1. THE ELABORATION PROCESS OF ENVIRONMENTAL REPORT

## 1.1 The conditions of the elaboration of environmental report

### 1.1.1. The organisation of the elaboration and the consultation of the SEA

The MARD – in co-operation with the Ministry of Environment and Water (MEW) – delegated the elaboration of the SEA and the performance of the process to independent experts experienced in SEA and rural development (**SEA working group**), the activity of the working group is co-ordinated by the Env-in-Cent Consulting Ltd. (EiC). The contractor (and simultaneously the co-ordinator of the ex ante evaluation of the New Hungary Rural Development Strategic Plan and Programme) of the elaboration of the SEA is the PricewaterhouseCoopers Hungary (PWC). The social consultation process is managed by the **National Society of Conservationists (NSC)**. In the course of the planning and managing the process the NSC proceeds with the MARD (which is responsible for the planning of the Strategy and the Programme) in key issues, and in accordance with the PWC and the EiC.<sup>13</sup> The members of the working group are as follows, the details of the stakeholder's consultation can be found in Chapter 1.3.

**Table 1. Members of the SEA working group**

Planning, programming expert (MARD representative)	<i>Anna Hortobágyi</i> (MARD, rapporteur in EAFRD Public Relations)
Agri-environmental expert (MEW representative)	<i>Tamásné Vajna</i> (MEW, deputy head of department)
Water management expert	<i>Tamás Czira</i> (geographer, Envigraph Bt.)
Co-ordinator of stakeholder's consultation	<i>István Farkas</i> (acting chairman, NSC)
Environmental assessment expert	<i>Zoltán Máyer</i> (environmental engineer, Env-in-Cent Consulting Ltd.)
SEA professional co-ordinator	<i>Tamás Pálvölgyi</i> (managing director, Env-in-Cent Consulting Ltd.)
Sustainable land-use planning expert	<i>Márton Péti</i> (geographer, expert in geoinformatics, Envigraph Bt.)
Management and consultation expert	<i>Éva Enikő Szabó</i> (biologist, Env-in-Cent Consulting Ltd.)
Ex-ante evaluation expert	<i>Krisztina Szenci</i> (analyst, PriceWaterhouseCoopers Hungary)

<sup>13</sup> The expert and organisational costs of the social consultation were incurred by the NSC itself. The participation in the environmental evaluation as well as the management of the social consultation did not affect the right of the NSC as NGO to perform publicly its opinion on the New Hungary Rural Development Strategic Plan and Programme as well as on the planning process.

Proof-reader	<b>János Szlávik</b> (head of Department for Environmental Economics, Budapest Univ. of Technology and Economics)
Proof-reader	<b>Gábor Figezky</b> (director in nature conservation, WWF)
Proof-reader	<b>Ferenc Ligetvári</b> (professor, Department of Pedology and Water Management, Szent István University)

(The proof-readers did not participate in the elaboration of the environmental report, their task was to perform professional evaluation and to form opinion on the stakeholder's consultation version.)

The elaboration process of the SEA – after the approval of the concept and the working schedule by the MARD – started in the first days of October; the applied methodology and the preliminary outcomes of the SEA were negotiated (among others) at the **SEA Forum** and with the National Environmental Council. The experts of the SEA working group received the first Programme version that consisted of sub-measures on 31 October<sup>14</sup>.

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<sup>14</sup> The subject of the SEA is the Programme officially submitted to the Commission by 19 February, 2007. The SEA Report also considers the text-related proposals that have been emerged since that date, especially the modifications suggested by the social partners and the members of SEA Working Group. We report on taking into account the comments emerged during the authority and social consultations in Chapter 1.3.4.

### **1.1.2. Connection to the planning process of the NHRDP**

The elaboration, consultation and modification processes of the Plan and the Programme had serious influence on the SEA working schedule. The major factors determining the elaboration of the environmental report were the following:

1. The time constraint of the elaboration of the Programme and the Plan as well as the fact that the decision on the SEA to be done to the rural development policy was made much later than as it had happened in the case of the Operative Programmes of the NHDP – these events **significantly narrowed the available time for elaborating the environmental report**. Many issues (we point out these in this environmental report) would have required scientific, more profound analysis but due to lack of time it was impossible to manage it.
2. Both the elaboration of the New Hungary Rural Development Strategic Plan and Programme and the ex-ante evaluation and the **SEA report** thereof **are heavily influenced by the fact that fundamental strategic documents are still missing**<sup>15</sup>. (For example, now Hungary does not have an approved agriculture strategy that went under public consultation, concept for renewable energy utilisation as well as the National Sustainable Development Strategy and the strategy on biodiversity are also not elaborated.) Without these fundamental documents certain statements of the environmental report (we point out these in the relevant part of the report) can only be considered as preliminary estimations.
3. During the elaboration of this environmental report **there were intensive consultations and constructive professional debates on certain fields (e.g. water management, renewable energy, animal breeding)** between the MARD experts and the SEA working group. In the 30-day SEA social consultation period these consultations will expectedly result in such a consensus – that is based on considerate analysis – that **may significantly affect the final versions of both the Programme and the SEA**.

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<sup>15</sup> Occasionally – for example in the field of water management – the professional-scientific elaboration of the sectoral strategies has been finished, the strategies have been completed, but their final approval has not occurred yet so far.



## **1.2. The effect of the proposals made during the elaboration on the NHRDP**

In the “accelerated” SEA process the role of the MARD became relatively important in the field of providing the information necessary to the successful elaboration of the environmental report. **The MARD helped the work of the SEA working group with open and constructive approach both at management and expert levels** and the – far beyond the legal obligations – positive administrative attitude significantly contributed to the completion of the environmental report.

The experts of the SEA Working Group commented on the overall strategic decisions made, including the allocation of funds between Axes, but the main emphasis in their work was put on the strategies employed under the specific Axes. In light of the limited experience with, and a lack of evaluation results on, agricultural and rural development policy planning and programming, the experts deemed it not feasible to extend the scope of the work to an assessment of core Hungarian agricultural and rural development policy issues into the SEA process. Thus, the allocation of funds between Axes was rather subject to negotiations between Hungary and the European Commission, than subject to discussions between the SEA experts and the programming authorities.

## 1.3. The inclusion of stakeholders into the elaboration of the environmental report

### 1.3.1. The concept of the professional-social consultation

The legal framework in terms of social consultation is provided by the Aarhus Convention and the Espoo Convention as well as by several Hungarian rules of law, mainly the SEA Decree. The concept is built on the requirements and principles of these rules of law. The SEA Decree defines the notion of public. By interpreting this, since the New Hungary Rural Development Strategic Plan and Programme are considered as plans of national impact and importance, the **notion of interested public generally covers professional, interest representing and social organisations dealing with environmental protection and nature conservation, other organisations dealing with environmental, agriculture and rural development and the general public, too**. These groups are the subjects of the social consultation. A plan was established on the social consultation process that could be debated by the representatives of the interested public.

### Access to information

*Homepage:* the working documents generating during the assessment and are debated by the working group are available for the general public, including the public draft versions of the Strategy and the Programme, the notes from the general public, the memos of the forums, etc. The public documents are available on the homepage of the NSC ([www.mtvsh.hu/skv](http://www.mtvsh.hu/skv)) that can be reached from the homepage of the MARD (subsection (5) Section 8 of the Decree) ([www.program.fvm.hu](http://www.program.fvm.hu)) as well as of PWC and EiC ([www.env-in-cent.hu](http://www.env-in-cent.hu)). The homepage is managed by the NSC.

*Other access:* if it was requested, we sent the key documents on paper, on CD by mail for those having no access to the internet.

### Informing the general public

*Press:* in the key stages of planning the NSC (as the organiser of the social consultation) together with the NARD actively informs the interested public beyond the homepage. At the beginning of the planning process the MARD informed the widest public through a press release in the national newspapers and other media on the launch of the strategic assessment and on the possibilities of participation. In addition, the MARD published a press release after the completion of the environmental report as well as advertised in a national newspaper.

*Direct requests:* at the beginning of the environmental assessment we e-mailed the 100 most important professional and interest representing environmental NGOs as well as we spread the news through email lists of the professional and interest representing environmental NGOs.

*Regular notices:* Those registered on the homepage are sent a notice if a new document is uploaded to the homepage as well as we inform the registered users on the completion of the environmental assessment and on the launch of the 30-day consultation period.

## **Consultation with the interested public and public administration actors as well as the opportunities of the direct public participation**

*General possibility of forming opinion:* on the homepage the current working materials were available, anyone was allowed to send comments on the documents at any stages through the homepage. These comments were received by the experts participating in the assessment and they took them into account.

*Development of the SEA Forum:* a 20-member working panel has been established from the interested public administration actors and the NGO representatives. This group met the SEA experts twice during the assessment. The environmental NGO-members of the Monitoring Committees of NRDP and ARDOP are invited to this Forum.

*Social debate of the SEA environmental report – Partnership Conference and forums in the countryside:* the strategic environmental assessment document (according to the rules of the consultation document according to the Decree) – was negotiated on a partnership conference by the assessment performer. The invited parties – through the email lists and direct mails – were about 100 organisations and institutions. The number of the expected participants was 29. In addition we organised a forum in Debrecen. The consultation period of the document was 30 days. In the meetings one could give oral opinion for the documents and it was possible to make written comments through the homepage and by mail. The oral comments were recorded in memos.

*National Environmental Council:* We initiated that the National Environmental Council should have debate on the environmental report document and the Rural Development Programme. The Council debated the material on a plenary session and on a working group meeting as well as prepared a written comment

We processed the received comments and the participants of the assessment took into account these at the finalisation of the documents. Each comment – both the oral and written ones – will be reacted in written form and will be informed about the way the comment was taken into account. The MARD – in accordance with the provisions of the SEA Decree – will take into account the outcomes of the environmental report at the formation of the final version of the Rural Development Programme that will be submitted to the Government.

**Table 2 Schedule of social consultation**

<b>Consultation tasks</b>	<b>time</b>
Debate on the social consultation concept, MARD/SEA working group	6 Oct
Launch of the homepage	10 Oct
SEA Forum meeting I.	18 Oct
NEC meeting	2 Nov
Completion of environmental report, making it public	20 Nov
Interviews	25 Nov
SEA Forum meeting II.	4 Dec

Partnership forum (SEA Conference)	6 Dec
Forums on the countryside	29 Nov
Delivery of the social opinions to the MARD	27 Dec
Delivery of the final environmental report to the MARD	25 Jan
Feedback to the social consultation participants	25 Feb

### **1.3.2. Involvement of the bodies responsible for environmental protection**

#### **Identification of the bodies responsible for environmental protection**

According to the Government Decree No. 2/2005. (I. 11.), the following authorities should be involved in the assessment process: the Ministry of Environment and Water, the Chief Medical Sanitation Office, the Ministry of Agriculture and Rural Development as well as the other organisation with national authority listed in Annex 3 of the SEA Decree.

The SEA working group personally negotiated on the performance of the assessment process with the competent department of the MEW that assigned the NIENW as environmental authority for the administration of issues of the assessment. The MARD notified the authority on the launch of the assessment as well as officially sent it to the authority for consultation. The SEA group integrated the opinion of the authority into the finalised syllabus. In addition we invited the representatives of the mentioned three authorities to participate in the work of the SEA Forum. After the completion of the assessment the authorities received the environmental report document that was commented by them. The final version of the environmental report was elaborated by taking into account these comments.

#### **Involvement of professional organisations**

**We established a SEA Forum** in order to involve the professional organisations that had two meetings during the assessment process. The members of the Forum were the environmental authorities, the designers of the MARD, the representatives of the universities and the science, the representatives of the interested social organisations. The first meeting was held on 18 October and its topic was the syllabus of the SEA. 24 experts participated on the Forum meeting. The members of the Forum essentially found the syllabus appropriate. They drew the attention to the fact that due to certain international obligations it was not acceptable if certain measures would be launched only from 2009 (e.g. NATURA 2000, IPPC); they stressed the importance of the integration of the environmental aspects; they indicated that it was important that the MARD should examine on the merits the possibility of integration of the SEA proposals, among others the source allocation among the axes. The next meeting of the Forum was held on 4 December, its topic was the environmental report document. The participants made several concrete proposals on the text of the SEA, and deeply dealt with the following topics: agri-environmental management, water management, NATURA 2000.

## Involvement of the National Environmental Council

The SEA working group presented the syllabus and the preliminary results of the report on the NEC meeting on 2 November. **The NEC approved the concept of the SEA report and made comments on the topics of water management and soil resource management.** The comments of the NEC members as well as the personal consultations greatly supported the professionalism of the environmental assessment in the aforementioned topics. The NEC established an official statement on the SEA consultation draft on 11 December 2006 and – except for the parts on water management – it was acknowledged in terms approval. On the basis of the NEC comments on agricultural water management the SEA Working group held a consultation on 15 December together with water management experts<sup>16</sup> where the actual parts were entirely re-assessed both in terms of the SEA and the Programme.

### 1.3.3. The involvement of the interested public

As it is laid in the principles, we directly involved the representatives of the environmental NGOs into the work of the SEA Forum. In addition everyone had the opportunity to participate in the process through the homepage and the forums.

**Table 3 The members of the SEA Forum**

Name	Position	Organisation
István Bondor	analyst	MARD
Bálint Csatári	director	HAS CRS Great Plain Research Institute
Péter Csóka	head of department	MARD
Ferenc Fehér	president	National Union of Water Management Associations
Gábor Figezky	NRDP MC	WWF
Ildikó Filotás	general director	National Inspectorate for Environment, Nature and Water
Iván Gyulai	director	Ecological Institute
Erzsébet Horkay	responsible for axis III	Department of agri-rural development, MARD
Katalin Horváth	responsible for axis IV	Department of agri-rural development, MARD
Péter Kajner	secretary	Alliance for the Living Tisza
Kinga Kenyeres	head of division	Department of analysis, evaluation and modelling, National Development Agency
Attila Kovács	deputy head of department	Department of agri-rural development, MARD
Ágnes K. váriné Bartha	secretary	Bács-Kiskun County Chamber of Agriculture
Kriszta Magócs	chief programming officer	Rural Development Office, Directorate for Strategic Planning and Assessment, Váti Kht.
Anna Makovényi	responsible for axis II	Department of agri-rural development, MARD
Éva Ócsainé Tomocz dr	head of department	Chief Medical Sanitation Office
Ferenc Pallagi	project manager	Association of Hungarian Private Forest Owners
László Podmaniczky	associate professor	SZIE-KTI
Péter Roszik	president	Hungarian Biokultura Federation
Anna Sánta	responsible for axis I	Department of agri-rural development, MARD
Erzsébet Schmuck	NRDP MC	National Society of Conservationists

<sup>16</sup> György Dobos, Gábor Figezky, Péter Kajner, Ferenc Ligetvári, Gyula Szabó, Sándor Szalai, Árpád Varga as well as on behalf of the SEA Working group: Tamás Czira and Tamás Pálvölgyi.

Zsolt Szilvácsku	ARDOP MC	Hungarian Ornithological Society
János Szilávik	head of department	Department of Environmental Economics, BUTE

## **The SEA homepage**

The SEA homepage ([www.mtvosz.hu/skv](http://www.mtvosz.hu/skv)) has been available since the beginning of the preparation of the SEA. The MARD published a press release on the launch of the homepage and the SEA, the NSC informed the potential stakeholders on it in direct ways and through mailing lists. The homepage contains:

Current information on the elaboration process of the SEA.

The social consultation syllabus of the SEA that contains the elaboration process and schedule of the SEA as well as the way of getting involved to the elaboration process of the SEA and the way of making comments on it.

Working documents of the SEA, preliminary outcomes.

All comments on the SEA in full size.

Documents connected to the SEA elaborated by the MARD.

If someone requests, we are continuously informing her/him if a new document is uploaded to the homepage, and we are waiting for the comments and questions at [skv@mtvosz.hu](mailto:skv@mtvosz.hu).

## **Forum – SEA Conference**

We organised an open partnership forum on the environmental report documents in the MARD (date: 6 December); we invited the environmental and the agri- and rural development partners but anyone could participate. There were 29 participants on the event. In addition we organised a forum together with the regional NGO consultation forum in Debrecen.

### **1.3.4. Comments and the way taking them into account**

The group processed the comments received to the document and put to the SEA homepage. After finishing the process each party making comment would receive the detailed answer of the group on its comment. 116 proposal and 42 comments arrived to the document whose majority was accepted and processed by the SEA group.

## **Proposals from the authorities to the environmental report document and the way of taking them into account**

Out of the contacted authorities the National Environmental Council, the National Inspectorate of Environment, Nature and Water, the Ministry of Education and Culture and the Department of Natural Resources of the MARD sent written comments to the document, 48 concrete proposals altogether. The SEA group 46 proposals of the 48 ones accepted and integrated into the document.

The National Environmental Council dealt with water management the most profoundly. The comment of the NEC refined the SEA proposals pertaining to irrigation, inland protection, soil protection and amelioration.

The National Inspectorate of Environment, Nature and Water made many concrete proposals in the topics of waste and wastewater management, IPPC and BAT, pesticides and landscape protection. The SEA working group has integrated the proposals.

The Ministry of Education and Culture improved the text and the statements of the document in the field of landscape protection and the rural cultural heritage.

The proposals of the Department of Natural Resources of the MARD were on water management and landscape protection.

### **The NGO proposals to the environmental report document and the way taking them into account**

8 NGOs made 68 written proposals to the document, 13 further NGOs made further 42 comments through the forums and the homepage.

The majority of the proposals was accepted by the SEA working group – 57 of the 68 written proposals were fully or partially accepted and the oral comments were also taken into account.

In some cases the cause of the omission was that according to the working group the topic did not belong to the scope of the SEA. Another type of the discarded proposals was those were pertaining to the methodology. At the closing stage of the SEA process the working group could not modify the methodology due to the advanced process.

One of the most active organisations was the Alliance for the Living Tisza. Their proposals (among others) were aiming at the increase of the granting rate of the agri-environmental and environmental-friendly measures, at stressing the confliction between the biomass and other industrial methods, at increasing the importance of the NATURA 2000 and the WFD, at enhancing the environmental-friendly character of water management. Some of the proposals on water management were opposite in content to the opinion of the National Environmental Council. In these cases the SEA working group accepted the latter one. The examination of the resource distribution among the axes was partially accepted by the SEA group: It dealt with the effects of the tendencies but did not made numerical proposal for a different resource distribution due to the methodological limitations of the assessment.

The Association of Hungarian Private Forest Owners and the Hungarian Federation of Forests and Wood Industries mainly provided proposals on forests and landscape management.

The Hungarian Biokultura Federation drew the attention to the importance of the role of the agri-environmental management and the organic farming.

Several proposals of the Foundation for Otters belong to the scope of the Fishery Operational Programme, so the SEA could not deal with it.

The Reflex Association made a proposal on the resource distribution among the axes as well as on the ban of granting the genetically modified plants.

### **Overview of the partners involved<sup>17</sup> into the SEA process**

#### **Authorities**

Ministry of Education and Culture

National Environmental Council

National Inspectorate of Environment, Nature and Water

#### **Social partners:**

Bokartisz Association, Federation for Living Tisza

Center for Environmental Studies

Clean Air Action Group

Foundation for Otters

Green Action Federation

Hungarian Association of Ornithology and Nature Conservation

Hungarian Academy of Sciences

Hungarian Biokultura Federation

Hungarian Federation of Forestry and Wood Industries

Hungarian Private Forest Owners

National Association of Institutes for Agricultural Research

National Federation of Water Management Associations

National Society of Conservationists (NSC)

Reflex Association

**The general impression of the SEA Working Group was that the MARD widely took into account the proposals made by the SEA Working Group and it maintained a constructive and helping attitude throughout the whole SEA process.**

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<sup>17</sup> Send written comments, suggestions or questions



## 1.4. The reliability of the used data and information

The main information base of the environmental report was the New Hungary Rural Development Strategic Plan and the Programme, so the data thereof fundamentally determine the use of the SEA, too. The ex-ante evaluation of the Plan and the Programme examines the uncertainty of the information used for the Plan and the Programme, so we do not deal with it in the environmental report.

We consider important, however, to note that the uncertainty of both the Plan and the Program and certain parts (statements) of the environmental report would be significantly reduced if **research-analysis studies were elaborated – in authentic scientific workshops** – for certain key issues (e.g. climate change, environmental issues of changing to animal breeding, methodological issues of the regional planning co-ordination). We indicate the scientific analysis demands in the environmental report. We consider especially important that such science-based methodology developments should be commenced that would render possible that **the sustainability of rural development efforts can be examined by indicators**, with less uncertainty than in the case of subjective, expert evaluation.

We proposed that in the period of the social consultation of the SEA the **competent scientific committees of the HAS** should debate the following key issues and – as far as possible – form opinion on them:

aspects of taking into account the climate change,  
environmental and nature conservation regards of changing to animal breeding,  
aspects of sustainable water management in agriculture<sup>18</sup>,  
lifecycle-type sustainability advantage-disadvantage analysis of energy plantations

The reliability of the information is also influenced by the fact that **sectoral or thematic strategies of certain fields are missing**. The conceptual documents that are scientifically grounded, based on wide professional and social consensus – unfortunately not existing in Hungary yet – (e.g. National Sustainable Development Strategy, National Biodiversity Strategy, Utilisation Concept of Renewable Energy Sources, Agriculture Strategy, etc.) would support the elaboration of the Programme and the Plan as an information basket as well as the ex-ante evaluation and environmental assessment thereof, too. The reliability of the data and information of these strategies would significantly increase the data reliability of the Programme and the Plan, too.

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<sup>18</sup> The competent committees of the Hungarian Scientific Academy (with 63 scientists being present) debated on the parts of the environmental report pertaining to the water management in agriculture at their common session on 18 January 2007. The relevant opinion of the HAS was taken into account in the final version of the SEA.

### Source of information, quality of data - general overview

	Primary data source	Reliability, quality of data	Barriers, source of uncertainty
Data and information on the agricultural sector and land use	New Hungary Rural Development Strategic Plan and the Programme, Agricultural Statistics	good	The SEA process, in general, does not validate data derived from the Plan and Programme. It has been presented in the ex-ante evaluation
General socio-economic data	Central Statistical Office, National Development Policy Concept, National Regional Development Plan, New Hungary Development Plan and its Operative Programmes	excellent	Excellent (Verified data and controlled information)
Environmental data and information	National Environmental Programme State of the Environment Reports National Regional Development Plan	good/medium	Barriers: 1) No environmental information on the level of micro regions 2) No common agri-environmental data base

## 1.5. Presentation of the applied methodology

### 1.5.1. Requirements against the methodology

In our approach the SEA is not only a “green mirror” (namely, not only the tool of the environmental and sustainability evaluation and screening of the programme), but also a “green engine” (namely the force driving the elaboration, implementation and monitoring of the programme into environmental direction). It can be achieved, if the applied methodology examines **the extent to which the relevant sustainability and environmental objectives integrate into the rural development policy supported by Community financial resources**. On the basis of taking into account the relevant rules of law<sup>19</sup> the – also enabling environmental integration – SEA methodology should provide the following:

- it should provide analysis support to that the Plan and the Programme should enable the consequent validation of prevention principle and the mitigation of the non-preventable environmental effects,
- it should influence the planning process in terms of environment and sustainability, elaborate alternatives and proposals and promote the life-cycle analysis,
- it should determine the environmental problems and values characteristic of the Hungarian countryside and agriculture, sustainability order of value the analysis of the importance thereof in terms of rural development efforts.

### 1.5.2. Presentation of the applied methodology

The applied SEA methodology based on the GRDP Handbook<sup>20</sup> is such an analysis-evaluation framework that explores the direct and indirect effects of the plan on the environment, the environmental changes due to the effect, the nature and size of the occurring effects as well as whether it is possible to prevent or reduce the expected significant damage. The analysis-evaluation methodology is built on the formerly elaborated<sup>21</sup> and applied<sup>22</sup> approach that the **strategic level of the rural development policy (objectives and priority) is compared to a sustainability order of**

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<sup>19</sup> Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment; Government Decree No. 2/2005. (I. 11.) on the environmental assessment of certain plans and programmes; Government Decree No. 148/1999. (X. 13.) on the announcement of the Espoo Convention on environmental impact assessment in a transboundary context.

<sup>20</sup> Handbook on SEA for Cohesion Policy 2007-2013, Greening Regional Development Programmes Network February 2006, Exeter, UK

<sup>21</sup> T Pálvölgyi, E Tombácz (2004): Methodology for the strategic environmental assessment of regional developments, In: Structural funds and sustainability, National Society of Conservationists, 2004, Budapest.

<sup>22</sup> T Fleischer, J Szilávik, R Baranyi, F Branner, N Nagypál, M Füle, K Kósi, T Pálvölgyi, T Princz-Jakovits, P Szilávik (2005) Strategic environmental assessment of the Hungarian transport policy. Közlekedéstudományi Szemle (Scientific Review of Transport), 2/LV, pp. 47-55.

value, while the more concrete tools and interventions of the programme are examined in the context of an environmental performance evaluation scheme.

## Methodology for the sustainability evaluation of the Plan

The New Hungary Rural Development Strategic Plan contains the **priorities and the system of targets of the rural development policy** being implemented from Community sources. The sustainability of the priorities and targets was examined by the following method:

1. We determined and debated with experts the sustainability order of values pertaining to the agriculture and rural development adapted to the domestic conditions. The **sustainability order of values** (see Annex 1) would like to tackle an approach of sustainable agriculture and rural development, controlling criteria and benchmark. The sustainability order of values of rural development – during the determination thereof we relied on many former studies and publications<sup>23</sup> - is based on the approach that sustainability has 3+1 pillars:

- environmental sustainability
- economic sustainability
- social sustainability

We completed these ones with holistic aspects that embrace the entirety of natural and social-economic existence. We shaped the 32-criterion order of values of the domestic rural development policy within the frames of the 3+1 pillars. Of course, the sustainability order of values cannot be considered as an absolute sustainability message and one cannot “judge” the sustainability of the Plan and the Programme on the basis of this. We consider it suitable only for “comparing” the priorities and the objectives to it as a relative reference.

2. We examined the compliance of the priorities and objectives of the Programme with the sustainability order of values separately, in standard input/output effect matrix in a way that **we**

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<sup>23</sup> Literature used for the sustainability scale of values:

József Ángyán, 2005: The future of rural development and agriculture – draft strategy and civil programme. In: Current issues of the Union’s environmental policy, National Society of Conservationists

CORASON Report, 2006. The knowledge-based approach of the sustainable rural development – dynamics expert and local knowledge forms. Research Report, Hungarian Academy of Sciences, Institute of Political Sciences.

Bálint Csatári, 2005: Where to go, Hungarian countryside? Possibilities and barriers HAS CRS Great Plain Research Institute

Iván Gyulai, Gusztáv Vágvölgyi, Zsolt Szilvácsku, 2005: sustainability and nature conservation assessment of the National Development Policy Concept. National Society of Conservationists.

András Krolopp, József Marticsek, Rita Francia, 2005: The European present and future of rural development . Expected changes in the Union’s rural development regulatory system and the probable consequences thereof, CEEWEB, Miskolc.

Gusztáv Nemes, 2000: The actors of rural development in Hungary. Institutions, approaches and resources. Institute of Economics, HAS; Budapest

Endre Tombácz, Tamás Pálvölgyi, Iván Gyulai, Zsolt Szilvácsku, Tamás Fleischer, Katalin Mozsgai, Em ke Magyar, 2003: Strategic Environmental Assessment for grounding the environmental ex-ante evaluation of Regional Operative Programme. VÁTI Kht.

**characterised the sustainability compliance for each element of the order of values by a value between -2 and +2 with the help of the collective expert evaluation** of the SEA working group (see Annex 2 and 3 for the input/output effect matrices).

3. We note that the “scoring” evaluation does not serve the general judgement of the priorities and objectives but – in accordance with the proposal-making feature of the SEA – with the negative values it draws attention to those sustainability aspects (elements of order of values) where the development of the priorities and objectives the sustainability aspects should be represented in a more definite way. Namely, **the methodology does not want to position the priorities and objectives in the dimension of “sustainable – not sustainable” but it wants to be an analytical decision-making tool** that would like to provide concrete guidance on the priorities/objectives we propose to modify.

## **Methodology for the evaluation of the environmental performance of the Programme**

As we mentioned earlier, we examine the more concrete tools and interventions of the programme in the context of an environmental performance evaluation scheme in order to get a picture on that how the measures comply with environmental, environmental policy aspects that are based on the National Environmental Programme and on other environmental strategy documents. We examine the environmental performance of the New Hungary Rural Development Programme with the following method:

1. We determined a set of environmental objectives – that is suitable for evaluating the rural development measures – on the basis of the relevant environmental policy documents<sup>24</sup>. The system of objectives takes into account the environmental policy priorities of prevention, recycling (reuse) and disposal.
2. We compared the measures of the Programme – by using collective expert evaluation – to the environmental aspects and we characterised the environmental performance of each measure by a score between -2 and +2.
3. Similarly to those mentioned at the sustainability evaluation, we also note here that the “scoring” evaluation does not serve the general judgement of the individual measures but – in accordance with the proposal-making feature of the SEA – with the negative values it draws the attention to those environmental aspects where at the determination of the details of the measures the environmental aspects should be represented in a more definite way. Namely, **the methodology does not want to position the measures in the dimension of “environment-friendly – environment-damaging” but it wants to be an analytical decision-making tool** that would like to provide concrete guidance on the measures we propose to modify and how.

The aspects applied during the environmental performance evaluation are as follows:

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<sup>24</sup> National Strategic Reference Framework, The Sixth Environmental Action Programme of the EU, National Environmental Programme, National Regional Development Concept, National Waste Management Plan, National Agri-environmental Programme, National Environmental Health Action Programme.

**Table 4 The aspects of the evaluation of environmental performance**

E1	Reduction of air pollution
E2	Reduction of global air polluting impacts
E3	Protection of surface waters, integrated river basin management
E4	Protection of underground waters
E5	Protection of soil and geological values
E6	Protection against the consequences of extreme climate events and environmental catastrophes
E7	Protection of areas under natural protection of national and local importance
E8	Protection and sustainable use of Natura 2000 and sensitive natural areas
E9	Nature conservation of forests
E10	Spreading of organic farming
E11	Sustainable regional management, development of complex environmental management systems
E12	Increase of the use of renewable energy sources
E13	Increase of material and energy efficiency
E14	Mitigation of chemical risks
E15	Health promotion and the increase of food safety
E16	Increase of the environmental awareness of the citizens, spreading of sustainable consumption patterns
E17	Sustainable use of landscape cultural heritage protection
E18	Improvement of urban environmental quality, development of environmental infrastructure

## 2. THE OVERVIEW OF THE PROGRAMME AND THE PLAN

### 2.1. The schematic presentation of the Plan and the Programme

As we referred to it in the Introduction, in our approach the subject of the SEA is the rural development policy of EAFRD-source, namely we elaborated the SEA as integrated to the Plan and the Programme, with identical approach, with uniform methodology and with common social consultation. Therefore we review the content and the objectives of both the New Hungary Rural Development Strategic Plan and the New Hungary Rural Development Programme as it follows.

#### **2.1.1. New Hungary Rural Development Strategic Plan**

The New Hungary Rural Development Strategic Plan – that is elaborated on the basis of the Council Regulation 1698/2005/EC – contains the strategic framework of the Hungarian rural development programme. The Plan was elaborated in accordance with the Council Decision 2006/144/EC on Community strategic guidelines for rural development. The starting-point of the Plan is that **in the period of 2007-2013 Hungary has the opportunity to spend about EUR 5 billion development source on the development of agriculture, rural environment and rural regions.** The Plan aims at creating the development framework necessary for the development of agriculture, the preservation of environmental values of rural areas, the strengthening of rural economy and the cohesion of rural society in line with the Lisbon objectives and the principles set out in the conclusions of the Goteborg European Council.

Based on the experience of the recent agricultural and rural development programmes financed from national sources or co-financed by European funds, **the objective of the Plan is to set up the directions and objectives of rural development** and to identify the tools and methods for attaining the objectives in line with the New Hungary Development Plan. The elaboration of the Plan started in October 2005 and it went under wide-ranging professional and social consultation so far. At the time of the elaboration of the environmental report the Plan is under final consultation with the Commission. The Plan contains the following:

future scenarios of the strategy

Situation analysis: presentation of the situation of agriculture, forest management, food processing and rural regions

State of environment

Socio-economic situation of the rural areas

Experience of the previous programming periods

Strategic priorities of the agro-rural development of the period of 2007 and 2013 and the main actions

Balance among the individual priorities

The exertion of horizontal policies

Coherence with the Lisbon Strategy, the linking national action programme and the Goteborg objectives

Strategy per EAFRD axis:

Axis I: improving the competitiveness of agriculture, food processing and forestry

Axis II: improving state of environment and countryside

Axis III: improving the quality of life in rural areas and encouraging diversification

Axis IV: LEADER

Axes of the New Hungary Rural Development Strategic Plan and the indicative resource allocation thereof

The internal and external consistency of the New Hungary Rural Development Strategic Plan and the complementarity thereof with other Community funding instruments

Setting up the National Rural Development Network

### **2.1.2. New Hungary Rural Development Programme**

The New Hungary Rural Development Programme should be elaborated by taking into account the opinion of the Commission as well as the partnership opinions according to the subarticle 3 Article 6 of the Regulation 1698/2005/EC whose partnership consultation is in progress during the elaboration of the environmental report. The aim of the Programme is to determine such interventions and measures that are suitable for the distribution of the financing funds according to the Plan and for actualisation of support mechanisms (applications). The main elements of the Programme are the following:

General situation analysis (socio-economic background, regional features of agriculture)

Thematic situation analysis along the individual measures (environmental economics and land use, rural economy and quality of life, LEADER)

The strategy chosen to meet strengths and weaknesses

Setting priorities

Indicative distribution of resources among axes

Impact from the previous programming period (SAPARD, ARDOP, NRDP)

Supporting of setting up and operation of producer groups

Supporting less favoured areas

Justification of the priorities

Detailed description of the measures

Financial plan

Designation of competent authorities and bodies responsible

Description of the monitoring and evaluation systems

Provisions to ensure that the Programme is publicised



Results of the consultations with the partners

Equality between men and women and non-discrimination

Technical assistance operations

## 2.2. Links with other strategic documents

### 2.2.1. Links with development policy documents

#### National Development Policy Concept

The National Development Policy Concept<sup>25</sup> (NDPC) determines the medium and long term directions and frames of the entire domestic public development. The NDPC contains „messages” on agriculture and rural development as well as ones connected to the environmental integration of the developments. Rural development is contained by the vision of the future and in the regional policy objective, and agriculture development is contained by the priorities, too. The rural development content of the vision of the future and of the objectives of the NDPC are built on the National Regional Development Concept. The agriculture development statements of the NDPC are both on:

environment-friendly, ecological and extensive activities that maintain landscape, and intensive and competitive modern commodity-producer agriculture served by informatics and logistic infrastructure and by research and development capacity.

The development policy did not want to solve the doctrinal contradiction hidden in this dual effort at its own general level but the New Hungary Rural Development Strategic Plan and Programme cannot avoid – at least partial – solution of this contradiction.

<b>Proposal 1</b>	In the course of the implementation of the Programme, where it is possible, the application of supporting conditions and criteria determined at micro-regional level should be ensured, by taking into account the environmental sensitivity and agricultural suitability of certain areas of Hungary <sup>26</sup> .
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#### National Regional Development Concept

The National Regional Development Concept<sup>27</sup> (NRDC) determines the medium and long term directions and frames of the Country’s regional development and of the regional relations of all public developments. The NRDC also contains relevant elements from the point of view of rural development strategic environmental assessment. **In the NRDC the rural development is present in each part of the planning document as one of the pillars of regional policy**, the regional policy tasks of agriculture policy are determined by a separate chapter. Among the regional policy development principle of the NRDC sustainability receives not only global but also regional interpretation. This interpretation is extremely important in the case of developments for the local

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<sup>25</sup> Parliament Decision No. 96/2005. (XII.25.)

<sup>26</sup> Based on the background analyses and maps presented in National Agri-Environmental Programme

<sup>27</sup> Parliament Decision No. 97/2005. (XII.25.)

communities, so in the case of rural development, too. In rural development the also stressed other NRDC principle is the principle of landscape aspect that requires the developments complying with the landscape systems.

<b>Proposal 2</b>	<i>We propose to complete the concept of horizontal sustainability in the Plan:</i> “At the enforcement of the horizontal policies it is a basic criterion to take into account the principles of local sustainability and landscape approach, as of defined in the National Regional Development Concept”
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The NRDC assigns micro-region as the spatial category of rural development and appoints rural regions. In terms of environment and sustainability it is important because rural development is placed to landscape context (with the so-called micro-regional dimension). **According the NRDC agriculture policy should develop forestry and agriculture that serve rural carrying capacity, landscape maintenance, environmental protection, organic farming as well as that fit to the local endowments**, so it should also establish agriculture development that is decentralised at regional level at least. On the contrary, the competitive commodity producer agriculture is a stressed component of the Programme, it interprets rural development as a sector, it does not introduce regional-specific tools, and its planning method is not regional-type. In order to establish – at least partially – the missing conformity, we propose the following:

<b>Proposal 3</b>	<i>(1) The conformity between the Programme and the Regional Operative Programmes (they also play role in regional development) should be ensured</i> <i>(2) The claim of accommodation to the local endowments should be secured as a principle in the Plan.</i>
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Out of the special interventions of the NRDC determined for the rural region types **several ones have sustainability and environmental protection characters. Most of them can be granted from the Regulation 1698/2005/EC but the intervention or the regional focus thereof is not represented in the Programme.** In order to establish the conformity with the National Regional Development Concept we propose the following to integrate into the appropriate measures:

<b>Proposal 4</b>	<i>In the course of the implementation of the Programme:</i> <i>(1) For all investment and development measures the enforcement of the requirements of “clean industry” should be pursued.</i> <i>(2) The development of eco-tourism should be promoted in the regions being rich in landscape values, in small village and scattered farm regions.</i> <i>(3) In the rural regions being rich in landscape values the spreading of integrated landscape management incorporating agriculture, forest management, hunting management and recreation activities should be promoted.</i> <i>(4) In the small village regions the spreading of the production of local products and the organic farming should be promoted.</i> <i>(5) In the rural regions being rich in landscape values the elaboration of local sustainability strategies (LA-21) as well as the completion of strategic environmental assessments should be promoted.</i> <i>(6) Pilot projects for the introduction of the so-called social forest as well as for the protection of heritage and the development based on the cultural resource thereof should be launched in the regions mainly inhabited by deprived social groups.</i>
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|  | <p>(7) <i>Pilot projects for surveying and eliminating the environmental pollution sources should be launched in scattered farm and small village regions.</i></p> <p>(8) <i>The granting of the developments pertaining to renewable energy sources of agricultural base should be underpinned by complex life-cycle analyses with sustainability approach.</i></p> |
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### **2.2.2. Links with the New Hungary Development Plan and with the Operative Programmes**

The New Hungary Development Plan (NHDP) is the plan for using the funds of the Structural Funds and the Cohesion Fund. Both the objectives and priorities of the NHDP contain rural development aspects and it undertakes that the Structural Funds also play role in rural development. At the same time, the NHDP does not contain agricultural developments. The NHDP is a strategic planning document to which operative programmes (OPs) are connected. In terms of rural development, the most important OPs are the following:

*Social Renewal Operative Programme (SROP).* Rural development content: training and employment programmes focussed to the most disadvantaged micro-regions.

*Social Infrastructure Operative Programme (SIOP).* Rural development content: public utility infrastructure development in the most disadvantaged micro-regions.

*Regional Operative Programmes (ROPs).* Rural development content: public utility and transport infrastructure development integrated at regional level, small-scale economic infrastructure and enterprise development.

*Environment and Energy Operative Programme (EEOP).* Rural development content: integrated river basin development (water management), renewable energy, nature conservation.

*Economy Development Operative Programme (EDOP).* Rural development content: SME and logistic developments.

*Electronic Public Administration Operative Programme (EPAOP)* Rural development content: modernisation of public services at micro-regional level.

Out of the important aspects of the strategic environmental assessment the **regional cohesion horizontal objective of the NHDP** can be highlighted. This objective requires a balanced urban-rural relationship, its connecting regional development priority element demands the strengthening of the urban-type functions that are able to serve the countryside. The horizontal objective contains so-called spatial utilisation principles as well whose majority is based on sustainability considerations. The principles preferring the maintenance of the separation of rural and urban features, the availability of values, the sustainable transport and brownfield investments can be highlighted. According to the principle of the NHDP, in terms of rural development the NHDP and the OPs thereof as well as the NHRDSP and the NHRDP complete each other. The **most important factor of ensuring the conformity that co-ordination, co-decision process between the OPs of the NHDP and the implementation of the NHRDP should be established.** Such implementation system should be elaborated that enables that the use of the rural development (EAFRD) and structural (SF) funds received by the regions could strengthen and complete each other and they should not spoil the

efficiency of the other. **In order to reach the conformity with the Operative Programmes we propose the following:**

<b>Proposal 5</b>	<p>(1) <i>The <b>experts of the regions should participate</b> (at least with consultative role) in the monitoring and the decision preparatory committees of the NHRDP.</i></p> <p>(2) <i>The implementation of the NHRDP should be represented in the monitoring committees of the Regional Operative Programmes as well as of the TAMOP (Social Renewal Operative Programme) and the TIOP (Social Infrastructure Operative Programme).</i></p> <p>(3) <i>In the procedural guideline of the NHRDP it should be ensured that the <b>developments also granted from the operative programmes (OPs) of the NHDP</b> (New Hungary Development Plan) <b>are preferred</b>.</i></p> <p>(4) <i>The common representative of the LEADER-type actions should also be present in the monitoring committees of the Regional Operative Programmes.</i></p> <p>(5) <i>The monitoring and evaluation system of the NHRDP should be capable of determining the <b>common professional performance measured</b> in the individual micro-regions (mainly in the rural micro-regions as well as settlements) of the OPs of the NHRDP and the NHDP.</i></p> <p>(6) <i>From the technical assistance budget of the NHRDP it should be ensured that the implementation is capable of improving the performance of certain weakly performing micro-regions or region-types (e.g. consultancy, expert availability, introduction of further application criteria).</i></p>
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### **2.2.3. Links with environmental policy documents**

#### **National Environmental Programme**

The second National Environmental Programme (for the period of 2003-2008)<sup>28</sup> (NEP-II) determines the objectives and priorities of the Hungarian environmental policy. Contrary to the objectives of the first NEP (that were mainly on environmental elements and acting factors), it drafts such an intervention plan scheme that is based on the implementation of the guidelines of the Sixth Environmental Action Programme of the European Union (valid to 2010)<sup>29</sup>. The NEP-II focuses on those environmental objectives that emerge in a complex way in the meeting point of the socio-economic-environmental problems that require interventions affecting several environmental elements, that widely affect the society and the economy and that can be solved by involving wide range of the stakeholders. NEP-II is not a sectoral program but a strategic document interweaving the

<sup>28</sup> Parliament Decision No. 132/2003. (XII.11.) on the National Environmental Programme for the period 2003-2008.

<sup>29</sup> Decision No 1600/2002/EC of the European Parliament and of the Council of July 22 2002 laying down the Sixth Environmental Action Programme (“Environment 2010: Our Future, Our Choice”).

entire society and economy, in which the common action of the sectors should comply with the quality and quantity objectives for improving the state of environment. The success of the NEP-II can be assured by the implementation of thematic action programmes ensuring cross-sectoral integration. The NHDP can mainly contribute to the following ones out of the NEP-II objectives:

- To the conservation of biodiversity, to the maintenance of natural heritage and to the subsistence of the ecological systems through the **conservation of the values of the natural areas protected** by domestic and international rules of law, **the implementation of the optimal nature conservation management**, the agri-environmental and the forest-environmental measures, the support of the areas of the Natura 2000 network.
- To the good condition and protection of waters **through the increase of the efficiency of the integrated river basin management** – like the utilisation of the dead channels and the affected zone thereof, supporting of nature-friendly agricultural land use, supporting of farmers in the rehabilitation areas of flood and drainage areas, spreading good agricultural practice.
- To the reduction in the use of fossil fuels **through the production of biofuels – through the production of the alcohol in the case of bioethanol** and through the production of crude oil at **biodiesel production**.
- To the increase in energy efficiency and to the reduction of energy consumption **through supporting of energy efficiency investments of agriculture technologies**.
- To the reduction of GHG emissions through the modernisation of livestock farms, to the protection of the geological medium and waters **through preventing the getting of liquid manure to the soil and groundwater and the adequate controlling thereof**.
- To soil protection, to the reduction of erosion, soil contamination and dust pollution **through supporting of land use, product structure and change in cultivation method** as well as with measures against drought damage.
- To the protection of waters and to the improvement of urban environmental quality **through the modernisation of wastewater treatment** as well as through the environment-friendly agricultural use of sludge from wastewater treatment plants.
- To the increase of environmental safety, to the maintenance and protection of the good condition of waters **through supporting of investments in the field of water management, water-damage prevention** regionally differentiated and **integrated** among sectors.
- By supporting the infrastructural conditions of eco-tourism and the connecting attitude-developing measures

**In order to establish the conformity with the NEP-II** we propose to insert the following text version:

<b>Proposal 6</b>	<p><i>The Programme should contain express reference to the fundamental document of Hungarian environmental policy:</i></p> <p>“On the basis of the second National Environmental Programme (NKP-II, 2003-2008) the NHRDP takes into account the strategic aims and objectives of the Hungarian environmental policy, and it contributes to the environmental goals of the NKP-II, especially in the following fields:</p> <ul style="list-style-type: none"> <li>– establishment and protection of the good state of waters in the frame of the integrated water management;</li> <li>– conservation of the values of the nature conservation areas, reservation of natural heritage and subsistence of ecological systems;</li> <li>– agri- and forest environmental measures and conservation of biodiversity through supporting the areas of the Natura 2000 network;</li> <li>– increase of forestation;</li> <li>– increase of the utilisation proportion of renewable energy sources;</li> <li>– reduction in the emissions of greenhouse gases;</li> </ul>
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- |  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>– qualitative and quantitative protection of soil;</li> <li>– reduction of erosion, soil contamination and dust pollution.”</li> </ul> |
|--|---|

## National Waste Management Plan

The National Waste Management Plan<sup>30</sup> (NWMP) is a complex action plan covering the entirety of waste management. The definition of the tasks and programmes of the NWMP occurred in accordance with the elaboration of the NEP-II and the NWMP represents the implementation plan of the Waste Management Thematic Action Programme, too. The NWMP – in the framework of the Agricultural and food industry biomass programme – declares that the disposal of the biologically degradable vegetable and animal waste practically should be ceased. Almost the entire utilisation of the biologically degradable vegetable and animal waste of food industry origin should be reached. The utilisation of the wastes containing biologically degradable organic matter of agriculture origin should be managed in order to recycle the utilisable elements into the biological cycle. This is intended to be met by the development of working into the soil, secondary processing and composting. The NHRDP encourages the recycling of vegetable remains generating from agriculture and forestry as well as manures coming from animal breeding into the biological cycle by supporting the environment-friendly farming methods in the frame of agri-environmental measures, too. The establishment of new waste treatment capacities (composting, biogas-producing and utilising facilities) is envisaged for treating the vegetable and animal wastes. However, the NHRDP does not deal with the biomass utilisation possibilities (production of other products, soil fertilisation, spreading of composting) other than energetic use, the EEOP supports only the spreading of the so-called site and household composting (that belongs to the scope of local governments) and does not provide solution for the treatment of organic wastes of agriculture origin.

The NHRDP intends to use the residuary materials in amelioration, so it contributes to the increase of the utilisation of residuary materials of the food industry.

According to the NWMP all the operating and closed carcass wells and animal waste disposal sites. Regional (selective) collecting and treating system should be established for the utilisation of animal waste. This objective was also supported from the Environmental and Infrastructure Development Operative Programme of the first NDP; it will be supported from the EEOP in the future.

Through the agri-environmental measures, in certain fields the NHRDP directly contributes to the rational use of agriculture chemicals, so indirectly contributes to the reduction of the wastes thereof (packaging of fertilisers, packaging of hazardous and non-hazardous pesticides) as well as to agricultural utilisation of manure and vegetable by-products. In addition – also in accordance with the provisions of the NWMP –, the harmless elimination of accumulated pesticide residues and the packaging thereof should be solved.

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<sup>30</sup> Parliament Decision No. 110/2002. (XII. 12.) on the National Waste Management Plan.



An important NWMP objective is to increase the utilisation ratio of sewage sludge (from 40% to 55% at least) through e.g. agriculture utilisation since with the continuous increase in establishing canalisation and wastewater treatment capacities the amount of sewage sludge is increasing, too. **However, the treatment of sewage sludge will be financed by not the NHRDP but the EEOP**, and the agricultural utilisation (adequate pre-treatment, analysis and supply) of the generating sewage sludge should be provided through the EEOP.

The total amount of liquid wastes is continuously increasing due to the increase in canalisation and wastewater treatment capacities. Still, it is important to take into account the NWMP objective that encourages the agricultural utilisation of such municipal and agricultural liquid wastes.

**In order to establish the conformity with the NWMP** we propose to take into account the following measures in the Programme:

<b>Proposal 7</b>	<p><i>1) In the case of the farms with high number of livestock the treatment of <b>sludge of agricultural origin and manure</b> should be especially promoted.</i></p> <p><i>(2) As far as possible, the <b>treatment of organic wastes of agricultural origin</b> (e.g. production of other products, soil fertilising, spreading of composting) should be supported.</i></p>
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#### **2.2.4. Link to the National Agri-Environmental Programme<sup>31</sup>**

The National Agri-Environmental Programme<sup>32</sup> (NAEP) was prepared in the pre-accession period to the European Union, with the co-operation of the MARD and the MEW, according to the provisions of the Common Agriculture Policy. The programme (that was launched in 2002 and was continuing in 2003) wanted to meet complex demands. The policy aimed at the structural change of agriculture, the reduction of the environmental load of agriculture origin and the preservation of biodiversity, while the farmers expected improving living conditions as well as the compensation of environmental and nature conservation restrictions from the Programme. The professional nature conservation organisations and the NGOs with good reason considered this agriculture granting system as the implementation tool of nature conservation management. By taking into account all these demands the results of the first years confirmed the success of the programme – it was popular among the farmers. The proceeding of the nature- and environment-friendly land use was **integrated into the agri-environmental measures of the National Rural Development Strategic Plan from our accession in 2004**, and its volume increased. If we also look at the pre-accession period (4 years passed so far) it should be stressed that the expansion of agri-environmental land use promotes the exercise of the Hungarian interests, the access to the additional Union sources, living conditions of the farmers as well as access to new markets. It mainly serves the common goals of agriculture and environmental protection and nature conservation and beyond this rural development and employment policy. In our opinion – though agri-environmental management is one of the main priorities of the New Hungary

<sup>31</sup> We also note the link with the National Forest Programme, especially in terms of attitude-development and environmental education.

<sup>32</sup> Government Decree No. 2253/1999. (X. 7.).



Rural Development Programme – but its weight (financing ratio) seems insufficient to reach the necessary size of agri-environmental management. In order to keep the results that have been reached since 2002 and to increase the agricultural area that is closer to the ecological endowments and that is cultivated under agri-environmental management methods the resource distribution among the axes should be changed in favour of Axis II. In addition we consider important that the Programme should support the landscape management measures connected to the New Vásárhelyi Plan. **In order to establish the conformity with the NAEP** we propose to take into account the following measures in the Programme:

<b>Proposal 8</b>	<p>(1) <i>Within the agri-environmental measure the Sensitive Natural Areas Programme having concrete nature conservation objective and providing high enough revenue for sustaining the nature-friendly management methods should receive paramount role.</i></p> <p>(2) <i>Within the agri-environmental measure – after the expiry of the 5-year commitment – it is expedient to reduce the proportion of the environmental programs bringing more modest environmental outcomes by discarding the arable land basic program and by relatively reducing the area proportion and supporting intensity of integrated farming.</i></p>
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## 2.3. The links of the Programme and the Plan with the implementation of certain environmental rules of law of paramount importance

### 2.3.1. Integrated permits for use of the environment

The Council Directive concerning integrated pollution prevention and control<sup>33</sup> (IPPC Directive) and the relevant domestic rule of law<sup>34</sup> expressly determine that the agricultural activities falling under the scope of the rule of law should comply with the requirements of the Best Available Techniques (BAT), **not later than 31 October 2007**.

**Table 5 The agricultural facilities that should comply with the BAT requirements**

Type of livestock farm	Estimated number
Facilities for intensive poultry breeding (with capacity of at least 40,000 poultries)	249 facilities
Facilities for intensive pig breeding - with capacity of at least 2000 pigs (over 30 kg) - with capacity of at least 750 sows	215 facilities 50 facilities

Source: National Inspectorate for Environment, Nature and Water  
[www.ippc.hu](http://www.ippc.hu) homepage (data of 2005)

We note that – as a consequence of the current review of the IPPC Directive – it is possible that cattle management can fall under the scope of the IPPC, so a BAT-quality operation would be required in this subsector, too.

The competent environmental authorities issued about 300 integrated permits for use of the environment altogether for the listed three subsectors not later than June 2006. This amount has certainly significantly increased since then, and the issue of about 100-150 permits remains. The real difficulty for these livestock farms are not the process of getting the environmental permits (though taking environmental consultancy service and of performing environmental measurements are already costly for many operators) but the **development costs of technology necessary to reach the BAT-level are significant for them**. According to the EU Directive and the national government decree all operating facilities should comply with the provisions of the integrated environmental permits (i.e. should meet the BAT-requirements) not later than 31 October 2007. **We stress that not only getting the permit but also complying with the BAT-quality should be fulfilled for this deadline!** The EU pays special attention to its practical fulfilment, so serious inspections are expected! The following BAT-requirements – this list does not contain all of them – would represent serious expenditures for the operators of livestock farms:

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<sup>33</sup> 96/61/EC Directive: Integrated Pollution Prevention and Control

<sup>34</sup> Government Decree No. 314/2005. (XII. 25.) on environmental impact assessment and integrated permits.

liquid manure, dung water and return flow can only be stored in insulated, leakproof tanks and basins (as opposed to the former case, liquid manure should not be even partially desiccated);

the storage space should be enough for at least 4 month-amount of liquid manure, dung water and return flow;

facilities serving both manure and liquid manure should be equipped with leakage detectors and adequate monitoring systems.

The Plan in its situation analysis part (subchapter “Nitrate directive”, Chapter “Environment and land use”) raises the problem of liquid manure annually generating an amount of several million cubic metres but the document does not mention the BAT at all. Though the listing in “*Cross-compliance*” requirements in Chapter “4.2.3. *Agri-environmental payments*” measure contains a reference to the IPPC Directive but it refers only to the supplying of data required by the Directive.

There is one more reference to the IPPC: in chapter “*Meeting standards based on Community legislation*” measure where it is mentioned within the definition of beneficiaries that the measure *With respect to environmental requirements, certain support titles are open only for parties involved in animal breeding in nitrate-sensitive areas or IPPC sites*”. **In order to take into account the compliance with the BAT-requirements** we propose the following measure in the Programme:

<b>Proposal 9</b>	<i>In the case of livestock farms – in order to comply with the BAT – the establishment of insulated manure storing basin of adequate size and of the related monitoring systems should be supported.</i>
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### **2.3.2. Directive 2006/32/EC on energy end-use efficiency and energy services**

A relatively new EU regulation – the Energy Efficiency Directive<sup>35</sup> – orders an annual average reduction of 1% of the energy end-use between 2008 and 2016 in the EU countries. Though the Directive itself does not make the reduction of energy end-use obligatory, but it declares: „Member States shall adopt and aim to achieve an overall national indicative energy savings target of 9% for the ninth year of application of this Directive, to be reached by way of energy services and other energy efficiency improvement measures.” The Directive demands that **Member States should elaborate Energy Efficiency Action Plans not later than 30 June 2007, and they should undertake energy efficiency commitments expressed in numbers.**

Those contained by the EEOP shows that energy savings of annual 1% should be determined in Hungary, so the domestic fuel consumption should be annually reduced by 10-11 PJ. *It is expected that agriculture* – as significant energy-consuming sector – should make an energy-saving commitment. **In order to comply with the Energy Efficiency Directive** we propose the following “amending” measure (condition specifying a measure) in the Programme:

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<sup>35</sup> Directive 2006/32/EC on energy end-use efficiency and energy services.

**Proposal 10**

*At the grants (especially in the case of purchasing machinery, irrigation and infrastructural development) the spreading of **energy-saving solutions** should be emphasized.*

### **2.3.3. NATURA 2000 directives**

Natura 2000 (that was created by the European Union) is a coherent European ecological network that ensures the preservation of biodiversity and contributes to the maintenance and restoration of the favourable nature conservation state thereof through the protection of natural habitats and wildlife species of European Community importance. The Natura 2000 network<sup>36</sup> contains the areas to be designated on the basis of two nature conservation directives of the European Union – the special bird protection areas to be designated by the implementation of the Directive on the conservation of wild birds (79/409/EEC, passed in 1979) and the special nature conservation areas to be designated according to the Habitats Directive (43/92/EEC, passed in 1992). (We note that the draft of land use requirements of the Natura 2000 areas is under public administration debate, the cadastral list of Natura 2000 areas is just before promulgation.)

**The general objective of the Birds Directive** is the protection of all bird species living under natural conditions in the Member States. Special bird protection areas are those regions that provide habitat for large population for species regularly occurring and migrating through the area of the Member State as well as that contain wetlands of international importance for water birds.

**The main objective of the Habitats Directive** is to preserve biodiversity, to ensure long-term survival of species and habitat types by maintaining or increasing their level of natural range. The Directive orders the creation of Natura 2000, the European ecological network that also contains the areas designated by the Birds Directive. The habitat types and species whose survival can only be ensured by immediate measure are of paramount importance and get priority in the Union. The Habitats Directive unanimously expresses that the goal by designating Natura 2000 areas is not preventing economic development and not establishing closed reservations where all activities are banned. Certain farming structures are allowed to pursue on the area if they meet the protection requirements. **Protection should only be ensured in terms of such species and habitat types that were the ground of the designation.**

**Natura 2000 network clearly supports the Plan and the Programme** by contributing to the sustainable rural development through increasing the employment of rural manpower, creating alternative income-generating opportunities, increasing the attractiveness of rural tourism, trading bio-products and agri-environmental measures. The biggest advantage of establishing the network is that the natural values of Hungary receive a higher level of protection (European Union legal protection)

<sup>36</sup> a) Government Decree No. 275/2004 (X. 8.) on nature conservation areas of European Community importance.

b) MEW Communication on the list of compartments with nature conservation areas of European Community importance (Publication: Hungarian Official Gazette, Vol. II, 80/2005, 16 June 2005).

than they did so far that widely support the national nature conservation efforts and works, promoting the protection of our uniquely rich natural values. It should also be noted that the Natura 2000 network is a complementary tool for the national nature conservation. The areas of the network do not replace but complete the system of the domestic nature conservation areas.

**Our country outstands out of the European countries since the majority of the natural values is tied to areas under forest and agricultural cultivation, to ecosystems established under human influence.** The activities pursued in these areas have significant impacts on the success of endeavours aiming at the conservation thereof. **So the interdependence of nature conservation and agriculture is highly true for Hungary** with regard to the high proportion of the areas under tillage and to the connection between natural values and farming methods. In Hungary, in accordance with the European Union directives, **467** special nature conservation areas (1.4 million hectares) and **55** special bird protection areas (1.38 million hectares) were designated. Due to overlaps between the nature conservation and bird protection areas it amounts altogether to **1.96 million hectares**, so does **21%** of the territory of the country (EU average: 20%).

Though the Commission assigned the European Agricultural Fund for Rural Development as the source of compensating the lost benefits and additional costs deriving from the compliance with the requirements of the Natura 2000 areas, the New Hungary Rural Development Programme plans to introduce the Natura 2000 compensation system only from 2009 and with small financing. **In order to comply with the NATURA 2000 directives** we propose to take into account the following in the Programme:

<b>Proposal 11</b>	<i><b>The NATURA 2000 measure should be launched from 2007. After the new resource distribution among the axes it is expedient to provide larger sources for those measures that result in better environmental outcome.</b></i>
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### **2.3.4. Water Framework Directive**

The Water Framework Directive<sup>37</sup> (WFD) pertains to the entire water management, to all policies all human activities connected to water, and one of the fundamental documents of the EU's environmental policy. The **main objective** of the Water Framework Directive **is the elaboration and implementation of the integrated, sustainable water management policy**. The major provisions of the WFD are the following:

- putting the surface waters and groundwaters into good (chemical and ecological) status and maintaining this good status for 2015;
- reaching a sustainable water use based on the long-term protection of available water resources;
- introducing river basin management planning and implementing the integrated river basin management programmes of measures with ensuring a high-level public participation;
- mapping and long-term forecasting social and economic water demands;

<sup>37</sup> Directive 2000/60/EC, Government Decree No. 221/2004. (VII. 21.) on certain rules of river basin management.

elaborating the implementation plans of measures thereof that take into account the aspects of cost-efficiency and sustainability;

determining environmental objectives and criteria, monitoring and evaluation thereof.

Agriculture production and agricultural water uses heavily influence the realisation of the environmental objectives determined in the Water Framework Directive and in other connecting water management rules of law<sup>38</sup> and reaching as well as maintaining the good status of waters.

The Programme refers to the WFD several times, in the reasoning of the 4.2.10. *Forest-environment payments* measure the planners appraise the contribution to the goals of the Directive as well as in the description of the 4.2.2. *Natura 2000 payments and payments linked to the implementation of Directive 2000/60/EC* measure, in subchapter Complementarity within the Programme WFD is mentioned as the measure within which further programme elements contributing to the national implementation of the WFD can be found. Not only the measures serving the integrated river basin management supported from the EEOP and partly from the ROPs could contribute to the objectives of the WFD but also on all interested agricultural fields according to the WFD. The **deadline of 2015** set by the WFD for reaching the good status of waters **coincides the closing deadline of the NHRDP, so it is another reason for seriously taking into account the requirements of the WFD.**

It should be noted that the **Directive 2006/118/EC on the protection of groundwater against pollution and deterioration (this directive is to replace Directive 80/68/EEC) entered into force at the end of 2006.** The Directive – referring to the WFD – defines the criteria for the assessment of good groundwater chemical status, the tasks of the Member States in preventing the pollution and deterioration of groundwater, in cleaning up the pollutions, in monitoring and assessment issues and in determining the criteria. The Directive protects the ecosystems depending on the groundwaters (so those ones that are in connection with the groundwaters and those whose chemical and ecological status depends on the chemical and quantity status of groundwaters).

**The Directive also draws the attention to the fact that in certain areas the protection of groundwaters requires changes in agriculture and forestry practice.** These changes may lead to decreasing revenues. Both the first assessment of the implementation of the Water Framework Directive and the EU Report prepared to the Nitrate Directive show that the measures taken in the period of 2000-2003, **including the provision on sanctioning of the good agricultural practice (GAP) have not resulted in the significant decrease of loading of groundwaters in agricultural areas.** All these render probable that the European Commission will pay special attention to the supervision of the member state level implementation of the WFD and the EU Directive on the protection of groundwater against pollution and deterioration.

**The priorities of the Plan fully fit to the objectives of the WFD; the planned measures of the Programme render probable that the agricultural water management will significantly**

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<sup>38</sup> (a) Government Decree No. 27/2006. (II. 7.) on protection waters against nitrates from agricultural sources

(b) Government Decree No. 21/2006. (I. 31.) on use and utilisation of high water river beds, riparian zones, wetland areas and areas endangered by piping waters as well as on the depreciation process of areas protected by summer dykes

contribute to the Hungarian implementation of the WFD. In order to achieve this, we propose to take into account the following in the Programme:

<b><i>Proposal 12</i></b>	<p>(1) <i>In the case of measures related to water management the Applicant should present <b>the way the investment or development contributes to the objectives of the WFD</b> (Water Framework Directive).</i></p> <p>(2) <i>Grant should be given <b>for the rural development consultants in order to improve their information on WFD.</b></i></p>
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### 3. ASSESSMENT OF THE ENVIRONMENTAL IMPACTS OF THE PROGRAMME AND THE PLAN

#### 3.1. Sustainability compliance: the sustainability evaluation of the NHRDSP

As we presented in Chapter 1.5.2., we examined the priorities and objectives of the New Hungary Rural Development Strategic Plan in terms of sustainability. We note that the situation analysis of the Plan adequately takes into account the environmental aspects of sustainability, at the same time it pays less attention to the social and economic pillars of sustainability. The Plan dedicates a separate chapter for presenting the emergence of horizontal policies, where the requirements determined by sustainable development are adequately presented.

##### **3.1.1. The sustainability assessment of the priorities of the Plan**

The New Hungary Rural Development Strategic Plan defines the **following priorities** within the frame of its agricultural and rural development priorities:

**I. Increasing the competitiveness of the agricultural and forestry sector, mitigation of structural tensions, promotion of change in production structure;**

- I/1a. *Renewable energy sources – energy plantations*: production and use, spreading the production systems based on it (energy plantations of ligneous and herbaceous plants)
- I/1b. *Renewable energy sources – agricultural by-products*: production and use, spreading the production systems based on it (production of raw materials necessary to the production of agricultural by-products and use of biomass)
- I/2. *Technological development*: purchasing of agricultural machinery fitting to the structural change, developments and infrastructure investments connected to agri-logistics as well as modernisation of farms in accordance with Community requirements
- I/3. *Animal breeding*: Transformation of livestock farms by taking into account animal health safety issues
- I/4. *Food-processing*: food industry integrations, continuous development of technological level, food safety, ecological and geographical trademarks, integrated product labelling
- I/5. *Horticulture*: Development potential in gardening of non-food purpose, the development of horticulture should also be linked with the utilisation of geothermic energy
- I/6. *Arrangement of holdings*: legal regulation of land purchase of holding-concentration purpose and of option to purchase land and pre-leasing , supporting of land-measuring works serving the arrangement of holdings, of preparing partition, consolidation, modification, etc. diagrams providing opportunities for young farmers to purchase land
- I/7. *Water management, protection against excess surface waters*: establishment and modernisation of regional and industrial water management facilities, supporting the abatement of local water damage and drought damage



## **II. Creation of the human conditions of the competitive agriculture, with special regard to the spreading of innovation skills and market-oriented approach**

- II/1. *Improving age-structure*: grant for taking over the farm by providing support for young farmers
- II/2. *Innovation and market orientation*: along the product track organisations: innovation and strategy are parts of all axes (horizontal objective). The reorganisation of the agricultural product tracks should be performed in accordance with the market and producer demands by operation and development resources, involving the potential of part-time and semi-subsistence farmers, too. The marketing activity connected to agriculture products should be supported by increasing the awareness of the consumers
- II/3. *Knowledge-based rural society*: sending fresh information to the rural communities and farmers, training, and supporting the use of advisory, information and communication technologies

## **III. Strengthening of the guarantees of sustainable production and land use**

- III/1. *Forestry*: afforestation of the agricultural areas being less suitable for competitive production and maintenance of the environmental status of forests, supporting the traditional forest management. Supporting the plantation of ligneous energy crops.
- III/2. *Environment-friendly management methods*: the spreading of organic farming, supporting of the compliance with voluntary provisions of agri-environmental management and with obligatory and voluntary provisions of Natura 2000 network, supporting of the environment-friendly agricultural practice implemented according to the programmes of measures of river basin management plans under the Water Framework Directive
- III/3. *Farming on Less Favoured Areas*: income-supplementing grants
- III/4. *Animal welfare requirements*

## **IV. Reduction of rural employment conflicts, enlargement of rural opportunities for earning income as well as improving the quality of rural life, better availability of services for the inhabitants of rural settlements**

- IV/1. *Rural business development*: encouraging diversification, creation of new jobs, development of rural tourism, supporting of the businesses producing and processing of products being characteristic of the region
- IV/2. *Village renewal*: renewal of villages, enlargement of the cultural and recreational possibilities
- V/3. *Integrated service spaces for small settlements*: supporting fundamental communication, administration and other services improving the quality of life in small settlements

## **V. Development of local communities. Mobilisation of internal resources covering several rural settlements (micro-regions), it serves the implementation of Axis IV**

Annex 2 shows the sustainability evaluation matrix of priorities. Our notes are as follows:

Evaluation does not serve for the general judgement of the priorities but – in accordance with the proposal-making feature of the SEA – it draws attention to those sustainability aspects (order of values elements) where the development of the priorities the sustainability aspects should be represented in a more definite way. The evaluations were prepared on the basis of the knowledge and information available at the elaboration of the SEA.

Priority I/1 was divided into two parts – priority a) and b) – by the SEA working group in order to have a sustainability evaluation differentiated enough. The relatively negative sustainability

judgement of energy plantation priority is based on that “pessimistic” assumption that these measures do not take into account the probable external effects.

We stress that the grounding of especially the “negative conclusions” would render necessary more profound examinations of scientific need. **Our statements serve the comparison of the priorities and they mainly intend to draw attention to the fact that the sustainability compliance of certain priorities ought to be ensured by regional focusing, or by conditions.**

As regards the environmental sustainability of the LEADER-type priorities we consider the enhanced representation of the environmental conscious education in all media as well as the development of the affinity to the nature for the different age-groups as important.

### **3.1.2. Sustainability assessment of the objectives of the Plan**

The New Hungary Rural Development Strategic Plan – in “strategic objectives per EAFRD axes” – defines the following specific objectives:

#### **Axis I: Improving the competitiveness of the agricultural and forestry sector**

- I.1. Supporting of gaining knowledge and improving the competence of human resources and age-structure
- I.2a. Promoting changes in land use in order to have a production structure sustainable even in ecological terms
- I.2b. Creation of sectoral balance between cultivation of plants and animal breeding
- I.3. Modernisation and development of physical resources, promoting innovation
- I.4. Improving the quality of agricultural production and products

#### **Axis II: Improving the environment and the countryside**

- II.1. Sustainable utilisation of agricultural areas, spreading of environment-friendly management methods
- II.2. Maintenance of agricultural activities on Less Favoured Areas
- II.3. Increase and sustainable management of forest resources
- II.4. Ensuring the animal welfare payments

#### **Axis III: Improving the quality of life in rural areas and promoting diversification**

- III.1.Reduction of rural employment tensions, enlargement of opportunities of earning income
- III.2.Improving the quality of rural life through the sustainable and complex utilisation of cultural and natural values, village renewal
- III.3.Development of basic services provided for rural inhabitants

#### **Axis IV: LEADER-type local developments**

Annex 3 contains the sustainability evaluation matrix of the objectives. Our notes are the same as they were in chapter 3.1.1., in addition:

we propose to take into account the fact that the negative judgement of “Creation of sectoral balance between cultivation of plants and animal breeding” is based on that theoretical (pessimistic) assumption that the number of livestock exceeds the carrying capacity of natural and ecosystems.

**Obviously, the moderate increase in number of livestock could result in environmental advantages but the determination of the numbers by breeds that are optimal in terms of carrying capacity requires further scientific analyses.** Without these analyses we used conservative estimations.

## 3.2. Environmental policy compliance: environmental performance of the NHRDP

### 3.2.1. Evaluation of the Chapter “State of environment in agriculture”

Chapter 2 of the draft NHRDP contains the situation analysis. It is a relatively large part, profound enough in general but in terms of certain issues it is not comprehensive as well as a bit difficult to follow the structure. The mentioned chapter starts with the presentation of the general geographical and socio-economic background (2.1.1), continues with the regional characteristics of agriculture (2.1.2). It contains the situation analysis per axis (2.1.3), then the description of environmental management and land use (2.1.4), and within this a situation analysis per each axis.

It is a general comment that **the situation analysis part mainly highlights only the weaknesses and the strengths; sometimes opportunities (e.g. cultivation traditions) and threats (e.g. drought) emerge but they remain unexplored or ignored.** It is also a general comment that it would help the better interpretation and usability of the situation analysis (so, for example, setting objectives and defining measures on the basis of it) if it used DPSIR scheme, logical framework. This model (developed by the OECD and the EEA), that is an acronym of “**D**iving forces, **P**ressures, **S**tates, **I**mpacts, **R**esponses”, namely a logical framework that examines and explores the interactions of economy-society-environment through the chain of „motivation (driving force) → pressure → state → (environmental) impact → response (solution)”.

**Out of the threats, the challenges in climate change are not or only indirectly mentioned;** these occur now through the more frequent extreme weather events. Though this will be one of the significant influencing factors of agricultural production in the near future.

The chapter correctly highlights that *“In Hungary the institutional background of vocational training on agriculture is stable, still, the qualification of farmers is low... mainly the knowledge on the functions of the European Union (including market and production regulation, support systems, quality standards of products, the rules of animal keeping, and environmental requirements) and the knowledge and skills of farm management are missing... there are shortcomings in the consultancy system and adult education outside the regular school network.”*. At the same time it correctly says that *“... the historic traditions of production and farming are still present, particularly in small settlements.”* Therefore it would be expedient to manage it as unique value and measure.

**Situation analysis only mentions such important factors like the use of chemicals and fertilisers, the future trends thereof.** In addition, it would be worth examining the development of the features of chemicals on the „supply” side, for example in terms of toxicity and degradability in the environment.

At the end of Chapter 2.1.3 it is very positive that the text mentions that *“(...) The level of organisation of the producers is rather poor, and it is still one of the biggest problem in food industry*

(...). *Their representation powers are particularly weak along the sensitive product lines (pig, poultry).*” This is a key issue, the reasons for the poor representation power would be worth further detailing as well as the ways of strengthening would be presented for the Hungarian farmers.

In Chapter 2.1.4, however, the very short subchapter “*Air quality*” is practically about forest belts. **The contribution of agriculture to air quality is significant, first of all the development of dust and stench pollution** but it is worth taking into account the realisation of gradual ban of using bromomethane (this substance is used by almost exclusively by agriculture) required by the Government Decree No. 94/2003. (VII. 2.) on substances depleting the ozone layer.

The subchapter “*Renewable energy, biomass production*” shows some inconsistency with other parts of the situation analysis since it contains not only situation analysis but also measures; e.g. “(...) *the plantation of fast-maturing energy plants, both herbaceous and ligneous and further afforestation are necessary.*” At the same time, this topic would be worth much wider negotiation due to its novelty, importance and controversial nature. **The text does not mention research directions, the species suitable for the climate and other endowments of the country; there are no data on the quantity of the currently generating biomass wastes (e.g. forestry waste), etc.** One should be careful with the “advanced” measures since many studies indicates problems in terms of natural and energy balance issues of energy plantations. Here it would be necessary to present the pros and the contras.

At the issue of average holding size the situation analysis mainly describes the problems of the small average holding size (e.g. market access problems) while it says nothing about the social danger caused by the existing, exaggerated holding concentrations.

It is positive that the situation analysis mentions the conditions of the Romas. This part would be more highlighted, mainly because the majority of the Romas live in rural regions and their situation is very complex. At the same time, the situation analysis says nothing about the potential impacts of the current EU-enlargement (Romania and Bulgaria; with significant agricultural potential and many social problems).

**It would be useful to present the results deriving from the use of agricultural and rural development sources (SAPARD, ARDOP, NRDP, NDP-1), and – compared to these – what kind of shift would be expedient in the case of the NHRDP.**

### **3.2.2. The environmental evaluation of the axes and measures of the NHRDP**

Chapter 4 of the Programme contains the information on the axes and the measures proposed to the individual axes. These measures can be considered as the more concrete tools of the Programme, so we assess these (and the interventions thereof) in an environmental performance evaluation scheme (see Chapter 1.5.2.). The environmental evaluation differentiates several types of the NHRDP measures:

1. The first type means those measures that were evaluated in unchanged form.
2. The second type of measures is those ones that we had to break up submeasures in order to be evaluated in environmental terms since they would not (or not unequivocally) be evaluated in the

“merged” way by the Programme. For example, the “4.1.6. Modernisation of agricultural holdings” (group of) measure(s) contained several submeasures – like supporting animal breeding, horticulture (fruits, grapes, ornamental plants, vegetables, herbs), “GAZDA” NET PROGRAMME – whose common evaluation cannot be performed since the environmental judgement of the submeasures can be totally different, so in this case the evaluation occurred by broken up to submeasures. (Here it is worth mentioning that the type 1 analysis “in unchanged forms” only means that those measures were not broken up or merged.)

3. The third group of measures contains such items that were not analysed because it is not possible due to their widely interpretable nature and/or uncertain content; such measures were, for example: the “LEADER Programme” or the “4.3.6. Skill acquisition, animation and implementation”. We are not able to say on this type of measures what will be implemented within their frames, so the analysis cannot be performed. The results of the evaluation according to the axes as well as measures of the Programme are as follows.

We enclosed the environmental performance evaluation matrix in Annex 4; we indicated the allocated supports, too. We note that the resource distribution among the axes fundamentally affects environmental performance. Axis I concentrates almost half of the resources (47%) to enhance competitiveness, and this mainly means technical modernisation, more intensive production, increase in quantity and through this, the support of the current land use structure. **The organisation of the Programme should be careful and it should take into account the environmental aspects in order to avoid that the resource distribution could lead to the fixation of the outdated production structure and to the increase of the connecting environmental loads.** We provide additional comments to the environmental performance evaluation in the following.

## **axis I: Improving the competitiveness of the agricultural and forestry sector**

### *111. Training, information and diffusion of knowledge*

This measure received positive (in one case 0, so neutral) judgements in all evaluation categories. In addition, it received the highest (+2) value at almost half of the categories. So it is not surprising that **this is one of the best measures of Axis 1 in environmental terms, but even one of the best ones among all measures in terms of “goodness”**. Of course, it depends on the subject of the training that could further strengthen or weaken the impact.

### *112. Setting up of young farmers*

This measure is the example when it cannot be “classically” evaluated according to the impacts of environmental elements (so it received “?” in the evaluation matrix) since for example it is difficult to connect the improvement of the age structure itself to these. At the same time, **all the other aspects with wider spectrum (almost without exception) received modest positive judgement (+1)**.

### *113. Supporting farmers in farm transfers*

This measure is very similar to 112 in terms of objective and tool, so its judgement is the same.

#### *121.1. Plant farming and horticulture (within the modernisation of agricultural holdings)*

Since it is technical infrastructure development, it means energy and material intensive activities, therefore its judgement in terms of environmental elements and nature conservation was a bit negative, at the other aspects it was a bit positive, while – due to the modernisation impact – as regards energy efficiency, very positive (+2). On the whole this submeasure can be characterised by a neutral (about 0) judgement. **The environmental performance of the measure can be significantly improved by adequate conditions.**

#### *121.2. Animal breeding (within the modernisation of agricultural holdings)*

Owing to the modernisation of the installations (e.g. adequate manure storage and management), mainly in terms of water and soil quality it received maximally positive judgement but there were not any negative judgements in the other categories, only a couple of neutral ones (“0”). On the whole, it is a good measure.

#### ***121.3 Purchase of machinery (within the modernisation of agricultural holdings)***

This measure received slightly negative judgements for the emissions into the air and the protected natural areas, its impact on the other environmental elements is neutral (“0”) and for four aspects (e.g. in terms of material and energy savings) a bit positive (+1). On the whole, this measure finished with an overall judgement of neutral, slightly positive (+0, 1). (The judgement can be modified if this measure would replace outdated machinery, or would put into operation new machinery.) **The environmental performance of the measure can be significantly improved by adequate conditions.**

#### ***121.4 “GAZDA” Net Programme (within the modernisation of agricultural holdings)***

This is such a measure where half of the evaluation categories received non-relevant (NR) judgement, since it cannot be really connected to the development for example of food safety (as evaluation category). In the remaining categories, however, a weak positive impact can be assumed, so on the whole it is a good submeasure.

#### ***121.5 Plantation (within the modernisation of agricultural holdings)***

At this measure there are three categories with „non-relevant (NR) judgements: settlement quality forests, environmental awareness. Beside this it received slightly negative judgements for environmental elements and protected natural areas (-1), but the protection and utilisation of landscape values received very positive judgement (+2), the remaining ones were neutral. **The environmental performance of the measure can be significantly improved by adequate conditions.**

#### ***122. Improving the economic value of the forest***

This measure received five non-relevant judgements (out of 18) but since it mainly would help putting into operation of machinery, it received negative (-1 or even -2) scores. It received four neutral judgements and only one (energy efficiency) slightly positive one (+1).

#### ***123. Adding value to agricultural and forestry products***

It received four non-relevant and seven neutral judgements, in the remaining evaluation categories rather positive results – on the whole, this measure received a favourable judgement.

#### ***124. Development of new products***

Due to its intellectual character of the activity this measure received non-relevant judgements in six evaluation categories (mainly for environmental elements). But in all the remaining categories received slightly positive judgements (+1), so on the whole **this measure can be characterised by a fairly good environmental performance.**

#### ***125.1 Development of the agricultural plant and communal facilities of irrigation***

This submeasure received seven non-relevant (e.g. chemical risk) and six neutral (e.g. renewable energy sources) judgements. **The possible disadvantages of the submeasure can be significantly improved by water- and energy-saving irrigation.** Due to the very positive (+2) received for the extreme climate events on the whole it received a positive final judgement, close to neutral.

#### ***125.2 Amelioration: development of the facilities***

This submeasure received many (at one-third of the evaluation aspects) non-relevant judgements (e.g. for environmental awareness, renewable resources, energy efficiency). Beside the many neutral impacts it received slightly positive judgements for soil and food safety, so **the submeasure can be considered as favourable in environmental terms.**

#### ***125.3 Collective investments in water-flow regulations***

This submeasure received six non-relevant judgements but it “cannot be judged” (“?”) in two evaluation categories, like for example: possibility of organic farming, possibility of sustainable regional management. (We remind that this “cannot be judged” means that the measure probably affects the given evaluation aspect, but since the measure is too general, or can be performed in many ways, so the evaluation could not judge the impact.) Due to the four slightly positive judgements **the submeasure can be considered as favourable in environmental terms.**

#### ***125.4-5. Improvement of physical infrastructure related to forestry and agriculture***

This submeasure received five non-relevant judgements. Beside this it received only mid-scores (-1, 0, +1) in the individual categories. Slightly negative impacts were identified at the emissions into air, soil protection and the types of protected natural areas. There were three neutral (0) judgements for water quality and the possibility of sustainable regional management. The measure received slightly positive (+1) judgements for the remaining categories. Based on these, on the whole this measure received a slightly negative judgement.

#### ***125.6. Energy supply and distribution***

At four evaluation categories were the judgement non-relevant. The measure received slightly negative scores for four aspects but beside many (six) neutral judgements we can find maximum score (+2), too; of course, in the category of „renewable energy sources”. There are positive judgements: global air pollution impacts, protection against extreme climate events and quality of urban environment. On the whole, the judgement of the measure is neutral (slightly positive).

#### ***125.7. Proper arrangement of holdings***

This is the measure that received one of the most non-relevant judgements, eight ones (out of 18), so almost in half of the categories. At the same time, it received slightly positive (+1) judgements in all other categories, so on the whole it is rather favourable.

#### ***131. Meeting standards based on Community legislation***

Since this measure is aimed to serve the compliance with environmental, public health, plant health and animal welfare requirements, so no wonder that it received – with two non-relevant judgements (e.g. nature conservation of forests) – only positive judgements; out of these maximum scores (+2) in many cases. **On the whole, this measure has one of the best environmental performances.**

#### ***132. Supporting the participation of farmers in food quality schemes***

Due to its feature this measure received non-relevant judgements at five evaluation aspects, mainly in the case of environmental elements, renewable energy sources and material and energy efficiency. Beside these, in half of the remaining categories it received slightly positive (+1), and in the remaining half very positive (+2) judgements (e.g. for the possibility of sustainable regional management). So the final score is positive but due to the many non-relevant judgements this measure has a smaller environmental relevance.

#### ***133. Supporting of producer groups in the field of information and promotion activities:***

Due to its feature this measure received non-relevant judgements at seven evaluation aspects, mainly in the case of environmental elements, renewable energy sources and material and energy efficiency. At all the remaining categories it received slightly positive (+1) judgements, so the final score is positive but due to the many non-relevant judgements this measure has a smaller environmental relevance.

#### ***141. Semi-subsistence farming***

Due to its feature this measure received non-relevant judgements at half (nine) of the evaluation aspects. The categories of health promotion and food safety were neutral, at all the remaining categories it received slightly positive (+1) judgements, so the final judgement is good but due to the many non-relevant judgements this measure has a smaller environmental relevance.

#### ***142. Supporting of setting up producer groups:***

This measure received non-relevant judgements at seven evaluation aspects, mainly in the case of water and soil quality and at impacts on protected areas. With only one neutral evaluation all the remaining categories received positive judgements. In the case of sustainable regional management was maximally positive (+2). **So the final judgement of the measure is very positive.**

#### ***114. Use of farm advisory services***

For the environmental elements (air, waters, soil) the judgement is non-relevant. However, in all the remaining categories is positive; in the case of sustainable regional management is (+2). **So on the whole, the aggregated judgement of the measure is very favourable.**

#### ***115 Setting up farm management and forestry advisory services:***

This measure is very similar to 114 in terms of its objectives and methods, **so its judgement is the same: very favourable.**



## Axis II: Improving the environment and the countryside

### *212. Payments to farmers in Less Favoured Areas*

This measure received slightly negative judgement (-1) only for emissions into air. In the remaining categories its judgement was mainly slightly positive (+1), while for three aspects (material and energy efficiency, renewable energy sources and quality of urban environment) the judgements were neutral. **On the whole, the final judgement is moderately favourable.**

### *213. Natura 2000 payments*

This measure received non-relevant judgements at four evaluation aspects (e.g. energy efficiency, quality of urban environment), but since these areas a priori were designated of nature conservation purpose, no wonder that the measure received positive judgements in all the remaining evaluation categories. Within this, it received the maximum score (+2) in six cases: impacts on protected areas, Natura 2000, possibilities of organic farming, possibility of sustainable regional management, environmental awareness and protection of landscape cultural heritage. **On the whole, the measure is judged as very positive.**

### *214. Agri-environmental payments*

This measure is similar to 213 (Natura 2000 payments), but there is not any non-relevant categories but all judgements are positive. Out of these it received the maximum score (+2) in nine (!) categories, so on the whole it became **one of the most favourable measures.**

#### *214.a. Preservation of genetic resources*

This measure is similar to 214, so its judgement is the same. (There are not any non-relevant judgements but only positive scores.).

#### *214.b. NRDP agri-environmental determination*

This measure is similar to 214, so its judgement is the same.

#### *214.c. NRDP forest determination*

This measure is similar to 214, so its judgement is the same.

### *215. Animal welfare payments*

Four evaluation aspects (e.g. air quality and soil quality) received non-relevant judgements. Two categories were neutral (0) but the remaining ones received positive judgements. Within this organic farming, food quality and environmental awareness received the maximum score (+2). **On the whole, the measure is judged as very positive.**

### *216. Assistance provided to non-productive investments*

Due to its feature this measure received non-relevant judgements in seven categories (e.g. quality of environmental elements, energy efficiency). Beside these the individual categories received only positive evaluations, dominantly (+1). The evaluation category of protection of landscape cultural heritage received a (+2) score. **On the whole, the judgement of the measure is favourable.**

#### *221.1. First afforestation of agricultural lands*

This measure was interpreted that it did not contain energy plantation. According to this, in the majority of the categories it received positive judgements (except for two neutral judgements), and it received maximum scores (+2) in eight cases. **On the whole, the final judgement is very positive.**

#### *221.2. Plantation of energy crops*

Here the evaluation should be interpreted that the energy crops are not planted to the place of an existing forest (since in this case there would have been worse judgements). There were non-relevant judgements in five cases, in the category of the extreme climate events the qualification is „cannot be judged” („?“). For the renewable energy sources it received the maximum score (+2) but for the protected natural areas the worst (-2). The environmental performance of the measure can be significantly improved by adequate conditions.

#### *222. First establishment of agro-forestry systems*

This measure was interpreted in a way that it does not contain energy plantation (since in this case there would have been worse judgements). It received non-relevant judgement only at one evaluation category, the global

atmosphere pollutants, in all the other categories it was positive, mainly (+1). The categories of forest nature protection, sustainable regional management and protection of landscape cultural heritage received maximum score (+2). **On the whole, the judgement of the measure is favourable.**

#### **223. First afforestation of non-agricultural lands**

This measure received maximum score (+2) for the amount of the global air pollutants. Beside this it mainly received (except for two non-relevant and one neutral categories) slightly positive judgements for all remaining aspects; so **on the whole, it can be considered as a favourable measure.**

#### **224. Natura 2000 payments: forest**

This measure is similar to 213, the Natura 2000 payments, but it is restricted to forest areas. Beside three non-relevant evaluations the judgements of the measure are positive; within this there are six categories with maximum scores (+2), for example: forest nature conservation, Natura 2000 areas, organic farming, protection of landscape cultural heritage, environmental awareness. **On the whole, the final judgement of the measure is very positive.**

#### **225. Forest-environment payments**

Since this measure is clearly supporting activities of nature conservation and environmental protection purposes, so it received positive evaluations in all categories. In the majority of these evaluation categories (11) it received the maximum scores (+2). **So it can be considered as one of the measures with the best environmental performance.**

#### **226.a. Forest rehabilitation – forestry potential (within Restoring forestry potential and prevention actions measures)**

This measure received non-relevant judgement only for the conditions of organic farming, and slightly negative judgement (-1) for material and energy efficiency. By the other aspects the judgements are mainly positive, moreover, in eight categories it received the maximum scores (+2), e.g. global air pollutants, quality of surface waters, soil quality, sustainable regional management, etc. **On the whole, the measure received very favourable judgement.**

#### **226b. Prevention of natural catastrophes affecting forests (within Restoring forestry potential and prevention actions measures)**

Due to its feature, this measure received non-relevant judgements in nine evaluation categories. **Its final judgement is neutral.**

#### **227. Supporting of non-productive forest-environmental investments**

This measure, beside three non-relevant judgements, received only positive scores, within this the maximum (+2) for six evaluation categories. **On the whole, it can be considered as a very positive measure.**

### **Axis III: Improving quality of life**

#### **311. Diversification into non-agricultural activities**

For the majority of environmental elements this measure received non-relevant judgements, and the case was the same for mitigating chemical risks. The impact cannot be judged („?”) in the categories of food safety and health promotion, but in all other cases the judgements are slightly positive, in the category of protection and sustainable utilisation of landscape cultural heritage it received maximum score (+2). **On the whole, it can be considered as a very positive measure.**

#### **312.a Micro-enterprises: technological developments (within the Development of micro-enterprises)**

At this measure the slightly negative, positive and neutral judgements are alternating. A different score can be found only in the category of food safety, where the score is the maximum (+2). **On the whole, its final judgement is neutral.**

#### **312.b Micro-enterprises: marketing, quality assurance, innovation, cluster (within the Development of micro-enterprises)**

Due to its feature the measure received a non-relevant judgement for environmental elements, but in all other categories it received slightly positive (+1) judgements, while in one (sustainable regional management) the score was the maximum (+2). **On the whole, it can be considered as a fairly positive measure.**

### **313. Encouragement of tourism activities**

The evaluation did not count hunting tourism into this measure (it would worsen the judgement of the measure). In several categories there would be slightly negative impacts, like emissions into air, protection of soil and geological values; but there were four neutral judgements and slightly positive judgements in the remaining categories. Of course, in health promotion category maximum positive impact (+2) is likely since the purpose of the measure is mainly this. **On the whole, it can be considered as a moderately positive measure.**

### **321. Basic services for the economy and rural population**

This measure received non-relevant judgements in half of the evaluation categories. In all the remaining categories the judgements were slightly positive, like for material and energy efficiency, quality of urban environment, environmental awareness. On the whole, the measure is of strongly positive (+1, 0) feature but **its environmental weight cannot be considerable due to the many neutral judgements.**

#### **323.1 Conservation and upgrading of the rural heritage**

This measure also received many non-relevant judgements (10) but the at the remaining categories it received positive evaluation, within this in four cases (quality of urban environment, landscape cultural heritage, conservation of protected areas, etc.) the scores were the maximum (+2). **So on the whole, the final judgement is very favourable but its environmental weight cannot be considerable due to the many neutral judgements.**

#### **323.2 Preparation of Natura 2000 plans**

The measure received non-relevant judgements in seven evaluation categories, but for all the other aspects there are only positive scores, within this seven (+2) scores. The measure is **definitely favourable.**

### **34. Skill acquisition, animation and implementation**

Due to its feature this measure is non-relevant for the environmental elements. All the other judgements were slightly positive (+1), for the possibilities of sustainable regional management it received the maximum score (+2). On the whole, **this measure can be considered as definitely favourable.**

## **3.2.3. Identification of measures with paramount and uncertain impacts**

The following measures are of paramount importance for the integration of the sustainable efforts of rural development, agriculture and water management:

125.1. Development of the agricultural plant and communal facilities of irrigation

125.3 Collective investments in water-flow regulations

Keeping the importance of the topic in view, we propose the following:

<b>Proposal 13</b>	<i>Overall scientific assessments should be launched on the “location-dependent” environmental relations of irrigation, melioration and water management.</i>
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In the case of the following measures there were uncertain or slightly negative, environmental impacts:

226b. Prevention of natural catastrophes affecting forests – forestry potential

312.a Micro-enterprises technological developments

In order to reduce uncertainty we propose the following:

<b>Proposal 14</b>	<i>A study should be prepared on the possibilities of environment-friendly technological</i>
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	<i>developments at micro-enterprises.</i>
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**Certain measures – at least at the general level presented in the Programme – proved disadvantageous in environmental terms; these are as follows:**

125.4-5. Improvement of physical infrastructure related to forestry and agriculture

221.2. Plantation of energy crops

121.5. Plantation – the modernisation of agricultural holdings

122. Improving the economic value of the forest

In order to avoid unfavourable impacts we propose the following:

<b>Proposal 15</b>	<p><i>(1) An environmental-type priority list (with life-cycle analysis, based on energy balance) should be prepared on the plant species of energy plantations. At the evaluation of the applications the plant species with higher priority should be given preference.</i></p> <p><i>(2) A “positive list” should be prepared on those agricultural areas that can be suitable for energy plantations and this list should be applied as an evaluation aspect.</i></p> <p><i>(3) At the grants the small-scale, local biomass utilisation (composting using organic waste + biogas-generating equipment, village heating plants) should be preferred.</i></p>
<b>Proposal 16</b>	<p><i>In the course of purchasing machinery and the development of physical infrastructure <b>material- and energy-saving equipment and processes should be preferred.</b> The reduction of the energy demand of agricultural plants and farmers, the increase of energy efficiency and the spreading of small equipment utilising solar, wind and geothermic energy should be promoted.</i></p>

### 3.3. Environmental consistency of NHRDP objectives

**There is a contradiction in the Programme between the measures supporting the development of intensive factory farming and those promoting the adaptation to the local endowments (organic farming).** The contradictions possibly arising from this are not resolved either at theoretical (e.g. in the objectives) or at practical level (e.g. in the supporting conditions or in regional focus).

**There is a contradiction in handling invasive species.** In the measures of the NHRDP supporting the protection against invasive species can be found, while the forestry and agricultural measures do not contain sanctions or conditions on the supportability of using invasive species.

**There are also smaller contradictions in the NHRDP in terms of supporting the traditional cultivation forms.** On the one hand, the production of traditional, local products is supported. However, the Programme does not adequately support the developments of production schemes that require the knowledge of traditions and expertise, much human interaction, special (not high-tech) tools instead of modernisation.

**The Programme, on the one hand, stresses the necessity of holding-concentrations, and on the other hand it supports the roads between the parts of the holdings as well as the arrangement tasks of the undivided common lands.** It obviously shows that a holding-arrangement strategy would be necessary.

In Hungary the new, sustainable methods of sustainable regional water management, irrigation, water-flow regulation, protection against excess surface waters and soil protection are developed. The agricultural water management measures of the Programme should entirely fit to the integrated water management system of the Carpathian basin. One of the main tasks of the modern agriculture (together with water management, environmental protection and regional development) should be to perform a change in the agricultural structure fitting to the water scheme of Hungary deriving from the country's basin-nature and climate.

### **3.4. The probable environmental impacts during the implementation of the NHRDP**

#### **3.4.1. Impacts on air**

The Programme in its current form **has a neutral effect on air quality and on the volume of greenhouse gas emissions on the whole**, but there are measures generating supposedly positive and negative impacts, too. Out of the impacts of the Programme on air, the energetic utilisation of resources generating and to be processed in agriculture (biomass, agricultural waste), production of bioethanol and (to a less extent) biodiesel, so indirectly the increase in the use of alternative fuels could have slightly positive impacts.

**The nature-like afforestation could have favourable and stabilising impacts on air through carbon dioxide sink as well as replacing fossil fuels at local and small enterprise levels** since these may reduce the greenhouse gas emissions to the atmosphere, so the risk of global warming. Modernisation of livestock farms and the utilisation of biogas generating from agricultural wastes could reduce the emissions of methane. Supporting of the measures aiming at the compliance with the Best Available Techniques (BAT) certainly has positive impacts on air quality; at local level mainly in the field of stench emissions but also of other „traditional” air pollutants; in addition, the BAT, by definition, could strengthen the spreading of preventive environmental measures, more significant headway thereof in farming approach – it would also be an important aspect.

At the same time, **the emission of greenhouse gases may increase due to the large-scale use of machinery, the additional fuels used in production process as well as the heating of new livestock farms, gardens and greenhouses by fossil fuels**, and even the local air pollution could increase. The local and regional air quality may deteriorate due to the flue dust component; dust gets into the air is generated during the application of inadequate cultivation technologies and over-motorised tillage. The local and regional air quality may deteriorate due to the measures generating and increasing motorised passenger and freight transportation.

#### **3.4.2. Impacts on surface waters**

The pollution degree of surface waters heavily depends on land use, the quality of agricultural machinery, cultivation methods, crop structure, naturalness of surface water systems, plant cover, the quality and quantity of used pesticides, fertilisers and reclaiming materials, timing of the use thereof.

**The damage caused by floods and excess surface waters can be reduced by change in land use, afforestation, development of wetland habitats, establishment of fish ponds, establishment of rational and integrated management of excess surface waters and (harmonising with this) supporting flood plain landscape management**, taking into account the revenue-generating effects thereof.

The pollution of surface waters can be decreased by the modernisation of livestock farms, transformation of machinery stock and fuel storage facilities, adequate management of liquid manure and agricultural wastes, establishment of environmental infrastructure, prevention of the development of stagnant waters, outer and inner integrated establishment and maintenance of drainage, water management and water retention systems.

As a consequence of causeless degree of holding-arrangement, the partial liquidation and destruction of boundaries, wood belts and water systems could cause the increase of surface runoff and the degree of nutrient inwash to living waters, so may lead to eutrophication.

**In accordance with the requirements of the WFD, in order to avoid the detrimental impacts on surface waters** we propose the following:

<b>Proposal 17</b>	<p><i>(1) At supporting the irrigation development investments, water use occurring from water reserves retained in water surplus periods as well as the application of water-saving processes of modern technology should be preferred, mainly in the case of garden and orchard cultures providing high profit.</i></p> <p><i>(3) The interventions providing the achievement of good ecological state of waters by adequately selected agri-technological operations should be preferentially supported.</i></p> <p><i>(4) The local conformity of the flood-control, agricultural and regional development tasks should be ensured by supporting complex regional landscape management systems.</i></p>
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### **3.4.3. Impacts on groundwaters**

The pollution of groundwaters is close connection with surface land use. Cultivated lands cause larger load for the environment than the areas continuously covered by vegetation. The forced holding-concentration may increase the nutrition load of groundwaters and may deteriorate the water retention capacity of the soil by eliminating the role of ecological protecting zone on reducing diffuse pollutions and regulation as well as by maintaining the high proportion of cultivation. Due to the more frequent desiccation of these areas the danger of inwash is stronger and it is aggravated by the limited nutrient recovery capacity due to the shallower root zone. In order to keep the quality of groundwaters the nutrient load of soils should be limited that is performed by regionally, through determining the optimised land size.

Stopping of further increase in nitrate concentration of groundwaters, maintaining the quality of subsurface aquifers and reducing the existing nitrate pollution can be ensured by the compliance and enforcement of the regulation on nitrate sensitive areas. **This issue is handled adequately by the Programme.** The integrated flood plain and excess surface water management and the rational land use based thereon contribute to the long-lasting assurance of good quantity and quality parameters of groundwaters. The risk of groundwater pollution and the degree of pollution **can be reduced by the following measures supported by the Programme:**

change in land use,

choosing the right agrotechnical practice,

afforestation (larger and area protecting wood belts)

establishment of wetland habitats and fish ponds,  
 establishment of rational and integrated excess surface water management and supporting of flood plain landscape management,  
 Natura 2000 grants,  
 organic farming (especially because of not using fertilisers and persistent, synthetic pesticides)  
 modernisation of livestock farms, spreading of extensive animal management, modernisation and utilisation of manure storage,  
 modernisation of machinery stock and fuel storage facilities,  
 adequate management of liquid manures and agricultural wastes,  
 establishment of environmental infrastructure,  
 prevention of the development of stagnant waters,  
 outer and inner integrated establishment and maintenance of drainage, water management and water retention systems.

The risk of pollution is increased by holding-concentration, the elimination of ecological protecting zones, neglecting and eliminating surface water systems, trenches and beds, use of agrochemicals applied for higher crops in intensive agriculture, the accumulated spoiled pesticides and fertilisers and the packaging thereof.

**In conformity of the requirements of the WFD, in order to avoid the unfavourable impacts on groundwaters we propose the following:**

<b>Proposal 18</b>	<i>The <b>significant reduction in nutrient load burdening waters</b> deriving from arable land cultivation and subsurface waters <b>should be achieved</b> by a considered restoration of the mosaic pattern of agricultural landscapes (e.g. establishment of boundaries, alleys, wood belts, riparian natural habitat zones and smaller ponds).</i>
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#### **3.4.4. Impacts on soil and geological medium**

The impacts on soils as conditionally renewably resources may be very diverse, and even opposite impacts may occur in a given area due to the different interventions of agriculture and forest management. In the same way, depending on the soil type the impacts of a measure may be opposite by regions.

The over-motorisation can lead to soil degradation, soil compaction, erosion, air pollution; even the risk of possible inwash of pollutants released by machines may increase.

The impacts of pesticides and crop-increasing substances on soil can be harmful in the case of inadequate cultivation method and agrotechnology. The residues of pesticides and the packaging wastes thereof also mean significant pollution risks. The agricultural and production wastes, wastewaters and sewage sludges of different origins and chemical compositions pollute soils by their heavy metal and detergent contents. The Programme supports the uncontrolled release to the environment of manures (including liquid manures), however the harmless management and storage thereof should also be ensured. **The utilisation of municipal wastewaters and sewage sludges is**



**financed by the EEOP (and not by the rural development programme);** the agricultural utilisation (adequate management, analysis and release) of generating sewage sludges should be solved through the EEOP.

The risk of erosion may be increased by the too large land-size, inadequate land use, cultivation method, crop structure, application of inadequate agrotechnics. Out of the water and soil management measures of the Programme, in the case of amelioration interventions, **deep tillage of soil may improve the nutrient and water regime of soil and may decrease the risk of excess surface waters**, the energy- and water-saving irrigation methods may reduce the desiccation and erosion of soils. The release of reclaiming materials may help in improving nutrient and water regime of soil and in increasing fertility. The strengthening of the role of biologically degradable agricultural and municipal wastes in soil fertilising may be ensured by establishing composting facilities, releasing the compost to cultivated areas and putting it into the soil. The NHRDP also deals with the residual materials, so it contributes to the increasing of the utilisation of residuals of food industry.

The Programme may reduce the degree of water and wind erosion in certain regions through the increase of the proportion of forests and afforestation, contributing so to the quantitative protection of soils as well as it may improve the nutrient and water balance of soil.

Supporting of the introduction of good agricultural practice, financing the measures against nitrate pollution may also be beneficial to the soils.

The modernisation of livestock farms, spreading of extensive animal management, modernisation of manure storage, modernisation of machinery stock and fuel storage facilities, adequate management of liquid manure and agricultural wastes, establishment of environmental infrastructure may have positive impacts on soils.

The rational, integrated and regionally differentiated excess water management measures may reduce soil erosion caused by waters, leaching, sodification, inwash of released nutrients and chemicals into waters, physical, chemical and biological quality deterioration of soils as well as drought sensitivity of soils. So the excess surface water measures contribute to the increase in fertility of soils.

**In order to avoid the unfavourable impacts on soil** we propose the following:

<p><b>Proposal 19</b></p>	<p>(1) <i>For the environment-friendly soil use there is a need for professional tillage, change in cultivation method, organic matter management, spreading of reclaiming materials, use of environment-friendly pesticides and fertilisers adequate to the agri-ecological endowments, animal and floral manure as well as the establishment of the appropriate crop structure. <b>In order to prevent soil compaction and structure deterioration as well as to improve the water balance characteristics of the soil, the application of the adequate deep-tillage and soil digging agrotechnical procedures should be promoted.</b></i></p> <p>(2) <i>Only the establishment and value added reconstruction of those water- and energy-saving irrigation plants and systems should be supported that take into account the already evolved property structure and comply with the environmental requirements.</i></p>
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### **3.4.5. Impacts on biodiversity**

Biological diversity is fundamentally threatened by two concrete dangers (not only for the Programme and not only in Hungary). The first one is the land use and regional development that are not considered enough. The second one is the strengthening impact of **climate change** on biological diversity.

Hungary's natural flora and fauna (that subsist in a fairly good condition compared to other European countries, despite the complex transformation thereof) is a fundamental part of our national values. **The characteristics of the Hungarian natural areas are that – mainly due to human transformation activity on landscape – they are of small size and in mosaic patterns. Their subsistence mainly requires continuous and often special interventions.** It is an important influencing factor in their conservation whether what kind of human activities characterise the protected areas and their vicinities, namely what kind of land use is characteristic around the nature-friendly areas. The Programme should take into account that wildlife could only be conserved together with the maintenance of their habitats and ecosystems, but in many cases the mere expansion of habitats in protected natural areas is not enough to preserve the viable populations of species in the longer run. Therefore the habitats should also be maintained outside the protected areas. It is important that the Programme **should promote the conservation of the landscape patterns that are paramount for the natural flora and fauna, namely biodiversity should be performed at landscape level.**

**In order to avoid the unfavourable impacts on biodiversity** (besides the proposals made at the compliance with Natura 2000) we propose the following:

<b>Proposal 20</b>	<i>(1) The designation of the Less Favoured Areas should be modified in a way that it mainly concentrates on the areas with high natural value and the sustenance of the landscape-conserving farming performed there, in accordance with the intention of the Union.</i> <i>(2) The monitoring activity focussing on the NATURA 2000 network should be immediately launched in order to provide the necessary information for conserving certain habitats and species less explored so far, then (on the basis of this) for elaborating conservation plans.</i>
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### **3.4.6. Impacts connected to the consequences of climate change and to the risk of an environmental catastrophe**

The measures of the Programme – beside taking into account of the adequate regional specialities and through the water schemes established within the frame of integrated river basin management as well as the modernisation of forest management – may reduce the environmental risks caused by climate change and other factors and the volume of the possible damage.

As a consequence of climate change **the probability of occurrence of precipitations with extreme distribution and increasing quantity**, the distribution of precipitation in time and space may be more diversified causing an increase in the occurrence frequency of floods and excess surface

waters. **At the same time the period of droughts may increase and also the size of the affected areas.** In the past decades, with the transformation of the industrial agriculture the water infrastructure (that in the past mainly served the cultivation methods of large lands ensuring the safety of agricultural production and the drainage of excess surface waters) did not adapt to the holding structure changed in large areas and to the changed land use practice. The schemes are partly deteriorated or eliminated. In addition, the conformity between outer and inner area excess surface water systems is missing.

The mitigation of water damage caused by the climate change may mainly be ensured by increasing the water storage capacity of the soil (deep tillage), by rational arrangement of holdings and change in cultivation method in land use, by concerted establishment of the elements of water retention and storage and by the maintenance of the schemes (river dredging, terrain correction). At the arrangement of holdings, during the integration of undivided common lands the division of the existing canals should be prevented. If these activities receive serious support out of the measures of the Programme, and their connection to water-flow regulation projects funded from other sources in order to utilise synergic effects, then the Programme will be able to reduce the heaviest water management risks significantly.

**In the field of the mitigation of drought damage,** out of the elements of the Programme the following ones may help: water retention, storage of excess surface waters, the economical use of water supply, increase of the water storage capacity of the soil, regionally different development of irrigation, the reconstruction of water-flow regulation facilities, namely **the concerted, integrated excess surface water management and the regional water management.** In the areas mostly endangered by drought it is recommended (beside water supplementation) to apply environment-friendly irrigation, to spread drought tolerant cultures or to change land use. **The Programme contains these measures but the integrated approach should be strengthened.**

Within the natural catastrophes, beside the damage caused by extreme weather and forest fires mainly the biotic factors, and within it the insects cause damage for forest management. The Programme provides support for both restoration and prevention of damage, and the supportable activities contain the enhancement of naturalness that positively affects biodiversity, too. Afforestation may significantly mitigate soil erosion and water damage, too.

### **3.4.7. Impacts on areas under natural protection and on Natura 2000 areas**

9.4% of Hungary's territory, so 874 440 hectares are under natural protection. Our natural heritage – owing to the geographical location, biogeographical position and earth historical past of the country – today is relatively rich in values. In our area the elements of three climate regions (Atlantic-Alpine, continental and sub-Mediterranean) are mixed. Due to these things, many and various habitat types could evolve in a small area; out of them the so-called relict or glacial habitats are irrecoverable values of our natural heritage, sanctuaries and living museums of the Hungarian earth and biohistory. These

diversified habitats that are rich in species are very vulnerable due to their mosaic pattern and wide-range. The threat of their fragmentation and weakening is serious so their conservation may only be realised by increased protection.

Due to the distinctive physical geographical endowments and land use traditions of Hungary, the nature conservation objectives can mainly be met by agriculture and forest management adjusted to the ecological endowments. The principle reason for it is the Hungarian feature that almost all the protected natural areas are cultivated lands at the same time, where land use should harmonise with protection in order to conserve the natural values.

83% of the country's territory is affected by the abovementioned agricultural branch, out of them the harmonisation of agriculture and nature conservation can be established by the so-called agri-environmental management. **The matter of agri-environmental management that environmental and nature protection aspects are built in the use of natural resources, so here in land use.** The NHRDP pays less attention to these endowments and features, it concentrates on the intensive agricultural lands, though the protected areas and areas requiring protection (Natura 2000, Sensitive Natural Areas, Less Favoured Areas) the target areas of agri-environmental management. Their size altogether amounts to 30% of the country's territory. In order to avoid the unfavourable impacts on areas under natural protection (besides the proposals made at the compliance with Natura 2000) we propose the following:

<b>Proposal 21</b>	<i>In order to establish the synergic effects among the axes those applicants that participate in the agri-environmental, the forest-environmental management programmes, should be preferred (as far as possible) at the evaluation of applications for the remaining measures.</i>
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### **3.4.8. Impacts on forests**

On the whole, the NHRDP has very positive or neutral impacts on forests. As regards the naturalness, health condition, quantity and spatial structure of forests, however, several measures may have environmental risks in the long run, and the environmental performance of the measures can be significantly improved in general.

In the case of the impacts **on the naturalness of forests (on the physical structure and biological diversity of forests)** the most dilemmas are hidden in the already mentioned dichotomy of the NHRDP (see the connection with the NDPC). It would like to perform both competitive interventions serving the economic interests and nature-friendly interventions at the same time. The former effort leads to better equipment for forest managers that would result in the change for the easier motorised management of the forests. The nature-friendly, work-intensive cultivation methods (that are still competitive due to the quality production), the associated knowledge would be lost. The investments preserving biological basis would release lots of invasive species.

Afforestations affect the naturalness of forests to a greater extent. The preference of the indigenous species is missing, and the **health conditions of the forests** may be endangered by invasive species and mono-cultural wood plantations. These bear the risk of introducing new

pathogens as well as of the proliferation of pathogens. The NHRDP, though it serves the **quantitative increase of forest stocks**, does not have direct beneficial impact *on the spatial structure* thereof.

**At the increase of biological values of forests the following should be taken into account:**

<b>Proposal 22</b>	<p><i>(1) In the production of the biological basis the native species should be preferred. The preference of the native species should be integrated into the application criteria.</i></p> <p><i>(2) At the supporting of the plantings and forestation the actions connecting to forest blocks, or even more, connecting forest stands or constituting macro-regional eco-network element should be preferred.</i></p>
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### **3.4.9. Impacts on human health and quality of life**

The measures of the Programme mainly have positive impacts on the health conditions of the inhabitants, so partly the quality of life, too, but this latter one is affected by several other factors beside health.

The Programme contributes to the increase of the quality of food and products, to the minimisation of the potential accumulation of chemicals in food products through supporting organic farming, extensive farming and the introduction of product certification and labelling, so increasing food safety and quality. Animal welfare payments also reduce the health risks threatening human beings that emerge in livestock management.

It contributes to the improvement of the quality of life through the development of agricultural, environmental and urban infrastructure, the integrated protection of built, natural and cultural heritage of rural settlements, supporting the programmes of rural communities for population retaining capacity and increasing revenues, ensuring the profitability of agriculture and the improvement of rural employment conditions.

Certain measures may have negative impacts and losers in the society. So over-motorisation, preference of large industrial farms through the reduction of human resource intensity may have negative impacts on rural employment. In the same way, the operation of the sustainable systems of the so-called social forest (and landscape) utilisation may be prevented by the planned energy plantations through blocking the access to natural resources, by extinguishing the nature-friendly, traditional, work-intensive forestry production methods, and indirectly by reducing the opportunities of employment, earning revenues and subsistence.

The touristic utilisation of the local and regional landscape-natural and cultural heritage attractions may improve the disadvantageous employment conditions of rural regions.

The escalation of environmental impacts may exercise new phenomena in different parts of the regional structures. These phenomena may cause conflicts between economic or social and environmental structures in certain regions, region types. The NHRDP has significant, aimed direct and indirect impacts on the social and economic life of rural regions. Out of these indirect impacts

those generated explicitly by environmental impacts and those creating conflicts are present, though to a little extent.

**The intention of spreading the perennial, fast-maturing plantation monocultures (that is supported by the NHRDP) may cause conflicts.** Their cultivation requires much less manpower with adequate motorisation, and in addition, this demand will be seasonal. The growing afforestation has similar impacts. If this change in land use significantly affects a region or a settlement, the decrease of the workforce demand results in difficulties in the population retaining capacity of the village. It would enhance migration and ageing of regions. These social processes would also result in secondary unfavourable impacts. If the revaluation neither of real estate market conditions nor of rural endowments emerges to an adequate extent, and it cannot launch a rural functional change (recreational potential, residence) in time, then the number of neglected houses is increasing, the image of the settlement deteriorates. It would be aggravated if the isolated segregations of a population with low or without income establish in the settlement.

**The encouraging of the processing of certain forest products (that is in the NHRDP) within the frames of national regulation would result in the commercial collection of the products.** This may exploit the goods of the forests. This environmental impact naturally may cause conflicts between forest owners and managers and those collect the wooden products (they are the beneficiaries of the measure) since the origin of these products is difficult to verify. A similar conflict may occur if the inhabitants of settlements that do not have opportunities for living but have demographic problems are forced to exploit the goods of the forests and landscape. Without adequate measures (namely the establishment of forest and landscape utilisation methods in partnership with the owners and managers) this environmental impacts may also cause conflicts among the inhabitants of the villages (moreover, this way of earning revenues would be ceased early and it would push people in need to a deeper crisis). These processes would be intensified by the modernisation of agriculture and forest management since the owners and managers will even more protect their mobile and immobile assets (whose values are increasing due to the supports) from the population in need using the agricultural and forest goods. Those in need having no management or possession rights will hardly receive from the development sources. Rural segregation may deepen.

### **3.4.10. The expected development of environmental awareness**

**On the whole, the NHRDP has favourable impacts on the environmental awareness of the population.** Negative impacts can be found mainly in the field of the local environment and landscape values of the inhabitants and the deterioration of landscape knowledge. Without these the unfavourable consequences of human activities or values to be protected cannot be experienced.

The spreading **industrial, modern cultivation method** causes the deterioration of the connection with the landscape. Industrial cultivation worsens the access to landscape values both in forest management and agriculture owing to the large lands or the intensive cultivation on large lands. The landscape utilisation with invasive species and in plantation-like ways (destroying landscape and land

character) is also not for landscape values and the deepening of environmental awareness, but there is a possibility to establish state-planted shelter belts that make the environment more nature-like.

The prosperity of the tourism of rural regions may only work towards environmental awareness if it relies on natural and cultural landscape values, and protects them at the same time, moreover, it helps their evolution. Opposite the destruction of the rural heritage during the last decades it sustains and revitalises the traditional cultivation methods and the ethnographical heritage. In other cases, if it does not rely on local resources then it will not only show lower environmental performance but it may explicitly affect adversely on the values. The infrastructures and stressing endowments that do not fit into the landscape or are not local ones as well as the propagation thereof destroy landscape character and the uniqueness of landscape.

**Hunting tourism** is also worthy of note since it directly hinders the access to public and landscape values (first of all to forests) for both the local inhabitants and the visitors arriving for not hunting, or directly (fencing), or passively, deriving from the activities (e.g. conflicts between hunters and tourists). Nevertheless, it may constrain the hunting possibilities and the collection of the forest products of the local inhabitants, namely the access to the goods of the forest and the management thereof – it results in the deterioration of the relationship of landscape and man. (It also causes further conflicts, see environmental conflicts.)

**In order to improve environmental awareness** we propose the following:

<b>Proposal 23</b>	<p>(1) <i>Local methodological guidelines should be elaborated for the supporting possibility of hunting tourism. Hunting tourism activities resulting in the establishment of facilities with restricted availability (intensive hunting, game preserve, other fencing) as well as using such existing facilities should not be supported.</i></p> <p>(2) <i>A local methodological guideline should be elaborated for the supporting possibility of countryside tourism.</i></p>
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### **3.4.11. Impacts on organic farming and on the development of sustainable regional management and complex environmental management schemes**

Within the frame of establishing organic farming and sustainable regional management and complex environmental management schemes the establishment of such type of agricultural production may occur that is operable without using artificial materials (soil fertilisers and pesticides), harmonising with the local natural endowments and utilising the resources thereof in a multi-coloured and sustainable way. **On the whole, the NHRDP has very positive impacts on the factors since a part of the planned supports directly aim at the establishment of the schemes, and such type of indirect impacts can also be indicated in the majority of the measures.** Mainly the local natural conditions of the schemes could suffer negative impacts due to the management that does not fit into but changes them as well as due to the utilisation of local conditions where the resources of non-local origin could play role.

### **3.4.12. Identification of the impacts on land use and spatial structure**

Land use and spatial structure mainly have paramount importance in terms of landscape diversity and landscape ecological stability, namely the operation of landscape ecosystem. The stability of landscape ecosystems is enhanced by divers land use, if the stability (in size) of the patches of nature-friendly land use is ensured as well as if the landscape ecological spatial structure facilitates material and energy flow within the landscape. **On the whole, the NHRDP has beneficial impact on space utilisation and neutral effect on spatial structure.** The possible negative impacts of several measures can be eliminated as well as favourable spatial structural impacts can be established.

Today in Hungary the more and more fading but still existing function of **land use** is the establishment of a mosaic pattern against the monotony of agricultural areas (belts and clumps disrupting the large lands and located between the smaller lands). There has been an important task since 15 years and still is the amelioration of land use of areas that were abandoned or have non-agricultural utilisation, or went wild or weedy as well as serving as the starting point of these problems through extensive cultivation or the acceleration of their afforestation. In the domestic forests – instead of the even-aged and monocultural stocks of industrial cultivation – mixed or mosaic-patterned stocks dotted with land use patches without trees (clearings, wetland habitats) are welcomed. A further task is to confine the land use of invasive species. In order to reach land use diversity it is very efficient the conservation (probably careful establishment) of wetland habitats and aquifers as well as the rehabilitation of locations that were damaged and eliminated by human activities. It is important that afforestation should connect to the green areas of the settlements. Beside the afforestation of agricultural areas we propose to support the establishment of shelter belts around facilities, the welfare forests and recreational green areas having positive impacts on the health conditions of the inhabitants, too. The establishment of a network of nature-like habitats, cultivated lands and green areas of settlements should be promoted by co-ordinating the measures of the NHDP and the NHRDP.

**Many measures of the NHRDP have beneficial impacts on land use.** At the same time, supporting of producer groups, holding-concentration and the initiations of plantations may lead to the development of monocultures and may result in the fallback of nature-friendly land use forms. **It is desirable that the change in land use should fit into the local or even the county spatial planning plans.**

Landscape ecological stability is served to a large extent if the interventions pay regard to **spatial structure**. This effort has hardly emerged so far in Hungary (except for at designating ecological networks). The connection of nature-friendly land use patches has actively beneficial impacts on spatial structure. So in the course of the establishment of nature-friendly locations (e.g. wetland habitats and afforestation) the fitting into ecological corridors, the connection of forest blocks as well as the bridging and eliminating of ecological barriers should be taken into account. The favourable spatial structure is served in a passive way if the introduction of artificial land use forms and establishment of barriers are banned in the ecological corridors and in the vicinity thereof. If the zone of a nature-friendly land use is around the settlement (especially if it is a forest), then it is beneficial for the dwelling environment.



**The NHRDP does not have direct impacts against the landscape spatial structure stability but there are not any clear beneficial impacts, too.** Such type of environmental performance of this could be significantly increased if the intervention forms having beneficial impacts on spatial structure would be preferred and if the interventions with potential adverse effects would be excluded from the supports. This latter one is relevant in the case of exploratory roads, the investments of economic infrastructure (energy supply, installations, buildings) and water-flow regulation. The inadequate allocation of these developments could endanger ecological corridors and could form barriers. The supportability of interventions having aimed positive impacts on spatial structure should also be represented in the measures.

**In order to mitigate the negative impacts on land use and spatial structure** we propose the following:

<b>Proposal 24</b>	<i>The establishment and reservation of the mosaic pattern of land use should be promoted. There is a need to consider the change in cultivation method in the case of nature-friendly land use forms (forests, grasses, reed, water body), or planting on them carefully, according to the local conditions.</i>
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### **3.4.13. Impacts on landscape management and landscape carrying capacity**

It is expected that the European Landscape Convention (that are currently under elaboration) will come into effect in the implementation period of the NHRDP. The most important principle of the Convention is to reach the sustainable development based on the balanced relationship among social needs, economic activities and environment. Landscape management is an economic resource, it could create new jobs so it contributes to the improvement of the quality of human life both in deteriorated and developed areas. **So the Programme could be one of the substantial implementation tools of the EU's landscape policy.**

The development of landscape management enables the establishment the traditional farming methods that provide individual landscape character or strengthen it. Landscape management utilises the natural and cultural landscape values as resources, in a sustainable way. Therefore it should accommodate to the local natural endowments and it should not change them as well as it protects the values and heritages forming the resources thereof and serves their evolution. Landscape management serves the maintenance of its carrying capacity pertaining on the flora and fauna and on local community. **On the whole, the NHRDP has beneficial impacts on the mentioned landscape categories.** Negative impacts may be suffered mainly by certain resources of landscape management as well as certain measures may also endanger the attainment of the optimum of landscape carrying capacity.

1. Out of the resources of landscape management the inadequately allocated infrastructural developments not carrying local landscape characters (e.g. roads, buildings) could endanger landscape values. It is to be feared that significant development resources contribute to the rapid

degradation of Hungarian landscape values and the landscape character (this process has already been lasting for six decades). Plantations could also perform negative landscape impacts. In case of their inadequate application the measures aiming at preventing catastrophes also belong to this circle that could result in a more artificial appearance of anyway invasive forest stocks (e.g. fire cuttings).

Measures serving modernisation could endanger the traditional cultivation methods. In the frame of modernisation it is not possible to establish cultivation forms that are not modern in technological terms or utilise mainly human or animal resources instead of motorisation and rely on expertise; in the most cases these would be necessary to produce the traditional local products that are supported by the NHRDP.

The most important resource of landscape management is the landscape ecological system itself with the landscape ecological processes, landscape household, material and energy flow within landscape and the cycles thereof. **The NHRDP mainly bears risks in spreading monocultural plantations and in changing the landscape water balance conditions pertaining to the operation of landscape ecological systems.**

2. The NHRDP supports holding-concentration, producer co-operation and the modernisation of forest management and agriculture (they take effect towards the modernisation of industrial production) supporting these obviously will demand less workforce in the production. The employment of low-qualified workforce cannot be a long-term goal, however it may be a solution for alleviating serious social problems in certain regions (e.g. in regions densely inhabited by Romas).

The overuse of forest by-products could cause the deterioration of landscape carrying capacity. The non-sustainable collection of forest by-products could result in the disappearance thereof within very short time, and the activity could endanger protected species, too.

The overuse of biomass in the long run could also cause the deterioration of landscape carrying capacity. **The aimed production of biomass of energetic purpose without adequate feasibility studies may exhaust the nutrient stocks of soil.** The utilisation of the biomass without the provenance analysis of raw materials and the regional biomass management framework (local plans) it could easily lead to the exhaustion of the soils or forest organic matter supply of certain regions.

The aimed production of biomass of energetic purpose goes together with the appearance of invasive species and the spreading of monocultures, like the afforestation with non-native species. **In order to mitigate the negative impacts on landscape** we propose the following:

<b>Proposal 25</b>	<p><i>(1) Developments containing landscape protection aspects should be preferred in areas being rich in landscape values.</i></p> <p><i>(2) It is useful to determine the threshold limit of the domain of the granted areas by production districts or micro-regions in the supporting of plantations.</i></p>
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### **3.4.14. Impacts on the renewal and spatial utilisation of natural resources**

**Out of the natural resources, the renewal of soils is clearly supported by the measures of the Programme.** Deep tillage, modern agrotechnical operations, supports for protection against erosion as well as supporting of changes in land use and cultivation methods in the case of lands with weaker crops or usually flooded, and the mandatory pedological expert opinions necessary to these actions all serve renewal. **At the same time, the Programme does not stress enough the different intervention possibilities deriving from regional differences,** mainly the comparison of the climate, hydrographical and geographical endowments strongly affecting the water balance of soils to the different constraints determined by national and EU regulations. Though, the individual regions should be prioritised on the basis of endangeredness.

**The Programme probably ensures the renewal of water supplies.** At the same time, there are only few words on water retention, the quantitative protection thereof, the possibilities of flood and excess surface water management, though these tasks do not belong to the scope of agriculture and rural development. The water-saving irrigation methods, the extensive cultivation methods, transformation of certain areas into wetland habitats, however, may help the renewal of living waters and the implementation of integrated water management.

Out of the renewable biological resources, in the case of production of energy grass the damage deriving from the monocultural and very intensive cultivation (the reduction of biodiversity, damage done by biotic pests, deterioration of soil quality), the costs of production, process, transport and energy generation are disproportionate to the expected energy win. The transporting distance is not determined where it is worth taking the energy grass to processing facilities for utilisation. Negative impacts are partly true for energy plantations, except for soil utilisation. Forest are planted in such locations where they improve the water balance and nutrient circulation of soils, and would represent a solution alternative for change in land use. The problem here is the possible negative energy balance and the vulnerability of the monocultural association. The load of the environment is aggravated by transport and fuel consumption of machinery.

In the case of plant cultures suitable for producing bioethanol the processing of crops that are grown on industrial farms (e.g. corn) looks a good solution since there are excess stocks of this crop. In the case of oily-seed crop cultures suitable for producing biodiesel the big distances between the processing plants and the farms are unjustified. In order to establish sustainable regional systems the possibilities of establishing processing plants located close to the growing farms should be examined.

The sustenance of nature-friendly ecosystems as renewable resources should be one of the fundamental pillars of modern agriculture since these systems – with little material and energy investment – provide living for local inhabitants, spare resources, they are less vulnerable to pests owing to their high biodiversity, the extensive production cultures guarantee high quality and safe products, the risk of environmental pollution is low.

**In order to mitigate the negative impacts on natural resources** we propose the following:

<b>Proposal 26</b>	<i>(1) In the call for applications the regional differentiation by criteria of environmental or natural endangeredness should be taken into account as far as possible. (2) In the case of energetic utilisation of biomass, the optimal factory scale should be grounded by a life-cycle analysis of sustainability approach. By default the establishment of local systems is recommended, where the generated heat energy is locally utilised, there are no large transporting distances, and the standard of living of the population is increasing as a consequence of the investments.</i>
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### **3.4.15. Impacts on urban environmental quality**

Out of the measures planned in villages and rural regions the preference of touristic utilisation methods based on landscape-natural and cultural heritage attractions, establishment of integrated small settlement community and service zones, outer and inner renovation, modernisation and making demonstrable of buildings under local protection, renovation of settlement structural units under local protection – these could have positive impacts on the quality of built environment in settlements. These measures also serve the conservation of natural and historical values and landscape elements of settlements.

**The Programme does not support the establishment of inner environmental infrastructure of rural settlements, which may cause further deterioration of the environment in the already bad infrastructural state of villages, mainly in less favoured regions.** The establishment of infrastructure improving inner environmental quality in villages is currently not solved. The co-ordination of outer water schemes with inner rainwater drainage and excess surface water protection network is not solved yet. In the past years the environmental emergencies in villages showed that the damage costs manifold exceeded the costs of prevention. Co-ordination is the fundamental pillar of integrated river basin management.

## 3.5. The overall impact of the measures of the NHRDP

### 3.5.1. The cumulative impact of implementation

The planned Programme – owing to their measures – will have positive impacts on the environment in several fields, and out of them – in an optimal case – there will be synergic impacts that strengthen the effects of each other and probably there will be negative ones, too. The Programme in its current form, on the whole, has neutral impacts **on air quality and the volume of greenhouse gas emissions** but there are measures rendering positive (afforestation, production of renewable energy sources, biogas utilisation) and negative (emission of air pollutants deriving from motorisation, transport, heating with fossil fuels) impacts.

Positive impacts can be rendered **to surface waters and groundwaters** by change in land use, deep tillage of soil, afforestation, establishment of wetland habitats, establishment of fish ponds, development of rational and integrated excess surface water management and flood plain management, modernisation of livestock farms, modernisation of machinery stocks and fuel storage facilities, adequate management of liquid manure and agricultural wastes, establishment of environmental infrastructure. Negative impacts can be rendered to waters by unjustified holding-concentration with large lands, partial elimination of boundaries, wood belts and water systems, release of agrochemicals in unjustified amount.

Negative impacts can be rendered to **soils** by soil degradation, soil compaction and increased erosion deriving from the overuse of machinery as well as the release of agrochemicals in unjustified amount. Positive impacts can be rendered to soils by the deep tillage of soil, improvement of nutrient and water household of soils, energy- and water-saving irrigation methods, afforestation, supporting of the introduction of the best agricultural practice, modernisation of livestock farms, spreading of extensive livestock management, modernisation of manure storage, modernisation of machinery stocks and fuel storage facilities, adequate management of liquid manure and agricultural wastes, establishment of environmental infrastructure and the integrated and regionally differentiated water management measures.

Beside taking into account of the adequate regional specialities and through the water schemes established within the frame of integrated river basin management as well as the modernisation of forest management may reduce the environmental risks caused by climate change and other factors and the volume of the possible damage. The mitigation of drought damage is served by water retention, storage of excess surface waters, the economical use of water supply, increase of the water storage capacity of the soil, regionally different development of irrigation, the reconstruction of certain water-flow regulation facilities.

On the whole, the NHRDP has decisively positive or neutral impacts on **forests**. The naturalness, health condition, quantity and spatial structure of forests, however, several measures may have environmental risks in the long run, and the environmental performance of the measures can be significantly improved in general. The environmental damage threatening the forests may be mitigated

by the sources for restoration and prevention and the increase of natural state. At the same time, the NHRDP may endanger the health conditions of the forests by invasive species and mono-cultural wood plantations, so the traditional, nature-friendly forests may be extinguished.

The NHRDP has significant, aimed direct and indirect impacts **on the social and economic life of rural regions**. Out of these indirect impacts those generated explicitly by environmental impacts and those creating conflicts are present, though to a little extent. The intention of spreading the perennial, fast-maturing plantation monocultures may cause conflicts, extinguishing the nature-friendly, traditional, work-intensive forestry production methods, water-flow regulation limited to agricultural areas would further increase the risks of excess surface waters, especially in inner areas. All these may cause conflicts between farmers and the inhabitants, degrade the real estates of a given part of the settlement, may reduce the mobility of those living there. The encouraging of the processing of forest products within the frames of national regulation may cause conflicts since it would result in the commercial collection of the products, and in collision between forest owners and those collect the wooden products. In hunting tourism the unduly high damage caused by wildlife populations may cause conflicts between forest owners, forest managers, farmers and wildlife managers.

On the whole, the NHRDP has favourable impacts **on the environmental awareness of the population**. Negative impacts can be found mainly in the field of the relationship with the local environment and landscape values – due to the impoverishment – of the inhabitants and the deterioration of landscape knowledge. The prosperity of the tourism of rural regions may only work towards environmental awareness if it relies on natural and cultural landscape values, and protects them at the same time, moreover, it helps their evolution.

The measures of the Programme mainly have positive impacts on the **health conditions of the inhabitants**, so partly the quality of life, too through supporting of food safety, environmental safety, facilitating infrastructure and community programmes. Negative impacts may be rendered by the extinguishment of work-intensive forestry and agricultural production methods, and indirectly by reducing the opportunities of employment, earning revenues and subsistence.

The NHRDP has very positive impacts **on the establishment of** organic farming and sustainable regional management and **complex environmental management schemes** since a part of the planned supports directly aim at the establishment of the schemes, and such type of indirect impacts can also be indicated in the majority of the measures. Mainly the local natural conditions of the schemes could suffer negative impacts due to the management that does not fit into but changes them as well as due to the utilisation of local conditions where the resources of non-local origin could play role.

The NHRDP has decisively beneficial impacts **on space utilisation** through supporting of the conversion to the extensive and organic farming, at the same time, supporting of producer groups, water-flow regulation, holding-concentration and the initiations of plantations prefer the monocultures with large lands that may result in the fallback of nature-friendly land use forms. The Programme has neutral impacts on spatial structure since it does not have direct impacts against the landscape spatial structure stability but there are not any clear beneficial impacts, too. The connection of nature-friendly land use patches has actively beneficial impacts on spatial structure but the investments of economic infrastructure (energy supply, installations, buildings) may render negative impacts. The inadequate allocation of these developments could endanger ecological corridors and could form barriers.

On the whole, the NHRDP has beneficial impacts on landscape through supporting of the spreading of **landscape management**, the maintenance of carrying capacity pertaining on the flora and fauna and on local community, protection and utilisation of resource-generating natural and cultural landscape values and heritages. Negative impacts may be suffered mainly by certain resources of landscape management like landscape and landscape ecosystem as well as the traditional cultivation methods (with the impacts of plantations, invasive tree species, buildings, irrigation and water-flow regulation facilities). Negative impacts may render the reaching of the optimum of the landscape carrying capacity through the holding concentration with large lands and the development and modernisation of industrial farming since the employment of local communities may decrease, the defencelessness may increase, the ecological living conditions of wildlife may decrease. The energetic overuse of biomass in the long run could also cause the deterioration of landscape carrying capacity by causing the exhausting of nutrient stocks, by the appearance of invasive species and the spreading of monocultures. The overuse of forest by-products may even lead to the disappearance thereof.

The NHRDP probably will have positive impacts on the environmental performance of the **branches connected to agriculture** (e.g. food industry, production of biofuels) but the capacity and the geographical location may significantly affect this impact. It is important that during the implementation of the Programme the impacts on the connected branches should be taken into account.

#### **Impacts of NHRDP measures on the environment<sup>39</sup>**

<b>NHRDP MEASURES</b>	<b>Impact</b>
111. Training, information providing activities, innovation	significant positive
112. Setting up of young farmers	positive
113. Supporting farmers in farm transfers	positive
114 Use of farm advisory services	significant positive
115 Setting up farm management and forestry advisory services	significant positive
121.1.Plant farming and horticulture (modernisation of agricultural holdings)	neutral
121.2. Animal breeding (modernisation of agricultural holdings)	significant positive
121.3 Purchase of machinery	neutral
121.4 “GAZDA” Net Programme (modernisation of agricultural holdings)	significant positive
121.5. Plantation (modernisation of agricultural holdings)	negative
122. Improving the economic value of the forest	significant negative

<sup>39</sup> Based on the detailed evaluation presented in Annex 4

123. Adding value to agricultural and forestry products	neutral
124. Development of new products	positive
125.1. Development of irrigation plant facilities	neutral
125.2 Amelioration: facility development	neutral
125.3 Collective investments in water-flow regulations	neutral
125.4-5. Improvement of physical infrastructure related to forestry and agriculture (improving of agricultural and forestry infrastructure)	negative
125.6. Energy supply and distribution	neutral
125.7. Arrangement of holdings (improving of agricultural and forestry infrastructure)	positive
131.Meeting standards based on Community legislation	significant positive
132. Supporting the participation of farmers in food quality schemes .	significant positive
133. Supporting of producer groups in the field of information and promotion activities	positive
141.Supporting semi-subsistence farming	positive
142.Supporting of setting up producer groups	positive
212. Payments to farmers in Less Favoured Areas (LFA)	positive
213. Natura 2000 payments	significant positive
214. Agri-environmental payments	significant positive
214.a. Preservation of genetic resources	significant positive
214b. NRDP agri-environmental determination	significant positive
214c. NRDP forest determination	significant positive
215. Animal welfare payments	significant positive
216. Assistance provided to non-productive investments	significant positive
221.1. Agricultural areas - afforestation (first afforestation of agricultural land)	significant positive
221.2. Plantation of energy crops	negative
222. First establishment of agro-forestry systems	significant positive



223. First afforestation of non-agricultural lands	positive
224. Natura 2000 payments: forest	significant positive
225. Forest-environment payments	significant positive
226a. Forest rehabilitation (forestry potential)	significant positive
226b. Prevention of natural catastrophes affecting forests (forestry potential)	negative
227. Supporting of non-productive forest-environmental investments	significant positive
311. Diversification into non-agricultural activities	positive
312.a Micro-enterprises: technological developments	negative
312.b Micro-enterprises: marketing, quality assurance, innovation, cluster	significant positive
313. Encouragement of tourism activities	neutral
321. Basic services for the economy and rural population .	positive
323.1 Conservation and upgrading of the rural heritage	significant positive
323.2 Preparation of Natura 2000 plans	significant positive
34. Skill acquisition, animation and implementation	significant positive

### **3.5.2. Probable environmental conflicts in the case of the cancellation of the implementation of the Plan**

The support of **afforestations** is one of the stressed elements of the NHRDP. In the case of the cancellation of the Programme and by knowing the perspectives of the Hungarian central budget the good processes of the increasing forestation of the last decades would be stopped for long years due to the expected lack of national sources. The rather it is true since the afforestations funded by Union sources – according to the experience so far – will be able to replace the afforestation supports earlier provided only from national sources.

The **case of naturalisation and spreading of organic farming** is similar to afforestations. In the case of the cancellation of the NHRDP, with the lack of national sources the evolving favourable processes cannot be supported. The naturalisation of the agri-environmental measures and the granting

of the payments, namely the implementation of the National Agri-Environmental Programme would be endangered without the Programme.

Without funding the eligible activities of **outer water-flow regulation** Hungary cannot comply with its commitments within the frame of the Water Framework Directive, the conservation of the good status of groundwaters and surface water and the quantitative and qualitative protection of waters cannot be ensured, the environmental damage caused by extreme weather events generated by the climate change cannot be mitigated. It is important, however, that the establishment of sustainable flood and excess surface water management schemes should be occurred in an integrated manner, by taking into account the regional specialities and as the co-ordinated systems of water retention and distribution.

The utilisation of **biomass** in accordance with the environmental criteria and the increase of the existing proportion of renewable energy sources in energy production is a national interest. However, the utilisation of biomass – according to cost-efficiency, sustainability and environmental aspects – does not contribute to the environmental compliance of the Programme in a unanimously positive way. Therefore at this supporting construction it is important to carry out the energy balance analyses, to consider ecological aspects and to support of the establishment of regional energy schemes.

## **4. PROPOSALS TO MANAGE THE NEGATIVE ENVIRONMENTAL IMPACTS OF THE NHRDP**

### **4.1. Proposals rendering the Plan and the Programme more sustainable**

In this chapter we summarise and systematise the proposals presented in the previous chapters of the environmental report. So we do not make any new proposals in this chapter. (The number in brackets before the proposal is the number of the proposal.)

#### **4.1.1. Proposals to the Plan**

1. In the course of the implementation of the Programme, where it is possible, the application of supporting conditions and criteria determined at micro-regional level should be ensured, by taking into account the environmental sensitivity and agricultural suitability of certain areas of Hungary.
2. We propose to complete the sustainability horizontal policy in the Plan: “At the enforcement of the horizontal policies it is a basic criterion to take into account the principles of local sustainability and landscape approach”.
- 3(1) The conformity between the Programme and the Regional Operative Programmes (they also play role in regional development) should be ensured.
- 3(2) The claim of accommodation to the local endowments should be secured as a principle in the Plan.

#### **4.1.2 Proposals to the Programme**

##### **To the measures of Axis I**

- 4(4) In the small village regions the spreading of the production of local products and the organic farming should be promoted.
- 7(1) In the case of the farms with high number of livestock the treatment of sludge of agricultural origin and manure should be especially promoted.
- 7(2) As far as possible, the treatment of organic wastes of agricultural origin (e.g. production of other products, soil fertilising, spreading of composting) should be supported.
9. In the case of livestock farms – in order to comply with the BAT – the establishment of insulated manure storing basin of adequate size and of the related monitoring systems should be supported.
- 10 At the grants (especially in the case of purchasing machinery, irrigation and infrastructural development) the spreading of energy-saving solutions should be emphasized.
- 12(1) In the case of measures related to water management the Applicant should present the way the investment or development contributes to the objectives of the WFD (Water Framework Directive).
- 12(2) Grant should be given for the rural development consultants in order to improve their information on WFD.
13. Overall scientific assessments should be launched on the “location-dependent” environmental relations of irrigation, melioration and water management.

16. In the course of purchasing machinery and the development of physical infrastructure material- and energy-saving equipment and processes should be preferred. The reduction of the energy demand of agricultural plants and farmers, the increase of energy efficiency and the spreading of small equipment utilising solar, wind and geothermic energy should be promoted.
- 17(1) At supporting the irrigation development investments, water use occurring from water reserves retained in water surplus periods as well as the application of water-saving processes of modern technology should be preferred, mainly in the case of garden and orchard cultures providing high profit.
- 17(2) The interventions providing the achievement of good ecological state of waters by adequately selected agri-technological operations should be preferentially supported.
- 17(3) The local conformity of the flood-control, agricultural and regional development tasks should be ensured by supporting complex regional landscape management systems.
- 19(1) For the environment-friendly soil use there is a need for professional tillage, change in cultivation method, organic matter management, spreading of reclaiming materials, use of environment-friendly pesticides and fertilisers adequate to the agri-ecological endowments, animal and floral manure as well as the establishment of the appropriate crop structure. In order to prevent soil compaction and structure deterioration as well as to improve the water balance characteristics of the soil, the application of the adequate deep-tillage and soil digging agrotechnical procedures should be promoted.
- 19(2) Only the establishment and value added reconstruction of those water- and energy-saving irrigation plants and systems should be supported that take into account the already evolved property structure and comply with the environmental requirements.

## **To the measures of Axis II**

- 4(5) In the rural regions being rich in landscape values the elaboration of local sustainability strategies as well as the completion of strategic environmental assessments should be promoted.
- 8(1) Within the agri-environmental measure the Sensitive Natural Areas Programme having concrete nature conservation objective and providing high enough revenue for sustaining the nature-friendly management methods should receive paramount role.
- 8(2) Within the agri-environmental measure – after the expiry of the 5-year commitment – it is expedient to reduce the proportion of the environmental programs bringing more modest environmental outcomes by discarding the arable land basic program and by relatively reducing the area proportion and supporting intensity of integrated farming.
11. The NATURA 2000 measure should be launched from 2007. After the new resource distribution among the axes it is expedient to provide larger sources for those measures that result in better environmental outcome.
- 15(1) An environmental-type priority list (with life-cycle analysis, based on energy balance) should be prepared on the plant species of energy plantations. At the evaluation of the applications the plant species with higher priority should be given preference.
- 15(2) A “positive list” should be prepared on those agricultural areas that can be suitable for energy plantations and this list should be applied as an evaluation aspect.
- 15(3) At the grants the small-scale, local biomass utilisation (composting using organic waste + biogas-generating equipment, village heating plants) should be preferred.
18. The significant reduction in nutrient load burdening waters deriving from arable land cultivation and subsurface waters should be achieved by a considered restoration of the mosaic pattern of agricultural landscapes (e.g. establishment of boundaries, alleys, wood belts, riparian natural habitat zones and smaller ponds).
- 20(1) The designation of the Less Favoured Areas should be modified in a way that it mainly concentrates on the areas with high natural value and the sustenance of the landscape-conserving farming performed there, in accordance with the intention of the Union.
- 20(2) The monitoring activity focussing on the NATURA 2000 network should be immediately launched in order to provide the necessary information for conserving certain habitats and species less explored so far, then (on the basis of this) for elaborating conservation plans.
21. In order to establish the synergic effects among the axes those applicants that participate in the agri-environmental, the forest-environmental management programmes, should be preferred (as far as possible) at the evaluation of applications for the remaining measures.

- 22(1) In the production of the biological basis the native species should be preferred. The preference of the native species should be integrated into the application criteria.
- 22(2) At the supporting of the plantings and forestation the actions connecting to forest blocks, or even more, connecting forest stands or constituting macro-regional eco-network element should be preferred.
- 24 The establishment and reservation of the mosaic pattern of land use should be promoted. There is a need to consider the change in cultivation method in the case of nature-friendly land use forms (forests, grasses, reed, water body), or planting on them carefully, according to the local conditions.
- 25(2) It is useful to determine the threshold limit of the domain of the granted areas by production districts or micro-regions in the supporting of plantations.
- 26(2) In the case of energetic utilisation of biomass, the optimal factory scale should be grounded by a life-cycle analysis of sustainability approach. By default the establishment of local systems is recommended, where the generated heat energy is locally utilised, there are no large transporting distances, and the standard of living of the population is increasing as a consequence of the investments.

### **To the measures of Axis III**

- 4(2) The development of eco-tourism should be promoted in the regions being rich in landscape values, in small village and scattered farm regions.
- 4(7) Pilot projects for surveying and eliminating the environmental pollution sources should be launched in scattered farm and small village regions.
- 6. The Programme should contain express reference to the fundamental document of Hungarian environmental policy:  
 “On the basis of the second National Environmental Programme (NKP-II, 2003-2008) the NHRDP takes into account the strategic aims and objectives of the Hungarian environmental policy, and it contributes to the environmental goals of the NKP-II, especially in the following fields:
  - establishment and protection of the good state of waters in the frame of the integrated water management;
  - conservation of the values of the nature conservation areas, reservation of natural heritage and subsistence of ecological systems;
  - agri- and forest environmental measures and conservation of biodiversity through supporting the areas of the Natura 2000 network;
  - increase of forestation;
  - increase of the utilisation proportion of renewable energy sources;
  - reduction in the emissions of greenhouse gases;
  - qualitative and quantitative protection of soil;
  - reduction of erosion, soil contamination and dust pollution.”
- 14. A study should be prepared on the possibilities of environment-friendly technological developments at micro-enterprises.
- 23(1) Local methodological guidelines should be elaborated for the supporting possibility of hunting tourism. Hunting tourism activities resulting in the establishment of facilities with restricted availability (intensive hunting, game preserve, other fencing) as well as using such existing facilities should not be supported.
- 23(2) A local methodological guideline should be elaborated for the supporting possibility of countryside tourism.

### **Proposals helping implementation (e.g. institutional system, technical assistance)**

- 5(1) The experts of the regions should participate (at least with consultative role) in the monitoring and the decision preparatory committees of the NHRDP.
- 5(2) The implementation of the NHRDP should be represented in the monitoring committees of the Regional Operative Programmes as well as of the TAMOP (Social Renewal Operative Programme) and the TIOP (Social Infrastructure Operative Programme).

- 5(3) In the procedural guideline of the NHRDP it should be ensured that the developments also granted from the operative programmes (OPs) of the NHDP (New Hungary Development Plan) are preferred.
- 5(4) The common representative of the LEADER-type actions should also be present in the monitoring committees of the Regional Operative Programmes.
- 5(5) The monitoring and evaluation system of the NHRDP should be capable of determining the common professional performance measured in the individual micro-regions (mainly in the rural micro-regions as well as settlements) of the OPs of the NHRDP and the NHDP.
- 5(6) From the technical assistance budget of the NHRDP it should be ensured that the implementation is capable of improving the performance of certain weakly performing micro-regions or region-types (e.g. consultancy, expert availability, introduction of further application criteria).

## **Overall proposals that can be taken into account for several measures**

- 4(1) For all investment and development measures the enforcement of the requirements of “clean industry” should be pursued.
- 4(3) In the rural regions being rich in landscape values the spreading of integrated landscape management incorporating agriculture, forest management, hunting management and recreation activities should be promoted.
- 4(6) Pilot projects for the introduction of the so-called social forest as well as for the protection of heritage and the development based on the cultural resource thereof should be launched in the regions mainly inhabited by deprived social groups.
- 4(8) The granting of the developments pertaining to renewable energy sources of agricultural base should be underpinned by complex life-cycle analyses with sustainability approach.
- 25(1) Developments containing landscape protection aspects should be preferred in areas being rich in landscape values.
- 26(1) In the call for applications the regional differentiation by criteria of environmental or natural endangeredness should be taken into account as far as possible.
- 27. On the basis of the SEA environmental report a separate Sustainability Guideline should be elaborated for the Programme.

## 4.2. “Compensation” measures aiming at the mitigation of the emerging impacts

In this chapter we summarise those proposals that we elaborated in order to compensate the possibly emerging negative environmental impacts by the measures of the New Hungary Rural Development Programme. We note that this list contains only the indispensable compensations; we presented our proposals in details in Chapter 4.1. Only Axis I requires compensation measures.

Axes, measures	Compensation proposal	Note
<b>Axis I: Improving the competitiveness of the agricultural and forestry sector</b>		
111. Training, information and diffusion of knowledge	Assurance of agricultural and rural development R&D conditions	For the examination of the negative environmental impacts of the axis
112. Setting up of young farmers		
113. Supporting farmers in farm transfers		
121.1. Plant farming and horticulture (modernisation of agricultural holdings)	With the priority of small- and medium-size farms	Horticulture on arable lands: use of fertilisers according to the Nitrate Directive;
121.2. Animal breeding (modernisation of agricultural holdings)	With the priority of small- and medium-size farms	Animal species and animal density in accordance with the ecological endowments of the landscape (Livestock unit/hectare); animal welfare and environmental requirements as the condition of supporting in the case of intensive animal management technology
121.3. Purchase of machinery	With the priority of family farms	
121.4 “GAZDA” Net Programme (modernisation of agricultural holdings)	Support of technological developments of low energy demand	
121.5. Plantation (modernisation of agricultural holdings)	Support of landscape cultivation in accordance with the ecological endowments	
122. Improving the economic value of the forest		
123. Adding value to agricultural and forestry products		
124. Development of new products		
125.1-3. Irrigation, amelioration, water-flow regulations (improvement of the infrastructure of agriculture and forestry)	Preference of water retention facilities; launch of VTT landscape management programme	

<b>Axes, measures</b>	<b>Compensation proposal</b>	<b>Note</b>
125.4-5. Improvement of physical infrastructure related to forestry and agriculture (improvement of the infrastructure of agriculture and forestry)	Support of technical and infrastructural developments fitting to nature-like forest management	
125.6. Energy supply and distribution	Preference of energy-saving solutions	



## **5. FURTHER PROPOSED MEASURES**

## **5.1. Measures adaptable to other strategic documents**

### **5.1.1. Environment and Energy Operative Programme**

The utilisation possibilities of the EAFRD – mainly as regards the supported activities and the scope of beneficiaries – are limited, so the co-ordination of the objectives and measures of the NHRDP and the EEOP has significant role (energetics, water-flow regulations, environmental infrastructure). Those infrastructural investments not receiving support from the EAFRD but connected to the management and use necessary to conserve the natural values of protected areas under state management would be implemented within the frame of the EEOP.

It is worth focussing the renewable energy use of the EEOP (beyond biomass) to rural regions and settlements since these are the locations where the communities really feel the developments as their own and they adapt to the local natural endowments. This also requires that the support intensity should be the possible highest (especially in scattered farm regions).

### **5.1.2 Regional Operative Programmes**

The implementation of submeasures planned within the frame of outer water-flow regulations in the NHRDP (in accordance with the Water Framework Directive) should be harmonised with the inner water-flow regulation operations funded within the frame of settlement rehabilitation of the ROPs.

In the procedural orders of the implementation requirements of the EEOP and the ROPs those developments (projects; integrated projects in the case of the ROPs) should be preferred to that the projects funded from the NHRDP are demonstrably connected. The central projects (especially within e.g. renewable energy investment, national park tourism, eco-tourism, development of attractiveness, organisation of public transport or of regional public services, inner water-flow regulation settlement development) should be established in a way that the smaller projects of the containing or neighbouring rural regions could be associated.

## 5.2. Proposals adaptable to the documents connected to the NHRDP

We consider important that the aspects presented in the proposals should be consequently represented in calls for application, in judgement guidelines and in procedural orders.

<b><i>Proposal 27</i></b>	On the basis of the SEA environmental report a separate Sustainability Guideline should be elaborated for the Programme.
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## **6. EVALUATION OF THE INDICATORS OF THE NHRDP**

### **6.1. Indicators of the Plan**

At the level of the New Hungary Rural Development Strategic Plan the indicators assigned to the individual axes are the following:

#### **Axis I (indicators assigned to the priority):**

Profitability of agriculture

Number of maintained and created jobs

Gross value added of agriculture sector

#### **Axis II (indicators assigned to the priority):**

Increase of the agricultural lands that emphasise environmental and landscape management aspects and affected by agriculture and forest management adapting to agri-ecological endowments

Decrease of agricultural lands endangered by water and wind erosion

#### **Axis III (indicators assigned to the priority):**

Proportion of farmers pursuing economic activity outside agriculture

Increase in employment of non-agricultural sectors

Improvement of self-employment

#### **Axis IV: LEADER (indicator assigned to the priority):**

Area and population covered by the Local Action Groups

It can be asserted that even with the environmental-type indicators of Axis II we cannot receive a more detailed picture of the sustainability relevance of the Plan.

## 6.2. Indicators of the Programme

In the New Hungary Rural Development Programme the (common EU) indicators connected to the given measure are in table format at each measure; the quantified goals of the measure are set on the basis of these. The indicators will be defined separately, by the following types:

*Output indicator* (it measures in financial or physical units; mainly e.g. the number of supported applications, farmers, communities)

*Result indicator* (it measures the direct and immediate impacts of the measures; e.g. the number of those farms that introduce new products or technologies; that comply with new requirements, created jobs)

*Impact indicator* (it measures results going beyond the direct impacts; e.g. it examines some kind of added – economic – value)

This triple indicator scheme consequently appears in all measures, according to Article 81 of Council Regulation 1698/2005, though the tables are short in several cases.

It is difficult to find environmental or environmental-type ones among them. To mention an example, where the environmental indicator appears at the measure “Meeting standards based on Community legislation”, the triple indicator structure is as follows:

**Table 8 Sample for indicator types, from the NHRDP**

Indicator type	Indicator	Goal
Output	Number of supported farms; Environmental protection; Animal welfare, health; Horticulture	5.000
Result	The number of those farms that comply with the new requirements	
Impact	Net value added expressed in PPS; Change in gross value added per workday unit	

Source: NHRDP

The Table shows that the output, moreover, even the result indicator (in an implicit way) contains environmental aspects though these are not clear and they have no assigned goal values.

## 6.3. Proposed environmental indicators to the Programme

### **6.3.1. Necessity of environmental indicators and the possibilities of the development thereof**

The relevant EU regulation makes possible for the Member States to use additional indicators beyond the common indicators to be used compulsorily. **We propose that the indicators should be completed by environmental indicators at the individual measures.** The environmental indicators have three main purposes:

Provide information on the environmental problems for the decision-makers so they could weigh up the severity of the given problem.

Support the development of the adequate policy by exploring the primary reasons for environmental loading.

Examine the impacts of the responses given by the policy.

The matrix evaluating environmental performance could provide help in developing the indicators, if necessary. Basically two questions could be raised on it:

At which measures is it expedient to use environmental/natural indicators?

What should this indicator “indicate”?

The answer could be given by the matrix evaluating environmental performance. **First, it is expedient to use “green” indicators at those measures that received stronger negative or positive overall judgements but obviously the former is more important. So it would be reasonable to use environmental indicators at the following measures:**

125.4-5. Improvement of physical infrastructure related to forestry and agriculture

221.2. Plantation of energy crops

121.5. Plantation – modernisation of agricultural holdings

122. Improving the economic value of the forest

The answer to the second question (What should this indicator “indicate”?) could also be deduced from the adequate line of the matrix evaluating environmental performance. Obviously, it is expedient to create the indicator to those environmental evaluation aspect(s) that received strong negative (-2) judgement. Beside these, in certain cases it would be worth creating indicators for those aspects received “?”, so that could not be judged since in these cases probably there is connection between the measure and the environmental aspect but the degree and the nature thereof was not judgeable in the SEA stage.

We note that in the Programme there is nothing about the data collection, process and analysis chain in the course of the implementation of the measures, so we do not know who and how will be the defined many indicators measures, monitored, and how the general public will be informed on the development of these values (namely on the successfulness of the measure).

### **6.3.2. Concrete proposed environmental indicators**

In the following section we propose environmental indicators serving the monitoring of the environmental aspects of the implementation of the Programme.

#### **Regional sustainability:**

The proportion of the local beneficiaries of the support (especially support of micro-enterprises, tourism development, village renewal, service centres, plantation of agricultural crops, forest plantation, water-flow regulations, infrastructure investments) and the proportion of subcontractors involved from outside the micro-region.

The proportion of the materials coming from inside and outside the given micro-region within the amount of the raw material utilised in the supported facility serving the energetic process of biomass.

The proportion of the holiday population potentially appearing owing to the touristic developments compared to the residents of the settlement

The proportion of the new agricultural and forestry plantations at settlement/micro-regional level (hectares/hectares).

#### **Forests, energy plantations:**

The proportion of forest plantations with invasive and native species (hectares/hectares)

The number of farms supplied by energy deriving from renewable energy sources

The proportion of energy forests of the planted forest areas

Energy grass established from support [hectares]

Energy forest established from support but broken down to each type within it, e.g. acacia, poplar, etc. [hectares/type]

Bioethanol or biodiesel producing facilities established from support but broken down to each type within it, e.g. rape, corn, sunflower, etc. [hectares/type]

The land size distribution of supported plantation types, by plant species.

#### **Sustainable water management**

The size of areas covered by excess surface waters (hectares)

The development of endangeredness by excess surface waters (number of protection days against excess surface waters)

New water reservoir capacities established to meet the ecological water demand, million m<sup>3</sup>

The size of new wetland habitats established by change in land use (hectares)

The amount of water spared by the use of water-saving irrigation systems (m<sup>3</sup>)

The size of areas rendered deep-tillage (hectares)

## **Purchase of machinery**

The number of purchased new machinery [pcs]

The number of old machinery replaced by new machinery (= the number of old machinery put out of use explicitly due to the purchase of new machinery).

We note that our proposals on indicators cannot be considered as overall, and axis-specific proposals on the indicators should be done within the frame of the Sustainability Guideline to be elaborated.

## **monitoring and evaluation of the environmental performance of the NHRDP**

It is essential that during the implementation of the measures, the relevant environmental effects (either at the level of the individual measures or level of sectors and regions) should be monitored. In order to provide the relevant information, we suggest the followings:

After the final approval of the NHRDP, an Environmental Monitoring, Evaluation and Reporting Plan (EMERP) should be elaborated. The EMERP should be based on the indicators presented above and methodology used should be harmonized by the similar procedures related to the Operative Programmes of NDP's

The EMERP should be an integrated part of the mid-term evaluation. The results should be presented to the social partners (i.e owner's organizations, gNGOs, agricultural chambers and science associations etc.)

Te EMERP should provide information for the environmental authorities in a regular basis. In the case of application for environmental permission, the EMERP information may serve as a baseline or reference.



## **ACKNOWLEDGEMENTS**

The SEA Working Group hereby thank for opinions and comments of all who have contributed to the finalisation of the statements and proposals of the environmental report.

The lead co-ordinator especially thanks György Dobos, István Ijjas Dr. and György Várallyay Dr. for the helping co-operation in the field of agricultural water management as well as Iván Gyulai Dr. and Endre Tombácz Dr. for their previous works that grounded the establishment of the sustainability order of values.

## EXECUTIVE SUMMARY

### Background, subject and goal of strategic environmental assessment

The Ministry of Agriculture and Rural Development (MARD) – as the responsible planning organisation of the New Hungary Rural Development Strategic Plan and of the New Hungary Rural Development Programme based thereon – officially initiated the preparation of the environmental report and the strategic environmental assessment (SEA) according to the 2/2005 (I. 11.) Government Decree toward the National Inspectorate for Environment, Nature and Water (NIENW) on 13 October 2006.

In our approach the subject of the SEA is the EU-sourced rural development policy, namely we prepared the SEA **as integrated on the Plan and the Programme, with the same approach and unified methodology, through common stakeholder's consultation**. The ultimate goal of the SEA prepared to the New Hungary Rural Development Strategic Plan and Programme is to compile an environmental report that provides realisable proposals in order to improve the environmental performance of the rural development measures and to enforce sustainable development in agriculture and rural development.

### The organisation of the elaboration and the consultation of the SEA

The MARD – in co-operation with the Ministry of Environment and Water (MEW) – delegated the elaboration of the SEA and the performance of the process to independent experts experienced in SEA and rural development (**SEA working group**), the activity of the working group is co-ordinated by the Env-in-Cent Consulting Ltd. (EiC). The contractor (and simultaneously the co-ordinator of the ex ante evaluation of the New Hungary Rural Development Strategic Plan and Programme) of the elaboration of the SEA is the PricewaterhouseCoopers Hungary (PWC). The social consultation process was managed by the National Society of Conservationists (NSC).

### The impact of the proposals made during the elaboration on the NHRDP

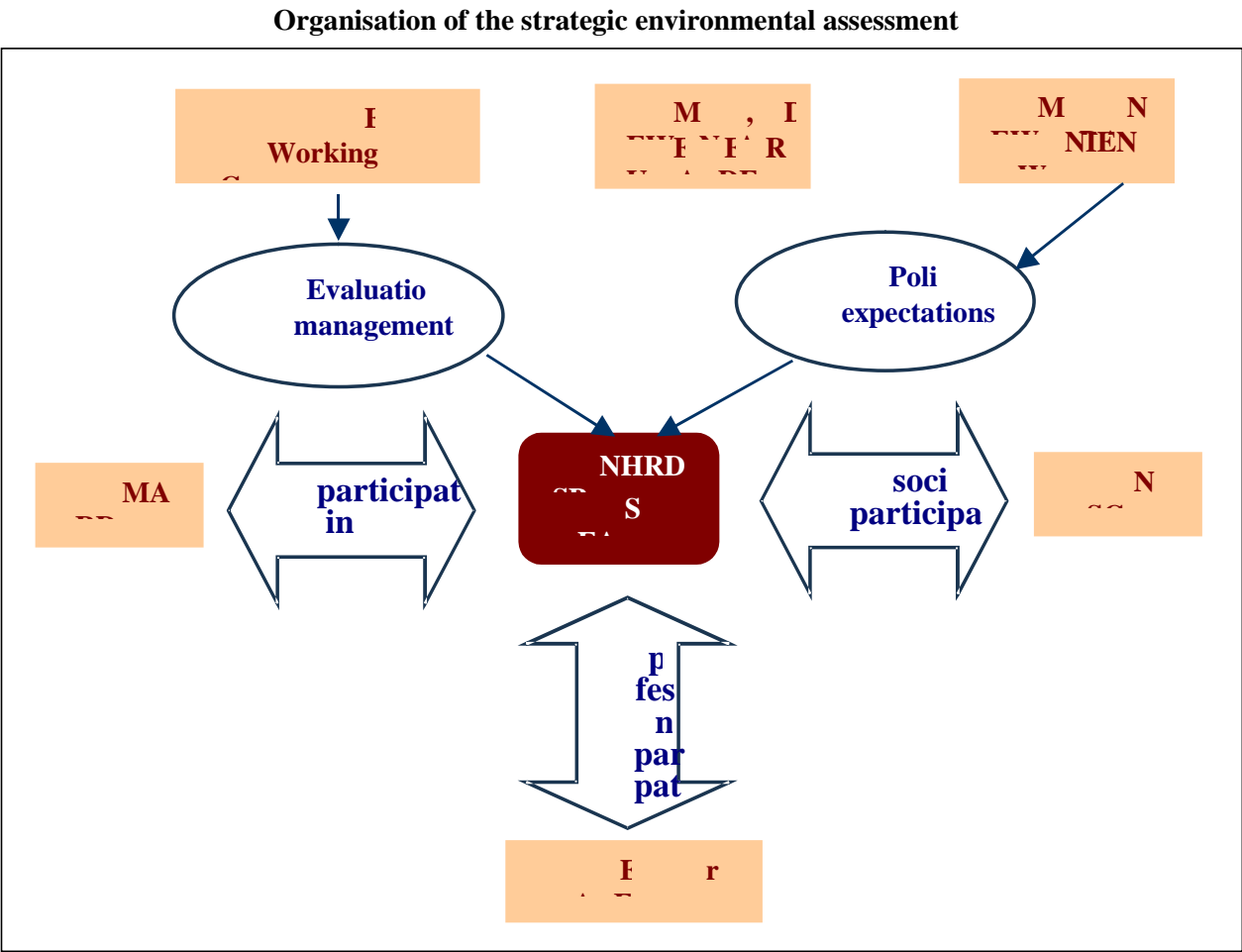
In the “accelerated” SEA process the role of the MARD became relatively important in the field of providing the information necessary to the successful elaboration of the environmental report. **The MARD helped the work of the SEA working group with open and constructive approach both at management and expert levels** and the – far beyond the legal obligations – positive administrative attitude significantly contributed to the completion of the environmental report.

### The inclusion of the stakeholders into the elaboration of and opinion-making on the environmental report

Since the New Hungary Rural Development Strategic Plan and Programme are considered as plans of national impact and importance, the notion of interested public generally covers professional, interest representing and social organisations dealing with environmental protection and nature conservation, other organisations dealing with environmental, agriculture and rural development and the general public, too. The working documents of the SEA are available on the **homepage of the NSC** ([www.mtvsh.hu/skv](http://www.mtvsh.hu/skv)). The MARD published a press release on the launch of the elaboration of the SEA, the NSC informed the potential stakeholders on it in direct ways and through mailing lists.

We established a 20-member panel of experts (**SEA Forum**) in order to involve the professional organisations that had two meetings during the assessment process. The members of the Forum were

the environmental authorities, the designers of the MARD, the representatives of the universities and the science, the representatives of the interested social organisations. the strategic environmental assessment document was negotiated on a **partnership conference**, the invited parties were about 100 organisations and institutions.



The SEA working group presented the concept and the preliminary results of the report on the **National Environmental Council (NEC)** meeting on 2 November. The NEC approved the concept and made comments on the topics of water management and soil resource management. The comments of the NEC members as well as the personal consultations greatly supported the professionalism of the environmental assessment in the aforementioned topics. The NEC established an official point of view on the SEA consultation draft on 11 December 2006 and – except for the parts on water management – it was acknowledged in terms approval. On the basis of the NEC comments on agricultural water management the SEA Working group held a consultation on 15 December together with water management experts where the actual parts were entirely re-assessed both in terms of the SEA and the Programme.

Out of the contacted authorities the National Environmental Council, the National Inspectorate of Environment, Nature and Water, the Ministry of Education and Culture and the Department of Natural Resources of the MARD sent written comments to the consultation version of the SEA en report, 48 concrete proposals altogether. The SEA working group 46 proposals of the 48 ones accepted and integrated into the document. 8 NGOs made 68 written proposals to the document, 13 further NGOs made further 42 comments through the forums and the homepage. The majority of the proposals was

accepted by the SEA working group – 57 of the 68 written proposals were fully or partially accepted and the oral comments were also taken into account.

We proposed that in the period of the social consultation of the SEA the **competent scientific committees of the Hungarian Academy of Sciences** should debate the following key issues and – as far as possible – form opinion on them (e.g. aspects of taking into account the climate change, environmental and nature conservation regards of changing to animal breeding, aspects of sustainable water management in agriculture, lifecycle-type sustainability advantage-disadvantage analysis of energy plantations). The competent committees of the Hungarian Academy of Sciences (with 63 scientists being present) debated on the parts of the environmental report pertaining to the water management in agriculture at their common session on 18 January 2007. The relevant opinion of the HAS was taken into account in the final version of the SEA.

## Presentation of the applied methodology and overview of the results

The analysis-evaluation methodology is built on the approach – formerly elaborated and applied in the national SEA practice – that the **strategic level of the rural development policy (objectives and priority) is compared to a sustainability order of values, while the more concrete tools and interventions of the programme are examined in the context of an environmental performance evaluation scheme**. Within this frame:

We determined and debated with experts the **sustainability order of values** (which consists of 32 criteria) pertaining to the agriculture and rural development adapted to the domestic conditions. Of course, the sustainability order of values cannot be considered as an absolute sustainability message and one cannot “judge” the sustainability of the Plan and the Programme on the basis of this. We consider it suitable only for “comparing” the priorities and the objectives to it as a relative reference. We examined the compliance of the priorities and objectives of the Programme with the sustainability order of values separately, in standard input/output effect matrix.

We examined the more concrete tools and interventions of the programme in the context of an **environmental performance evaluation scheme** in order to get a picture on that how the measures comply with environmental, environmental policy aspects that are based on the National Environmental Programme and on other environmental strategy documents. (The system of targets takes into account the environmental policy priorities of prevention, recycling (reuse) and disposal.) We compared the measures of the Programme – by using collective expert evaluation – to the environmental aspects, and we presented environmental performance also in an impact matrix.

We note that the methodology does not want to position the measures in the dimension of “environment-friendly – environment-damaging” but it is **an analytical decision-making tool** that would like to provide concrete guidance on the priorities/objectives we propose to modify and how. We present and analyse the sustainability evaluations and the environmental performance evaluation in details in the environmental report, and we reached the following consequences based thereof:

The **Plan could contribute to the national transition towards sustainability**, if in the course of the implementation the aspects proposed by the SEA will be integrated.

The **environmental performance of the Programme is acceptable, moreover, it could be significantly improved** if the improving and compensating measures proposed by the SEA will be integrated. Certain measures – at least at the general level presented in the Programme – proved disadvantageous in environmental terms; these belong to the topic of the improvement of physical infrastructure related to forestry and agriculture, the plantation of energy crops, the modernisation of agricultural holdings and the improvement of the economic value of the forest. In order to improve the environmental performance thereof we made a 4-item proposal package.

The organisation of the Programme should be careful and it should **take into account the environmental aspects** in order to avoid that the resource distribution could lead to the fixation of the outdated production structure and to the increase of the connecting environmental loads.

## Links with other strategic documents

We examined the links with the **National Development Policy Concept** and the **National Regional Development Concept**. According the NRDC agriculture policy should develop agriculture policy that serve rural carrying capacity, landscape maintenance, environmental protection, organic farming as well as that fit to the local endowments, so it should also establish agriculture development that is decentralised at regional level at least. On the contrary, the competitive commodity producer agriculture is a stressed component of the Programme, it interprets rural development as a sector, it does not introduce regional-specific tools, and its planning method is not regional-type. In order to establish the missing conformity, the environmental report made 12 proposals (see below).

We analysed the relationship between the **New Hungary Development Plan (NHDP)** and its operation programmes. The most important factor of ensuring the conformity that co-ordination, co-decision process between the OPs of the NHDP and the implementation of the NHRDP should be established. In order to reach the conformity with the Operative Programmes we made a proposal package of 6 elements.

In addition, we reviewed the relations with the **National Environmental Programme (NEP-II)** and the **National Waste Management Plan**. In order to establish the conformity with the NEP-II we proposed concrete texts to be inserted into the Programme. As regards the NWMP, our proposals drew the attention to the treatment of sludge of agricultural origin and manure and the treatment of organic wastes of agricultural origin (e.g. production of other products, soil fertilising, spreading of composting).

## Links with the implementation of certain environmental rules of law of paramount importance

We analysed the compliance with the requirements of the Council Directive concerning integrated pollution prevention and control (**IPPC Directive**) and the **Best Available Techniques (BAT)**. It is probable that the compliance with the BAT-requirements demand serious expenditures from the operators of livestock farms, therefore we proposed the aimed support of the compliance with the BAT.

We examined the **directive on energy end-use efficiency and energy services** that orders an annual average reduction of 1% of the energy end-use between 2008 and 2016 in the EU countries. For this we proposed that at the grants (especially in the case of purchasing machinery, irrigation and infrastructural development) the spreading of energy-saving solutions should be emphasized.

We reviewed in details the rural development relationships of the implementation of the **NATURA 2000 Directives**. The interdependence of nature conservation and agriculture is highly true for Hungary: the nature conservation and bird protection areas affect 21% of the territory of the country. Natura 2000 network clearly supports the Plan and the Programme by contributing to the sustainable rural development – for this we proposed that the NATURA 2000 measure should be launched from 2007.

We also presented in details the aspects connected to the implementation of the **Water Framework Directive (WFD)**. The main objective of the WFD is the elaboration and implementation of the integrated, sustainable water management policy. The deadline of 2015 set by the WFD for reaching the good status of waters coincides the closing deadline of the NHRDP, so it is a good reason for seriously taking into account the requirements of the WFD. The priorities of the Plan fully fit to the objectives of the WFD; the planned measures of the Programme render probable that the agricultural water management will significantly contribute to the Hungarian implementation of the WFD. For this we made two concrete proposals.

## The probable environmental impacts during the implementation of the Programme

The Programme has a neutral effect **on air quality and on the volume of greenhouse gas emissions** on the whole, but there are measures generating supposedly positive and negative impacts, too. The nature-like afforestation could have favourable and stabilising impacts on air through carbon dioxide sink as well as replacing fossil fuels at local and small enterprise levels. At the same time, the emission of greenhouse gases may increase due to the large-scale use of machinery, the additional fuels used in production process as well as the heating of new livestock farms, gardens and greenhouses by fossil fuels, and even the local air pollution could increase.

The damage caused by floods and excess surface waters can be reduced by change in land use, afforestation, development of wetland habitats, establishment of fish ponds, establishment of rational and integrated management of excess surface waters and (harmonising with this) supporting flood plain landscape management. The pollution of **surface waters** can be decreased by the modernisation of livestock farms, transformation of machinery stock and fuel storage facilities, adequate management of liquid manure and agricultural wastes. The risk of **groundwater** pollution and the degree of pollution can be reduced by the following measures supported by the Programme. In conformity of the requirements of the WFD, in order to avoid the unfavourable impacts on surface waters and groundwaters we made 4 proposals.

Out of the water and soil management measures of the Programme, in the case of amelioration interventions, deep tillage of soil may improve the nutrient and water regime of **soil** and may decrease the risk of excess surface waters, the energy- and water-saving irrigation methods may reduce the desiccation and erosion of soils. The modernisation of livestock farms, spreading of extensive animal management, modernisation of manure storage, modernisation of machinery stock and fuel storage facilities, adequate management of liquid manure and agricultural wastes, establishment of environmental infrastructure may have positive impacts on soils. In order to avoid the unfavourable impacts on soil we made 2 proposals.

**Biological diversity** is fundamentally threatened by two concrete dangers (not only for the Programme and not only in Hungary). The first one is the land use and regional development that are not considered enough. The second one is the strengthening impact of climate change on biological diversity. The Programme should promote the conservation of the landscape patterns that are paramount for the natural flora and fauna, namely biodiversity should be performed at landscape level. In order to avoid the unfavourable impacts on biodiversity we made 3 proposals.

As a consequence of **climate change** the probability of occurrence of precipitations with extreme distribution and increasing quantity, the distribution of precipitation in time and space may be more diversified causing an increase in the occurrence frequency of floods and excess surface waters. At the same time the period of droughts may increase and also the size of the affected areas. In the field of the mitigation of drought damage, out of the elements of the Programme the following ones may help: water retention, storage of excess surface waters, the economical use of water supply, increase of the water storage capacity of the soil, regionally different development of irrigation, the reconstruction of water-flow regulation facilities.

Due to the distinctive physical geographical endowments and land use traditions of Hungary, the nature conservation objectives can mainly be met by agriculture and forest management adjusted to the ecological endowments. The principle reason for it is the Hungarian feature that almost all the protected natural areas are cultivated lands at the same time, where land use should harmonise with protection in order to conserve the natural values. For this we proposed that the applicants that participate in the agri-environmental, the forest-environmental management programmes, should be preferred (as far as possible) at the evaluation of applications for the remaining measures.

On the whole, the NHRDP has very positive or neutral impacts on **forests**. As regards the naturalness, health condition, quantity and spatial structure of forests, however, several measures may have environmental risks in the long run, so we made 2 proposals in order to compensate these.

The measures of the Programme mainly have positive impacts on the **health conditions of the inhabitants**, so partly the quality of life, too, but this latter one is affected by several other factors

beside health. The Programme contributes to the increase of the quality of food and products, to the minimisation of the potential accumulation of chemicals in food products through supporting organic farming, extensive farming and the introduction of product certification and labelling, so increasing food safety and quality. Animal welfare payments also reduce the health risks threatening human beings that emerge in livestock management.

On the whole, the Programme has favourable impacts on the **environmental awareness of the population**. Negative impacts can be found mainly in the field of the local environment and landscape values of the inhabitants and the deterioration of landscape knowledge. Without these the unfavourable consequences of human activities or values to be protected cannot be experienced. In order to improve environmental awareness we made 2 proposals.

On the whole, the NHRDP has beneficial impact on **space utilisation and neutral effect on spatial structure**. The possible negative impacts of several measures can be eliminated as well as favourable spatial structural impacts can be established. At the same time, holding-concentration and the initiations of plantations may lead to the development of monocultures and may result in the fallback of nature-friendly land use forms. It is desirable that the change in land use should fit into the local or even the county spatial planning plans.

On the whole, the NHRDP has beneficial impacts on **landscape management**. At the same time, the overuse of biomass in the long run could also cause the deterioration of landscape carrying capacity. In order to mitigate the negative impacts on landscape we made 2 proposals.

Out of the **natural resources**, the renewal of soils is clearly supported by the measures of the Programme. The Programme probably ensures the renewal of water supplies. At the same time, there are only few words on water retention, the quantitative protection thereof, the possibilities of flood and excess surface water management, though these tasks do not belong to the scope of agriculture and rural development. In order to mitigate the negative impacts on natural resources we made 2 proposals.

The Programme does not support the establishment of **inner environmental infrastructure** of rural settlements, which may cause further deterioration of the environment in the already bad infrastructural state of villages, mainly in less favoured regions.

## **Probable environmental conflicts in the case of the cancellation of the implementation of the Plan**

The support of **afforestations** is one of the stressed elements of the NHRDP. In the case of the cancellation of the Programme the good processes of the increasing forestation of the last decades would be stopped for long years due to the expected lack of national sources. The **case of naturalisation** and spreading of **organic farming** is similar to afforestations. In the case of the cancellation of the NHRDP, with the lack of national sources the evolving favourable processes cannot be supported. The naturalisation of the agri-environmental measures and the granting of the payments would be endangered without the Programme.

Without funding the eligible activities of **outer water-flow regulation** Hungary cannot comply with its commitments within the frame of the Water Framework Directive, the conservation of the good status of groundwaters and surface water and the quantitative and qualitative protection of waters cannot be ensured, the environmental damage caused by extreme weather events generated by the climate change cannot be mitigated.

The utilisation of **biomass** in accordance with the environmental criteria and the increase of the existing proportion of renewable energy sources in energy production is a national interest. However, the utilisation of biomass – according to cost-efficiency, sustainability and environmental aspects – does not contribute to the environmental compliance of the Programme in a unanimously positive way. Therefore at this supporting construction it is important to carry out the energy balance analyses, to consider ecological aspects and to support of the establishment of regional energy schemes.

## Proposals to the Plan

1. In the course of the implementation of the Programme, where it is possible, the application of supporting conditions and criteria determined at micro-regional level should be ensured, by taking into account the environmental sensitivity and agricultural suitability of certain areas of Hungary.
2. We propose to complete the sustainability horizontal policy in the Plan: “At the enforcement of the horizontal policies it is a basic criterion to take into account the principles of local sustainability and landscape approach”.
- 3(1) The conformity between the Programme and the Regional Operative Programmes (they also play role in regional development) should be ensured.
- 3(2) The claim of accommodation to the local endowments should be secured as a principle in the Plan.

## SEA proposals to the Programme

### *To the measures of Axis I*

- 4(4) In the small village regions the spreading of the production of local products and the organic farming should be promoted.
- 7(1) In the case of the farms with high number of livestock the treatment of sludge of agricultural origin and manure should be especially promoted.
- 7(2) As far as possible, the treatment of organic wastes of agricultural origin (e.g. production of other products, soil fertilising, spreading of composting) should be supported.
9. In the case of livestock farms – in order to comply with the BAT – the establishment of insulated manure storing basin of adequate size and of the related monitoring systems should be supported.
- 10 At the grants (especially in the case of purchasing machinery, irrigation and infrastructural development) the spreading of energy-saving solutions should be emphasized.
- 12(1) In the case of measures related to water management the Applicant should present the way the investment or development contributes to the objectives of the WFD (Water Framework Directive).
- 12(2) Grant should be given for the rural development consultants in order to improve their information on WFD.
13. Overall scientific assessments should be launched on the “location-dependent” environmental relations of irrigation, melioration and water management.
16. In the course of purchasing machinery and the development of physical infrastructure material- and energy-saving equipment and processes should be preferred. The reduction of the energy demand of agricultural plants and farmers, the increase of energy efficiency and the spreading of small equipment utilising solar, wind and geothermic energy should be promoted.
- 17(1) At supporting the irrigation development investments, water use occurring from water reserves retained in water surplus periods as well as the application of water-saving processes of modern technology should be preferred, mainly in the case of garden and orchard cultures providing high profit.
- 17(2) The interventions providing the achievement of good ecological state of waters by adequately selected agri-technological operations should be preferentially supported.
- 17(3) The local conformity of the flood-control, agricultural and regional development tasks should be ensured by supporting complex regional landscape management systems.



- 19(1) For the environment-friendly soil use there is a need for professional tillage, change in cultivation method, organic matter management, spreading of reclaiming materials, use of environment-friendly pesticides and fertilisers adequate to the agri-ecological endowments, animal and floral manure as well as the establishment of the appropriate crop structure. In order to prevent soil compaction and structure deterioration as well as to improve the water balance characteristics of the soil, the application of the adequate deep-tillage and soil digging agrotechnical procedures should be promoted.
- 19(2) Only the establishment and value added reconstruction of those water- and energy-saving irrigation plants and systems should be supported that take into account the already evolved property structure and comply with the environmental requirements.

## ***To the measures of Axis II***

- 4(5) In the rural regions being rich in landscape values the elaboration of local sustainability strategies as well as the completion of strategic environmental assessments should be promoted.
- 8(1) Within the agri-environmental measure the Sensitive Natural Areas Programme having concrete nature conservation objective and providing high enough revenue for sustaining the nature-friendly management methods should receive paramount role.
- 8(2) Within the agri-environmental measure – after the expiry of the 5-year commitment – it is expedient to reduce the proportion of the environmental programs bringing more modest environmental outcomes by discarding the arable land basic program and by relatively reducing the area proportion and supporting intensity of integrated farming.
11. The NATURA 2000 measure should be launched from 2007. After the new resource distribution among the axes it is expedient to provide larger sources for those measures that result in better environmental outcome.
- 15(1) An environmental-type priority list (with life-cycle analysis, based on energy balance) should be prepared on the plant species of energy plantations. At the evaluation of the applications the plant species with higher priority should be given preference.
- 15(2) A “positive list” should be prepared on those agricultural areas that can be suitable for energy plantations and this list should be applied as an evaluation aspect.
- 15(3) At the grants the small-scale, local biomass utilisation (composting using organic waste + biogas-generating equipment, village heating plants) should be preferred.
18. The significant reduction in nutrient load burdening waters deriving from arable land cultivation and subsurface waters should be achieved by a considered restoration of the mosaic pattern of agricultural landscapes (e.g. establishment of boundaries, alleys, wood belts, riparian natural habitat zones and smaller ponds).
- 20(1) The designation of the Less Favoured Areas should be modified in a way that it mainly concentrates on the areas with high natural value and the sustenance of the landscape-conserving farming performed there, in accordance with the intention of the Union.
- 20(2) The monitoring activity focussing on the NATURA 2000 network should be immediately launched in order to provide the necessary information for conserving certain habitats and species less explored so far, then (on the basis of this) for elaborating conservation plans.
- 20(3) Grant must not be provided for cultivating genetically modified plant species.
21. In order to establish the synergic effects among the axes those applicants that participate in the agri-environmental, the forest-environmental management programmes, should be preferred (as far as possible) at the evaluation of applications for the remaining measures.
- 22(1) In the production of the biological basis the native species should be preferred. The preference of the native species should be integrated into the application criteria.

- 22(2) At the supporting of the plantings and forestation the actions connecting to forest blocks, or even more, connecting forest stands or constituting macro-regional eco-network element should be preferred.
- 24 The establishment and reservation of the mosaic pattern of land use should be promoted. There is a need to consider the change in cultivation method in the case of nature-friendly land use forms (forests, grasses, reed, water body), or planting on them carefully, according to the local conditions.
- 25(2) It is useful to determine the threshold limit of the domain of the granted areas by production districts or micro-regions in the supporting of plantations.
- 26(2) In the case of energetic utilisation of biomass, the optimal factory scale should be grounded by a life-cycle analysis of sustainability approach. By default the establishment of local systems is recommended, where the generated heat energy is locally utilised, there are no large transporting distances, and the standard of living of the population is increasing as a consequence of the investments.

### ***To the measures of Axis III***

- 4(2) The development of eco-tourism should be promoted in the regions being rich in landscape values, in small village and scattered farm regions.
- 4(7) Pilot projects for surveying and eliminating the environmental pollution sources should be launched in scattered farm and small village regions.
6. The Programme should contain express reference to the fundamental document of Hungarian environmental policy:
- “On the basis of the second National Environmental Programme (NKP-II, 2003-2008) the NHRDP takes into account the strategic aims and objectives of the Hungarian environmental policy, and it contributes to the environmental goals of the NKP-II, especially in the following fields:
- establishment and protection of the good state of waters in the frame of the integrated water management;
  - conservation of the values of the nature conservation areas, reservation of natural heritage and subsistence of ecological systems;
  - agri- and forest environmental measures and conservation of biodiversity through supporting the areas of the Natura 2000 network;
  - increase of forestation;
  - increase of the utilisation proportion of renewable energy sources;
  - reduction in the emissions of greenhouse gases;
  - qualitative and quantitative protection of soil;
  - reduction of erosion, soil contamination and dust pollution.”
14. A study should be prepared on the possibilities of environment-friendly technological developments at micro-enterprises.
- 23(1) Local methodological guidelines should be elaborated for the supporting possibility of hunting tourism. Hunting tourism activities resulting in the establishment of facilities with restricted availability (intensive hunting, game preserve, other fencing) as well as using such existing facilities should not be supported.
- 23(2) A local methodological guideline should be elaborated for the supporting possibility of countryside tourism.

### ***Proposals helping implementation (e.g. institutional system, technical assistance)***

- 5(1) The experts of the regions should participate (at least with consultative role) in the monitoring and the decision preparatory committees of the NHRDP.
- 5(2) The implementation of the NHRDP should be represented in the monitoring committees of the Regional Operative Programmes as well as of the TAMOP (Social Renewal Operative Programme) and the TIOP (Social Infrastructure Operative Programme).
- 5(3) In the procedural guideline of the NHRDP it should be ensured that the developments also granted from the operative programmes (OPs) of the NHDP (New Hungary Development Plan) are preferred.
- 5(4) The common representative of the LEADER-type actions should also be present in the monitoring committees of the Regional Operative Programmes.
- 5(5) The monitoring and evaluation system of the NHRDP should be capable of determining the common professional performance measured in the individual micro-regions (mainly in the rural micro-regions as well as settlements) of the OPs of the NHRDP and the NHDP.
- 5(6) From the technical assistance budget of the NHRDP it should be ensured that the implementation is capable of improving the performance of certain weakly performing micro-regions or region-types (e.g. consultancy, expert availability, introduction of further application criteria).

### ***Overall proposals that can be taken into account for several measures***

- 4(1) For all investment and development measures the enforcement of the requirements of “clean industry” should be pursued.
- 4(3) In the rural regions being rich in landscape values the spreading of integrated landscape management incorporating agriculture, forest management, hunting management and recreation activities should be promoted.
- 4(6) Pilot projects for the introduction of the so-called social forest as well as for the protection of heritage and the development based on the cultural resource thereof should be launched in the regions mainly inhabited by deprived social groups.
- 4(8) The granting of the developments pertaining to renewable energy sources of agricultural base should be underpinned by complex life-cycle analyses with sustainability approach.
- 25(1) Developments containing landscape protection aspects should be preferred in areas being rich in landscape values.
- 26(1) In the call for applications the regional differentiation by criteria of environmental or natural endangeredness should be taken into account as far as possible.
- 27. On the basis of the SEA environmental report a separate Sustainability Guideline should be elaborated for the Programme.

We consider important that the aspects presented in the proposals should be consequently represented in calls for application, in judgement guidelines and in procedural orders, therefore we proposed that on the basis of the SEA environmental report a separate **Sustainability Guideline** should be elaborated for the Programme.

## **Proposed environmental indicators to the Programme**

### ***Regional sustainability***

The proportion of the local beneficiaries of the support (especially support of micro-enterprises, tourism development, village renewal, service centres, plantation of agricultural crops, forest plantation, water-flow regulations, infrastructure investments) and the proportion of subcontractors involved from outside the micro-region.

The proportion of the materials coming from inside and outside the given micro-region within the amount of the raw material utilised in the supported facility serving the energetic process of biomass.

The proportion of the holiday population potentially appearing owing to the touristic developments compared to the residents of the settlement

The proportion of the new agricultural and forestry plantations at settlement/micro-regional level (hectares/hectares).

### ***Forests, energy plantations***

The proportion of forest plantations with invasive and native species (hectares/hectares)

The number of farms supplied by energy deriving from renewable energy sources

The proportion of energy forests of the planted forest areas

Energy grass established from support [hectares]

Energy forest established from support but broken down to each type within it, e.g. acacia, poplar, etc. [hectares/type]

Bioethanol or biodiesel producing facilities established from support but broken down to each type within it, e.g. rape, corn, sunflower, etc. [hectares/type]

The land size distribution of supported plantation types, by plant species.

### ***Sustainable water management***

The size of areas covered by excess surface waters (hectares)

The development of endangeredness by excess surface waters (number of protection days against excess surface waters)

New water reservoir capacities established to meet the ecological water demand, million m<sup>3</sup>

The size of new wetland habitats established by change in land use (hectares)

The amount of water spared by the use of water-saving irrigation systems (m<sup>3</sup>)

The size of areas rendered deep-tillage (hectares)

### ***Purchase of machinery***

The number of purchased new machinery [pcs]

The number of old machinery replaced by new machinery (= the number of old machinery put out of use explicitly due to the purchase of new machinery).

**WE NOTE THAT OUR PROPOSALS ON INDICATORS CANNOT BE CONSIDERED AS OVERALL, AND AXIS-SPECIFIC PROPOSALS ON THE INDICATORS SHOULD BE DONE WITHIN THE FRAME OF THE SUSTAINABILITY GUIDELINE TO BE ELABORATED.**

## **ANNEXES**

We note that the values of matrices presented in Annex 2 and 3:

1. pertain to the 15 November 2006 version of the expert estimations elaborated on the basis of the knowledge and information available at the elaboration of the SEA and of the Plan and the Programme. In the course of the final elaboration of the Plan and the Programme – by taking into account our proposal – the evaluations were modified on the merits and to advantage.
2. do not serve for the general judgement of the priorities, objectives and the environmental performance but – in accordance with the proposal-making feature of the SEA – with the negative values it draws the attention to those aspects where the environmental and sustainability aspects should be represented in a more definite way.

## Annex 1 Sustainability order of values

The objectives, priorities and tools of rural development policy should contribute to the compliance with the following:

### 1. Holistic, overall and general values

#### H1 LOCAL AND REGIONAL SUSTAINABILITY

It should contribute to **local sustainability** through handling the unique agricultural and natural endowments as national treasure as well as it should help in offsetting product, raw material and energy import of the region.

#### H2 GLOBAL SUSTAINABILITY

It should contribute to **global sustainability**, especially in the field of prevention of climate change, preservation of biodiversity as well as conservation of water supplies and soil.

#### H3 ECO-SOCIAL RURAL DEVELOPMENT

It should promote the solution of the structural problems of land use and the **environment-friendly, nature conserving change in agricultural structure**.

#### H4 ATTRACTIVE RURAL WORLD

It should promote the improvement of rural mode of life, **strengthen rural retaining capacity and attractiveness**, promote the acquaintance of rural Hungary.

#### H5 VALUE-PRESERVING, DIVERSIFIED FARMING

It should promote the **preservation of the diversity of rural mode of life, culture and traditions**, ensure the subsistence of architectural, archaeological, ethnographical, settlement structural and landscape values (all these form part of cultural heritage), preserve the biodiversity and relatively good state of environment of the countryside.

#### H6 CAREFULNESS AND ALTRUISM

It should ensure the realisation of the principle of “diligence of good keeper” but it could not hurt the values and interests of other communities (e.g. the neighbouring regions of the affected region) and **it could not result in the increase of regional differences**.

#### H7 ETHICAL BEHAVIOUR

It should promote the production of healthy products, animal welfare activities and the establishment of the framework of **ethical production and trade**.

#### H8 CONSCIOUS FOOD CONSUMPTION

It should promote the improvement of the consumer behaviour to food products and the spreading of the **sustainable consumption patterns**.

### 2. Environmental and natural aspects and criteria

#### K1 NATURE CONSERVATING RURAL DEVELOPMENT

It should clearly support the conservation of natural values, **biodiversity**, genetic stock and natural spatial structure.

#### K2 ECOLOGICAL RURAL DEVELOPMENT

In the course of farming activities as well as of land and landscape use resource demand and the use of the environment should take into account the **limited carrying capacity of the environment** and the local natural endowments.

K3 POLLUTION PREVENTION, MINIMISATION

It strives for the **prevention of the release of pollutions and wastes** as well as where it is not possible, for minimising these emissions (it loads the local environment up to its carrying capacity).

K4 MINIMISING FURTHER IMPACTS

It should mitigate the adverse environmental impacts caused by agriculture; especially it **cannot amplify the adverse environmental impacts of desertification, extreme water regimes and soil erosion** as well as it cannot lead to trade-offs among the different environmental systems.

K5 DEMATERIALISATION

The amount of used **industrial raw materials** (e.g. fertilisers, pesticides, agrotechnics) and the transport and storage demands should be minimised.

K6 RECYCLING

The measures should promote the **recycling of** wastewaters, liquid manures and wastes, **agricultural by-products**.

K7 ECONOMICAL USE OF EXHAUSTING RESOURCES

The use of **non-renewable** natural resources and vital elements should be minimised.

K8 VALUE-PROTECTING MANAGEMENT OF RENEWABLE RESOURCES

The stocks, state and self-regulatory capacity of **conditionally renewable** natural resources and environmental elements should be maintained and these can be used only by taking into account their renewal capacity and pace.

K9 SECTORAL INTEGRATION

It should promote the realisation of **sustainable transport policy, sustainable energy policy and ecological landscape management approach**.

### 3. Economic aspects and criteria

G1 PROSPERING RURAL ECONOMY

It should promote farming producing high added value, mitigation of the lack of capital in agriculture, **stability** and calculability **of farming**.

G2 INTEGRATED PRODUCT POLICY

It should promote the realisation of the integrated product policy through that the direction change of consumption patterns should change **from the material- and energy-intensive products and services toward material- and energy-saving, knowledge- and culture-based production and consumption**.

G3 DECENTRALISED RURAL DEVELOPMENT

It cannot lead to the undue concentration of agricultural enterprises and it should promote the **diverse** and competition-neutral development of **businesses**.

G4 "PRODUCE IN PLACE, CONSUME IN PLACE"

It should promote the **access to local markets**, community-level autarchy, support the local food production and trade.

G5 "WORK IN PLACE"

It should promote **local employment, development of the local SMEs**, spreading of family and small community farming forms, support headway of rural way of life, living forms based on traditions.

G6 QUALITY PRODUCTS, INNOVATION

It should promote innovation in agriculture, **spreading of innovative farming techniques and quality agricultural production**.

G7 DIVERSIFIED RURAL PRODUCT SUPPLY



It should promote the manufacturing of products **with special marketing and unique quality** (e.g. hungaricum).

G8 REGIONAL PRODUCTION CO-OPERATIONS

It should strengthen the **development of product processing chains within the regions and settlements**, the improvement the marketing relationship between producers.

## 4. Social aspects and criteria

T1 LOCAL ECO-SOCIAL INTERESTS AND SOCIAL RESPONSIBILITY

It should ensure that the use of resources occurs under responsible conditions and serves the **interests of local communities**.

T2 SOCIAL JUSTICE

It should contribute to the improvement of the living of rural population, the **combat against poverty**, the closing-up of deprived social groups.

T3 KNOWLEDGE-BASED RURAL DEVELOPMENT

It should promote the **training and access to information** and knowledge **of those working in agriculture**, the establishment of local intellectual capacities, services supporting farming.

T4 SOCIAL COHESION

It should help for rural communities to **invent their own image of future**, identity as well as support the evasion of the import social problems from regions and settlements (e.g. rural segregation of those moving from urban environment).

T5 SOLIDARITY, REGIONAL COHESION

It should promote the **recognition of the interdependence** of food producers and consumers as well as the improvement of the relationship between farmer communities and local society.

T6 JUSTICE AMONG GENERATIONS AND SOCIAL EQUALITY

The value-protecting, **economical** use of resources that keeps **long-term aspects** in view should be implemented in a way that equal opportunities for women, children, elderly and handicapped people should be ensured.

T7 SOCIAL PARTICIPATION

It should promote the **participation of farmer community and the interested local communities, professional organisations and NGOs in rural development decisions**, support self-organisation and development of rural civil society.

## Annex 2 Sustainability evaluation matrix of the priorities of the NHRDSP

PRIORITIES	Holistic, overall and general values								Environmental and natural aspects and criteria									Economic aspects and criteria					
	H1	H2	H3	H4	H5	H6	H7	H8	K1	K2	K3	K4	K5	K6	K7	K8	K9	G1	G2	G3	G4	G5	G6
	local and regional sustainability	global sustainability	eco-social development	attractive rural world	value-preserving diversification	credulity and ethics	ethical behaviour	conscious food consumption	nature conserving rural development	ecological rural development	pollution prevention	minimising further impacts	dematerialisation	recycling	economical use of resources	value-creating management of natural integration	prosperous rural economy	integrated product policy	decentralised rural development	'Produce in place, consume in place'	'Work in place'	quality products	agricultural
<b>I. Increasing the competitiveness of the agriculture</b>	0,7	0,3	0,9	1,1	0,7	1,0	1,3	1,3	-0,6	0,3	0,3	0,7	-0,3	1,0	0,7	1,0	1,0	1,6	0,4	0,1	0,7	1,3	1,4
<b>I/1a. Renewable energy sources - ENERGY PLANTATIONS</b>	-1	0	-1	0	-1	NR	NR	NR	-2	-1	-1	1	0	NR	1	NR	1	0	-1	-2	1	0	1
<b>I/1b. Renewable energy sources – AGRICULTURAL BY-PRODUCTS</b> (production of raw materials necessary to the production of agricultural by-products and use of biomass)	2	2	1	1	1	2	NR	NR	0	1	0	1	1	2	2	2	1	1	0	1	1	1	1
<b>I/2. Technological development</b> purchasing of agricultural machinery fitting to the structural change, developments and infrastructure investments connected to agri-logistics as well as modernisation of farms in accordance with Community requirements	0	-1	2	1	NR	1	NR	0	-1	-1	1	NR	-1	1	NR	1	1	2	1	0	1	1	1
<b>I/3. Animal breeding</b> Transformation of livestock farms by taking into account animal health safety issues	1	1	1	1	0	1	1	1	0	NR	2	0	0	1	NR	NR	1	2	0	0	-1	1	2
<b>I/4. Food-processing</b> food industry integrations, continuous development of technological level, food safety, ecological and geographical trademarks, integrated product labelling	2	0	1	2	2	1	2	2	NR	2	0	NR	0	NR	-1	0	2	2	2	2	1	2	2
<b>I/5. Horticulture</b> Development potential in gardening of non-food purpose, the development of horticulture should also be linked with the utilisation of geothermic energy	0	0	1	2	1	1	1	2	-2	0	-1	-1	-2	0	1	1	0	2	1	1	1	2	2
<b>I/6. Arrangement of holdings</b> legal regulation of land purchase of holding-concentration purpose, supporting of land-measuring works serving the arrangement of holdings, of preparing partition, consolidation, modification, etc. diagrams providing opportunities for young farmers to purchase land	NR	NR	1	1	1	1	NR	NR	0	NR	1	1	1	1	1	1	NR	2	0	-1	1	2	1
<b>I/7. Water management, protection against excess surface waters</b> establishment and modernisation of regional and industrial water management facilities, supporting the abatement of local water damage and drought damage	1	0	NR	1	NR	0	NR	NR	1	1	NR	2	-1	NR	0	NR	NR	2	NR	0	NR	1	NR
<b>II. HR Conditions</b> Creation of the human conditions of the competitive agriculture, with special regard to the spreading of innovation skills and market-oriented approach	1,5	1,0	1,3	1,3	1,7	1,0	1,7	1,5	1,0	1,0	1,5	1,0	1,5	1,5	1,5	1,5	1,3	1,7	1,3	1,3	0,7	1,7	1,7
<b>II/1. Improving age-structure</b> grant for taking over the farm by providing support for young farmers	NR	NR	0	1	2	2	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	1	2	1	1	2	2	1
<b>II/2. Innovation and market orientation</b>	1	0	2	2	2	0	1	1	NR	1	1	NR	1	1	1	1	1	2	1	2	0	2	2
<b>II/3. Knowledge-based rural society</b> Sending fresh information to the rural communities and farmers, training, and supporting the use of advisory, information and communication technologies	2	2	2	1	1	1	2	2	1	1	2	1	2	2	2	2	2	1	2	1	0	1	2
<b>III. Sustainable production and land use</b>	1,8	1,5	1,0	1,8	1,5	1,5	1,3	1,3	1,5	2,0	1,0	1,5	0,0	1,0	1,3	1,7	1,3	0,8	0,5	0,8	0,8	1,5	1,3
<b>III/1. Forestry</b> Afforestation of the agricultural areas being less suitable for competitive production	2	2	0	2	2	2	1	1	2	2	0	2	-1	2	2	2	2	1	NR	0	1	2	0
<b>III/2. Environment-friendly management</b>	2	2	2	2	2	1	1	2	2	2	1	2	1	1	2	2	1	0	1	2	2	2	2
<b>III/3. LFA farming</b> Less Favoured Areas: income-supplementing grants	2	1	1	2	2	2	2	NR	2	2	1	2	0	0	0	1	NR	0	NR	1	1	1	NR
<b>III/4. Animal welfare requirements</b>	1	1	1	1	0	1	1	1	0	NR	2	0	0	1	NR	NR	1	2	0	0	-1	1	2
<b>IV. Improving the quality of rural life</b>	2,0	1,0	1,7	2,0	2,0	2,0	2,0	2,0	NR	1,5	0,5	NR	0,3	1,0	0,7	1,0	2,0	1,3	2,0	1,7	1,7	1,7	1,5
<b>IV/1. Rural business development</b> Encouraging diversification, creation of new jobs, development of rural tourism, supporting of the businesses producing and processing of products	2	1	2	2	2	2	2	2	?	2	0	NR	1	1	0	1	2	2	2	2	2	2	2
<b>IV/2. Village renewal</b> Renewal of villages, enlargement of the cultural and recreational possibilities	2	1	1	2	2	2	2	NR	NR	1	1	NR	-1	1	1	1	2	1	NR	1	2	2	NR
<b>IV/3. Integrated service spaces</b> supporting fundamental communication, administration and other services improving the quality of life in small settlements	2	1	2	2	2	2	2	NR	NR	NR	NR	NR	1	NR	1	1	2	1	NR	2	1	1	1
<b>V. Development of local communities</b> Mobilisation of internal resources covering several rural settlements (micro-regions), it serves the implementation of Axis IV	2	2	2	2	2	2	2	2	NR	NR	NR	NR	NR	NR	NR	NR	NR	2	2	2	2	2	2
<b>TOTAL:</b>	1,59	1,16	1,37	1,64	1,57	1,5	1,65	1,62	0,64	1,21	0,82	1,06	0,4	1,13	1,04	1,29	1,42	1,48	1,25	1,18	1,16	1,62	1,59

## Annex 3 Sustainability evaluation matrix of the objectives of the NHRDSP

DESIGNATION OF SPECIFIC OBJECTIVES	Holistic, overall and general values								Environmental and natural aspects and criteria									Economic aspects and criteria					
	H1	H2	H3	H4	H5	H6	H7	H8	K1	K2	K3	K4	K5	K6	K7	K8	K9	G1	G2	G3	G4	G5	G6
	local and regional sustainability	global sustainability	eco-social rural development	attractive rural world	value-preserving, diversified farming	carefulness and altruism	ethical behaviour	conscious food consumption	nature conserving rural development	ecological rural development	pollution prevention, minimisation	minimising further impacts	dematerialisation	recycling	economical use of exhausting	value-protecting management of	sectoral integration	prospering rural economy	integrated product policy	decentralised rural development	"Produce in place, consume in place"	"work in place"	quality products, agricultural
<b>Axis I: Improving the competitiveness of the agricultural and forestry sector</b>	<b>1,0</b>	<b>0,6</b>	<b>0,8</b>	<b>0,8</b>	<b>0,8</b>	<b>0,6</b>	<b>1,3</b>	<b>1,0</b>	<b>0,4</b>	<b>0,6</b>	<b>0,2</b>	<b>0,4</b>	<b>0,0</b>	<b>0,8</b>	<b>0,0</b>	<b>0,4</b>	<b>1,2</b>	<b>1,4</b>	<b>0,6</b>	<b>0,6</b>	<b>0,6</b>	<b>1,4</b>	<b>1,4</b>
I.1. Supporting of gaining knowledge and improving the competence of human resources and age-structure	2	2	2	1	1	0	NR	2	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2
I.2a. Promoting changes in land use in order to have a production structure sustainable even in ecological terms	2	2	2	1	2	1	1	1	2	2	1	1	1	1	2	2	2	1	1	2	2	2	1
I.2b. Creation of sectoral balance between cultivation of plants and animal breeding	-1	-1	-1	0	-1	0	NR	-1	-2	-1	-2	-1	-2	1	-2	-1	1	1	1	-1	-1	1	0
I.3. Modernisation and development of physical resources, promoting innovation	0	-1	0	1	0	0	1	NR	-1	0	1	1	1	1	-1	0	1	2	0	0	0	1	2
I.4. Improving the quality of agricultural production and products	2	1	1	1	2	2	2	2	2	1	0	0	-1	0	0	0	1	1	-1	1	1	2	2
<b>Axis II: Improving the environment and the countryside</b>	<b>1,8</b>	<b>1,5</b>	<b>1,3</b>	<b>1,8</b>	<b>1,5</b>	<b>1,8</b>	<b>1,3</b>	<b>1,7</b>	<b>1,7</b>	<b>1,3</b>	<b>1,3</b>	<b>2,0</b>	<b>0,8</b>	<b>0,8</b>	<b>1,0</b>	<b>1,3</b>	<b>1,3</b>	<b>0,5</b>	<b>1,0</b>	<b>1,3</b>	<b>1,0</b>	<b>1,5</b>	<b>1,5</b>
II.1. Sustainable utilisation of agricultural areas, spreading of environment-friendly management methods	2	2	2	2	2	2	1	2	2	2	1	2	1	2	2	2	2	1	2	2	2	2	1
II.2. Maintenance of agricultural activities on Less Favoured Areas	2	1	1	2	2	2	2	NR	2	2	1	2	0	0	0	1	NR	0	NR	1	1	1	NR
II.3. Increase and sustainable management of forest resources	2	2	1	2	1	1	0	1	1	1	1	2	1	1	1	1	1	0	0	1	1	2	NR
II.4. Ensuring the animal welfare payments	1	1	1	1	1	2	2	2	NR	0	2	NR	1	0	1	1	1	1	1	1	0	1	2
<b>Axis III: Improving the quality of life in rural areas and promoting diversification</b>	<b>1,7</b>	<b>1,0</b>	<b>2,0</b>	<b>2,0</b>	<b>1,7</b>	<b>1,7</b>	<b>1,3</b>	<b>NR</b>	<b>2,0</b>	<b>1,0</b>	<b>1,0</b>	<b>1,0</b>	<b>1,0</b>	<b>NR</b>	<b>0,3</b>	<b>1,0</b>	<b>1,7</b>	<b>1,0</b>	<b>1,5</b>	<b>1,7</b>	<b>1,3</b>	<b>1,7</b>	<b>1,0</b>
III.1. Reduction of rural employment tensions, enlargement of opportunities of earning income	1	1	2	2	1	1	1	NR	NR	0	1	NR	NR	NR	-1	0	2	1	1	1	1	2	1
III.2. Improving the quality of rural life through the sustainable and complex utilisation of cultural and natural values, village renewal	2	1	2	2	2	2	1	NR	2	2	1	1	1	NR	1	2	1	1	2	2	2	2	1
III.3. Development of basic services provided for rural inhabitants	2	1	2	2	2	2	2	NR	NR	NR	NR	NR	1	NR	1	1	2	1	NR	2	1	1	1
<b>Axis IV: LEADER-type local developments</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>NR</b>	<b>1,0</b>	<b>1,0</b>	<b>1,0</b>	<b>1,0</b>	<b>0,0</b>	<b>0,0</b>	<b>1,0</b>	<b>1,0</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>2,0</b>	<b>1,0</b>
<b>TOTAL</b>	<b>1,6</b>	<b>1,28</b>	<b>1,51</b>	<b>1,64</b>	<b>1,49</b>	<b>1,5</b>	<b>1,48</b>	<b>1,33</b>	<b>1,27</b>	<b>0,96</b>	<b>0,86</b>	<b>1,1</b>	<b>0,44</b>	<b>0,52</b>	<b>0,58</b>	<b>0,91</b>	<b>1,55</b>	<b>1,23</b>	<b>1,28</b>	<b>1,38</b>	<b>1,23</b>	<b>1,64</b>	<b>1,23</b>

NHRDP MEASURES	Million €	Environmental aspects																	
		E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18
		Reduction of air pollution	Reduction of global air pollution impacts	Protection of surface waters, integrated waters	Protection of underground waters	Protection of soil and geological values	Protection against the consequences of	Protection of areas under natural	Protection and sustainable use of	Nature conservation of forests	Spreading of organic farming	Sustainable regional management	Increase of the use of renewable energy	Increase of material and energy efficiency	Mitigation of chemical risks	Health promotion and the increase of	Increase of the environmental	Sustainable use of landscape cultural	Improvement of urban environmental
<b>Axis I Improving the competitiveness of the agricultural and forestry sector</b>	<b>2384,0</b>	<b>-0,3</b>	<b>-0,1</b>	<b>0,4</b>	<b>0,4</b>	<b>0,3</b>	<b>1,1</b>	<b>0,4</b>	<b>0,4</b>	<b>0,6</b>	<b>0,9</b>	<b>1,0</b>	<b>1,0</b>	<b>0,6</b>	<b>1,0</b>	<b>1,1</b>	<b>0,9</b>	<b>0,6</b>	<b>0,7</b>
111. Training, information providing activities, innovation	82,4	1	1	2	2	2	1	1	1	1	2	2	2	1	1	2	1	1	0
112. Setting up of young farmers	33,0	?	?	?	?	?	NR	1	1	1	1	1	1	1	1	1	1	1	1
113. Supporting farmers in farm transfers	25,7	?	?	?	?	?	NR	1	1	1	1	1	1	1	1	1	1	1	1
121.1.Plant farming and horticulture (modernisation of agricultural	477,9	-2	-2	-1	-1	-1	1	-1	-1	NR	1	1	1	2	1	1	NR	0	1
121.2. Animal breeding (modernisation of agricultural holdings)	675,1	1	0	2	2	2	2	0	1	NR	1	1	1	2	2	1	1	0	1
121.3 Purchase of machinery	367,6	-1	-1	0	0	0	1	-1	-1	0	0	1	1	1	NR	1	0	0	NR
121.4 "GAZDA" Net Programme (modernisation of agricultural	25,7	NR	NR	1	1	1	NR	1	1	1	1	1	NR	NR	NR	NR	2	NR	NR
121.5. Plantation (modernisation of agricultural holdings)	0,0	-1	-1	-1	-1	-1	1	-1	-1	NR	-1	-1	0	0	-1	0	NR	2	NR
122. Improving the economic value of the forest	7,3	-2	-2	0	0	-2	NR	-1	-1	-2	NR	NR	0	1	NR	NR	-1	-1	0
123. Adding value to agricultural and forestry products	198,5	-1	0	0	0	0	NR	NR	NR	1	1	1	2	0	NR	1	1	0	0
124. Development of new products	40,4	NR	NR	NR	NR	NR	1	1	1	1	1	1	1	1	1	1	1	NR	1
125.1. Development of irrigation plant facilities	55,1	-1	0	-1	0	0	2	NR	NR	NR	NR	0	0	0	NR	1	NR	NR	1
125.2 Amelioration: facility development	51,4	0	0	0	0	1	0	NR	0	0	0	?	NR	NR	NR	1	NR	0	NR
125.3 Collective investments in water-flow regulations	55,1	0	0	1	1	0	1	NR	NR	NR	?	?	NR	-1	NR	1	NR	0	0
125.4-5. Improvement of physical infrastructure related to forestry	0,0	-1	-1	0	0	-1	NR	-1	-1	-1	1	0	NR	-1	NR	NR	NR	1	1
125.6. Energy supply and distribution	29,4	-1	1	0	0	0	1	-1	-1	NR	0	0	2	-1	NR	NR	0	NR	1
125.7. Arrangement of holdings (improving of agricultural and	25,7	1	1	NR	NR	1	1	1	1	1	1	1	NR	1	NR	NR	NR	NR	NR
131.Meeting standards based on Community legislation	48,0	1	1	2	2	2	1	2	2	NR	1	1	1	1	2	2	1	NR	1
132. Supporting the participation of farmers in food quality schemes	20,2	NR	NR	NR	NR	1	1	1	1	1	2	2	NR	NR	1	2	2	2	1
133. Supporting of producer groups in the field of information and	36,7	NR	NR	NR	NR	NR	1	1	1	1	1	1	NR	NR	1	1	1	1	1
141.Supporting semi-subsistence farming	18,3	NR	NR	NR	NR	NR	1	1	1	1	1	1	NR	NR	NR	0	NR	1	1
142.Supporting of setting up producer groups	73,5	1	1	NR	NR	NR	1	NR	NR	NR	1	2	1	1	1	1	1	NR	0
114 Use of farm advisory services	36,3	NR	NR	NR	NR	NR	1	1	1	1	1	2	1	1	1	1	1	1	1
115 Setting up farm management and forestry advisory services	0,7	NR	NR	NR	NR	NR	1	1	1	1	1	2	1	1	1	1	1	1	1

Annex 4 Environmental evaluation matrix of the measures of the NHRDP (continued on next page)

**Annex 4 Environmental evaluation matrix of the measures of the NHRDP (continued from previous page)**

NHRDP MEASURES	Million €	Environmental aspects																	
		E1 Reduction of air pollution	E2 Reduction of global air pollution impacts	E3 Protection of surface waters, integrated waters	E4 Protection of underground waters	E5 Protection of soil and geological values	E6 Protection against the consequences of	E7 Protection of areas under natural	E8 Protection and sustainable use of	E9 Nature conservation of forests	E10 Spreading of organic farming	E11 Sustainable regional management	E12 Increase of the use of renewable energy	E13 Increase of material and energy efficiency	E14 Mitigation of chemical risks	E15 Health promotion and the increase of	E16 Increase of the environmental	E17 Sustainable use of landscape cultural	E18 Improvement of urban environmental
Axis II.: Improving the environment and the countryside	1521,0	0,6	1,1	1,3	1,1	1,2	1,0	1,1	1,2	1,4	1,7	1,4	1,1	0,4	1,0	1,6	1,5	1,4	1,0
212. Payments to farmers in Less Favoured Areas (LFA)	22,0	-1	-1	1	1	1	0	1	1	1	1	1	NR	NR	1	1	1	1	NR
213. Natura 2000 payments	33,0	NR	NR	1	1	1	1	2	2	2	2	1	1	NR	1	1	2	2	NR
214. Agri-environmental payments	588,2	1	1	2	2	2	1	2	2	2	2	2	1	1	1	2	2	2	1
214.a. Preservation of genetic resources	11,0	1	1	2	2	2	1	2	2	2	2	2	1	1	1	2	2	2	1
214b. NRDP agri-environmental determination	391,1	1	1	2	2	2	1	2	2	2	2	2	1	1	1	2	2	2	1
214c. NRDP forest determination	88,2	1	1	2	2	2	1	2	2	2	2	2	1	1	1	2	2	2	1
215. Animal welfare payments	46,6	NR	NR	1	1	NR	NR	1	0	0	2	1	1	1	1	2	2	1	1
216. Assistance provided to non-productive investments	10,4	NR	NR	NR	NR	NR	1	1	1	1	1	1	1	NR	NR	1	1	2	1
221.1. Agricultural areas - afforestation (first afforestation of	135,9	1	2	2	1	2	1	0	0	2	NR	2	1	-1	1	2	2	2	1
221.2. Plantation of energy crops	16,2	-1	1	1	0	-1	?	-2	NR	-1	NR	-1	2	-1	NR	NR	-1	-1	NR
222. First establishment of agro-forestry systems	0,7	1	NR	1	1	1	1	1	1	2	1	2	1	1	1	1	1	2	1
223. First afforestation of non-agricultural lands	1,7	1	2	1	1	1	1	1	1	1	NR	1	1	0	1	1	1	1	NR
224. Natura 2000 payments: forest	40,3	NR	NR	1	1	1	1	2	2	2	2	1	1	NR	1	1	2	2	NR
225. Forest-environment payments	83,5	1	1	2	2	2	1	2	2	2	2	2	1	1	1	2	2	2	1
226a. Forest rehabilitation (forestry potential)	8,0	1	2	2	1	2	1	0	0	2	NR	2	1	-1	1	2	2	2	1
226b. Prevention of natural catastrophes affecting forests (forestry	2,0	NR	NR	-1	-1	-1	2	0	0	0	NR	NR	NR	NR	NR	NR	1	-1	NR
227.Supporting of non-productive forest-environmental investments	42,2	1	2	1	1	1	1	2	2	2	NR	1	0	NR	NR	1	2	2	1
Axis III Improving quality of life	583,2	-0,3	-0,3	0,0	0,5	-0,3	1,0	0,6	0,6	0,8	0,8	1,2	0,8	0,3	0,0	1,5	0,7	1,2	1,2
311. Diversification into non-agricultural activities	33,0	NR	NR	NR	NR	1	1	1	1	1	1	1	0	1	NR	?	1	2	NR
312.a Micro-enterprises: technological developments	200,0	-1	-1	0	0	-1	1	-1	-1	0	0	1	1	0	-1	2	-1	0	1
312.b Micro-enterprises: marketing, quality assurance, innovation,	15,0	NR	NR	NR	NR	NR	1	1	1	1	1	2	1	1	1	1	1	1	1
313. Encouragement of tourism activities	82,7	-1	-1	0	1	-1	NR	0	1	1	1	1	1	-1	0	2	0	1	1
321. Basic services for the economy and rural population	99,2	1	1	NR	NR	NR	NR	NR	NR	NR	1	1	NR	1	NR	1	1	1	1
323.1 Conservation and upgrading of the rural heritage	90,0	NR	NR	NR	NR	NR	NR	2	1	NR	1	1	NR	0	NR	NR	2	2	2
323.2 Preparation of Natura 2000 plans	1,8	NR	NR	NR	NR	1	1	2	2	2	1	2	0	NR	NR	2	2	2	NR
34. Skill acquisition, animation and implementation	61,5	NR	NR	NR	NR	NR	1	1	1	1	1	2	1	1	1	1	1	1	1
TOTAL:	4488	-0	0,21	0,56	0,69	0,4	1,02	0,68	0,73	0,9	1,14	1,19	0,94	0,44	0,67	1,37	1,01	1,08	0,98

**Environmental report**  
**to the Strategic Environmental Assessment of the New Hungary Rural Development**  
**Strategic Plan and Programme**



**January 2007**

## Annex 5: Community standards

### Community Standards for which support may be granted

#### I. Community Standards for the measure „Modernisation of agricultural holdings”

<b>Content (Standard to be met)</b>	<b>EU legislation</b>	<b>National Legislation</b>	<b>Date from which the standard is mandatory for the farmer</b>	<b>Link between the requirements and the relevant measures</b>	<b>Short explanation summing up the main requirements of standard</b>
ENVIRONMENT					
Protection of water against pollution from nitrates	Council Directive 91/676/EEC	27/2006. (II.7.) Government Decree on the protection of water against nitrate pollution of agricultural origin	31 December 2011.	Modernisation of agricultural holdings	Designation of nitrate sensitive areas, measures to be taken to lessen the nitrate content of waters

## I. Community Standards for the measure „Setting up of young farmers”

<b>Content (Standard to be met)</b>	<b>EU legislation</b>	<b>National Legislation</b>	<b>Date from which the standard is mandatory for the farmer</b>	<b>Link between the requirements and the relevant measures</b>	<b>Short explanation summing up the main requirements of standard</b>
<b>ENVIRONMENT</b>					
Protection of water against pollution from nitrates	Council Directive 91/676/EEC	27/2006. (II.7.) Government Decree on the protection of water against nitrate pollution of agricultural origin	31 December 2011.	Setting up of young farmers	Designation of nitrate sensitive areas, measures to be taken to lessen the nitrate content of waters
Protection of water against pollution caused by certain dangerous substances	Council Directive 76/464/EEC of 4 May 1976	203/2001(X.26.) Government Decree on certain rules of the protection of the quality of surface waters	01 January 2003	Setting up of young farmers	General rules concerning the protection of waters, duties of the emitter
Protection of groundwater against pollution caused by certain dangerous substances	Directive 80/68/EEC	33/2000 (III.17.) Government Decree on certain tasks in connection with activities related to the quality of subsurface waters Government Decree No 203/2001. (X.26.) . on the quality protection of surface water	01 January 2003  01 January 1996	Setting up of young farmers	General rules concerning the protection of waters, duties of the emitter
Framework for Community action in the field of water policy	Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000	Act LVII of 1995 on water management			
Requirements with regards to the protection of atmosphere	1980/68/EEC 1984/360/EEC 1991/692/EEC 1996/61/EC 1996/62/EC 1997/101/EC	Government Decree No 21/2001. (II.14.) . regarding certain regulation about the protection of atmosphere  Government decree	01 July 2001	Setting up of young farmers	General rules of protecting the atmosphere, controlling the level of air pollution



		No 36/2006 (II.20.) . On the modification of Decree No. 21/2001 (II.14.) .	30 October 2007		
Protection of water against pollution from nitrates	Council Directive 91/67/EEC	Act LIII of 1995 on the general rules of environmental protection  49/2001 (IV.3) Government Decree on the protection of water against nitrate pollution of agricultural origin	16 July 2004  03 May 2001	Setting up of young farmers	General rules concerning the protection of waters, duties of the emitter
Habitats and wild birds					
Conservation of natural habitats and of wild flora and fauna	Directive 92/43/EEC	<i>Act LIII of 1996 on nature conservation</i>  <i>Act LV of 1996 on game preservation, management and hunting</i>	01 January 1997  01 March 1997  01 March 1997	Setting up of young farmers	General rules concerning nature conservation

Conservation of wild birds	Directive 79/409/EEC	<i>Decree No 30/1997 (IV.30) FM of the Minister of Agriculture on the implementation of Act LV of 1996 on game preservation, management and hunting</i>	11 September 1999		General rules concerning nature conservation
		<i>Government Decree No 139/1999. (IX.3.) . on the rules of keeping, showing and make use of protected animals</i>	11 April 1998		
		<i>Government Decree No 67/1998. (IV.3.) . on restrictions and prohibitions applied in protected or in highly protected areas of habitats and ecosystem</i>	28 October 1997		
		<i>Joint Decree of the Minister of Agriculture and Minister of Environment and Regional Development No. 73/1997. (X. 28.) FM-KTM on fish species and aquatic animals that cannot be caught as well as on seasonal fishing bans by fish species, modified by Decree</i>	17 May 2001		
		<i>Decree No. 13/2001. (V. 9.) KoM of the Minister of Environment</i>			
		<i>on protected and strictly protected plant and animal</i>			

<b>Content (Standard to be met)</b>	<b>EU legislation</b>	<b>National Legislation</b>	<b>Date from which the standard is mandatory for the farmers</b>	<b>Link between the requirements and the relevant measures</b>	<b>Short explanation summing up the main requirements of standard</b>
Integrated Pollution Prevention and Control	Council Directive 96/61/EC of 24 September 1996	Government Decree 193/2001 (X. 9) . on the detailed rules of uniform licensing process of the use of environment	30 October 2001	Setting up of young farmers	Rules of uniform licensing process
Environmental Impact Assessment	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment	Government Decree 20/2001 on environment impact assessment	14 April 2001	Setting up of young farmers	Rules of impact assessment

#### Egg products

Hygiene and health problems affecting the production and placing on the market of egg products	Council Directive 89/437/EEC		1 May 2004	Setting up of young farmers	Conditions of producing eggs, duties of the operator, requirements of imported eggs
Specific public health conditions for the placing on the market of certain types of eggs	Council Decision 94/371/EC		15 August 2003	Setting up of young farmers	Rules on marketing egg products, order of hygiene controls

Content (Standard to be met)	EU legislation	National Legislation	Date from which the standard is mandatory for the farmers	Link between the requirements and the relevant measures	Short explanation summing up the main requirements of standard
Specific public health requirements for imports of egg product for human consumption	Commission Decision 97/38/EC		1 May 2004  <		

are kept for farming purposes	2006/778/EK		1 June 2002		
Compliance with provisions concerning floors			Point 1.2.3. 1 January 2013		
			Laying hen: Point 6.7 1 January 2007		
			Point 2.5, 2.6 1 June 2002		
Compliance with provisions concerning micro-climate	Section 10 of the Annex of Council Directive 98/58/EC	MARD Decree 32/1999. (III.31.), Article 6	General: Art. 6 1 June 2002  Calves: Point 4. 1 June 2002  Pig: 1.5, 1.12 1 June 2002  Laying hen: Point 7. 1 January 2012.  Point 14, 20 1 June 2002	Setting up of young farmers	It must be ensured that lighting, temperature, relative humidity, the dust content of air and other environmental conditions (gas concentration or noise levels) do not reach levels that are harmful to the animals at the place where they are kept.
Compliance with provisions concerning the safety of animal husbandry sites	Section 12 of the Annex of Council Directive 98/58/EC	Act XXVIII of 1998, Article 5, paragraph (1)  MARD Decree 32/1999. (III.31.), Article 8, paragraph (5)  Act XXVIII of 1998, Article 5, paragraph (3), MARD Decree 32/1999. (III.31.), Article 5, paragraph	General: Art. 5 (3) 1 June 2002  Calves: Point 3,8,10: 1 June 2002  Pig: Point 1.11, 3.7 1 June 2002	Setting up of young farmers	Must ensure that the animal is kept so that it cannot escape Must comply with provisions concerning the prevention of fire hazards In case of free-range keeping, animals must be provided with an area or facility where they can find shelter against extreme

		(3)	Laying hen: Point 8.2 1 January 2007  Point 9.1, 15, 22 1 June 2002		weather conditions, against predators and against other effects that are damaging to their health
Compliance with provisions concerning space requirements	Section 15 of the Annex of Council Directive 98/58/EC  Council Directive 91/629/EEC laying down minimum standards for the protection of calves, its amendment, Council Directive 97/2/EC, and Commission Decision 97/182/EC,  Council Directive 91/630/EEC laying down minimum standards for the protection of pigs, its amendment, Council Directive 2001/88/EC and Commission Directive 2001/93/EC,  Council Directive 88/166/EEC laying down minimum standards for the protection of laying hens kept in battery cages,	MARD Decree 32/1999. (III.31.), Article 4, paragraph (3)  MARD Decree 20/2002 (III.14.), Annex 1, section (20)  MARD Decree 20/2002 (III.14.), Annex 1, section (22)  MARD Decree 20/2002 (III.14.), Annex 2, sections (1.2.1.), (2.1.2.), (4.2.)  MARD Decree 20/2002 (III.14.), Annex 3, sections (6.3.) (6.6.) (9.2.) (10.1.a)	General: Art. 4. (3) 1 June 2002  Calves: Point 20, 22. 1 January 2007  Pig: Point 1.2.1, 1 May 2004  Point 2.1, 2.1.1, 3.6 1 June 2002  Point 1.2.2, 1.2.10 1 January 2013  Point 2.1.2, 1 January 2003  Point 2.1.2 1 January 2005  Annex 2, point 4.2 14 May 2004  Laying hen: Point 6.8 1 January 2007 (in all holdings)  Point 7 1 January 2012	Setting up of young farmers	The amount of space allocated to individual animals must be consistent with the species, variety, age and sex of the animals concerned and the animals must have access to the resting, feeding, drinking and manuring places  Space requirements of calves kept in groups and of calves kept in individual boxes space requirements of raised piglets and porkers kept in groups Each hen should have at least 250 cm <sup>2</sup> of littered area, with the litter covering at least 1/3 of the area. In the compartments used for natural mating, boars must have unhindered access to a minimum area of 10 m <sup>2</sup>  Space requirements of sows about to litter kept in enclosed litter pens: at least 0,3 m free area must be provided behind the sow in

	Council Directive 1999/74/EC laying down minimum standards for the protection of laying hens,		Point 9.2, 10.1. a) 1 June 2002		the littering pen  Laying hens kept in an alternative system, one nest should be occupied by up to seven hens, or in case of group nests, a maximum of 120 hens should occupy one m2 of nest space.  In improved battery cages, each hen should have at least 750 cm2 of cage area of which 600 cm2 should be usable.
Compliance with provisions concerning keeping and foddering technology	Article 3 and sections 14, 16, 17 and 18 of the Annex of Council Directive 98/58/EC	MARD Decree 32/1999. (III.31.), Article 3, section (c)  MARD Decree 32/1999. (III.31.), Article 4, paragraph (2)  MARD Decree 32/1999. (III.31.), Article 4, paragraph (1)	General: Art. 4. (1), (2) 1 June 2002  Calves: Point 12, 13, 14, 15 1 June 2002  Pig: Point 1.2.7, 1.2.8, 1.15, 1.16, 1.17, 6.2, 6.3, 1 June 2002  Laying hen: Point 6.1, 6.2, 8.1. c) 1 January 2007  Point 9.7, 9.8, 16, 17, 10.2, 10.3, 1 June 2002	Setting up of young farmers	Animals should be fed, watered and cared for in accordance with their species, variety, age, development, adaptive ability, degree of domestication, physiological status and ethological requirements  With some exceptions, animals may only be given fodder that, according to the present level of scientific knowledge, does not have a detrimental effect on their welfare.  Foddering and watering equipment must be installed, assembled, placed, operated and maintained so as to comply with

					detailed provisions
f Technological developments associated with site technology	<p>Section 13 of the Annex of Council Directive 98/58/EC</p> <p>Section 13 of the Annex of Council Directive 98/58/EC</p> <p>Sections 8 and 9 of the Annex of</p>	<p>MARD Decree 32/1999. (III.31.), Article 7, paragraph (1)</p> <p>MARD Decree 32/1999. (III.31.), Article 7, paragraph (2)</p>	<p>General: Art. 7 (2-3), Art. 8 (1-3), (5) 1 June 2002</p> <p>Annex No. 1 (11): 14 May 2004</p> <p>Art. 1 (4): 1 January 2005</p> <p>Calves: Point 5,9,18,24 1 June 2002</p> <p>Art. 7 (4) 1 January 2005</p> <p>Pig: Point 1.2.4, 1.2.9, 1.5, 1.7,</p>	Setting up of young farmers	<p>Electrical equipment used around animals must be safe. Shock protection must be provided for.</p> <p>Technical equipment used in the course of animal husbandry must be checked at least once a day and any malfunctions discovered must be remedied immediately, and all necessary protective measures must be taken immediately to protect the welfare and health of the animals.</p> <p>When animals are kept in enclosed spaces, sharp edges and elevations of</p>



	<p>Council Directive 98/58/EC</p> <p>Section 13 of the Annex of Council Directive 98/58/EC</p> <p>Section 13 of the Annex of Council Directive 98/58/EC</p>	<p>MARD Decree 32/1999. (III.31.), Article 8, paragraph (3)</p> <p>MARD Decree 20/2002. (III.14.) Article 7, paragraph (3)</p> <p>Modified by MARD Decree 72/2004. (IV. 29.)</p>	<p>1.8, 1.9, 1.10, 3.4, 3.5 1 June 2002</p> <p>Point 1.2.5, 1.2.6, 1.2.10, 1 January 2013</p> <p>Point 1.3 1 January 2006</p> <p>Point 1.6 14 May 2004</p> <p>Laying hen: Point 2, 1 January 2003</p> <p>Point 6.3, 6.4, 6.5, 6.6, 8.1 1 January 2007</p> <p>Point 9.3, 9.4, 9.9, 10.1 b-d), 10.4, 10.5 11, 12, 13, 18, 19, 21, 23, 1 June 2002</p>		<p>the building structure must be eliminated, the materials used may not irritate or injure the animals. The surfaces in contact with the animals must be possible to clean and disinfect appropriately and they may not be made of materials hazardous to the health of animals.</p> <p>In stables with artificial ventilation, a supplementary, back-up system must be put in place to provide for sufficient air replacement required for the health and comfort of the animals, even if the artificial ventilation system malfunctions.</p> <p>Animal husbandry buildings equipped with artificial ventilation systems must be fitted with a malfunction alarm system.</p>
	Directives referred to points I/a1-5 and II/a1-f3	National legislation referred to points I/1-5 and II/a1-f3		Setting up of young farmers	Complex reconstruction in order to meet all the standard conditions and technologies referred to in sub-measure I/1-5 and II/a1-f3

**Annex 6: Designated areas of regional water management for development in accordance with main drainage system (implemented under the measure “Infrastructure related to the development and adaptation of agriculture and forestry”)**

<b>Designated areas</b>	<b>Counties</b>
1. Berettyó-Sebes körös közti tájegység, Alsó-Nyírvíz tájegység	Hajdú Bihar megye
2. Algyői belvízrendszer	Bács-Kiskun és Csongrád megye
3. Kraszna balparti belvízrendszer	Szabolcs-Szatmár-Bereg megye
4. Királyéri öblözet	Szabolcs-Szatmár-Bereg megye
5. Réhelyi, Szeghalmi, Gyomai belvízrendszer	Békés megye -Hajdú Bihar megye
6. Túr-belvíz-fcsatorna és Tapolnok-Kömör térsége	Szabolcs-Szatmár-Bereg megye
7. Doba-milléri öblözetek	Jász-Nagykun-Szolnok megye
8. Hármaskörös jobbparti tájegység	Jász-Nagykun-Szolnok megye
9. Kígyós-fgyjt-fcsatorna öblözete	Bács-Kiskun megye
10. Felsőszabolcsi belvízrendszer	Szabolcs-Szatmár-Bereg megye
11. Tisza-Maroszugi, Sámsoni belvízrendszer	Csongrád megye -Békés megye
12. Hortobágy-Berettyó jobbparti belvízrendszer	Jász-Nagykun-Szolnok megye
13. Dél-Pest megyei tájegység	Pest megye
14. Dél-Dunavölgyi tájegység	Bács-Kiskun megye
15. Dél-Borsodi tájegység	Borsod-Abaúj-Zemplén megye
16. Mezőberényi és Dögös-Kákafoki belvízrendszerek	Békés megye
17. Sárréti tájegység és Köselei öblözet	Hajdú-Bihar megye -Békés megye
18. Alsó Szigetköz	Győr-Moson-Sopron megye
19. Kelet-Baranyai Tájegység	Baranya megye
20. Nyíri belvízrendszer	Szabolcs-Szatmár-Bereg megye
21. Cecei belvízrendszer	Fejér megye
22. Rinya térség	Somogy megye
23. Gyála, Maros balparti belvízrendszer, Percsori öblözet	Csongrád megye
24. Tisza-Kunság térsége	Bács-Kiskun megye
25. Taktaköz	Borsod-Abaúj-Zemplén megye
26. Bodrogsík	Borsod-Abaúj-Zemplén megye
27. Dél-Heves síkvidék öblözet	Heves megye
28. Beregi belvízrendszer	Szabolcs-Szatmár-Bereg megye
29. Kurca térség (Szentek)	Csongrád megye
30. Vidre-éri belvízrendszer (Csongrád)	Csongrád megye
31. Dél-Tolnai öblözet	Tolna megye

## **Annex 7: The methodology of income forgone and cost calculation for Axis 2 measures**

When calculating the payments of all axis 2 measure, principles established by the European Commission have been applied, namely the compensation of income forgone and possible increase in cost caused by management provisions.

## A) Natura 2000 payments on agricultural areas – measure 213

The rate of the compensation is established, on the basis of the additional costs of complying with the provisions set by the national legislation and lost revenues connected therewith. The methodology of determining the rate of compensation was similar to the methodology used for the agri-environmental measures.

Determining the land use prescriptions and their agronomic effect; calculating factors of income loss/income growth and cost reduction/encrease based on the agronomic effects and finally summarizing all the factors mentioned above and determining the rate of income loss. The last step of calculating the proposed sum of compensation is to round off the sum to the closest thousand.

The determination of the rate of support on Natura 2000 grasslands was carried out by taking into account the cost effects of 3 land use prescriptions.

NATURA 2000 provisions	baseline (GAEC/usual practice)	payment calculation
avoid overgrazing	avoid overgrazing	no payment
yield improvement prohibited	fertiliser/pesticide application occur	extra cost of fodder to supplement missing yield
nutrient supply only by livestock manure	fertiliser/pesticide application occur	no payment (included in previous)
5 % of the area left uncut	not applied	income loss due to unharvested yield
bird friendly mowing methods	not applied	higher cost due to special harvesting method
removal of mowed hay	not relevant	no payment

Payment calculation process and the involvement of experts are the same as with Measure „Agri-environmental Payments” (see under).

## B) Agri-Environmental payments – measure 214 A

### **General aspect**

Calculation is composed of the following steps: the definition of certain agri-environmental specifications, the definition of agronomical effects of such specifications, calculation of revenue loss/ revenue increase/ cost decrease/ cost increase factors resulting from agronomical effects, and finally, concerning all specifications, the summary of all above factors and the definition of revenue loss. The very last step is to round off the amount of revenue loss to the closest thousand and thus define the recommended amount of support. In the following table there is an overview on selected (most frequent) management prescriptions, their baselines and the difference upon which the payment rate (income forgone) is calculated.

### **Expert involvement in the planning/payment calculation**

In line with the Article 53 of Council Regulation 1974/2006/EC, the calculation of support amount has been completed by a group of independent experts: Ferenc TAR, chief planner, independent expert of Association of Agri-environmental Management, Zoltan SZUDA, planner, independent expert of Federation of Bio-culture Associations, Gyula FÜLÖP, planner, expert of Birdlife Hungary, Zoltán SZABÓ, coordinator, Csongrád County Agri-information and Educational Public Company.

### **Collection of data**

In line with the Article 53 of Council Regulation 1974/2006/EC, the calculation of support amount has been completed by independent experts. The basis for calculations have been the economic data of years 2003, 2004 and 2005 of the pilot operation system run by the Agricultural Economic Research Institute, and in terms of operative costs, the 2006 factual data have been used provided by the Association of Agricultural Machinery Entrepreneurs.

In addition to the abovementioned baseline data further information and specific data were provided by the following institutions: “Szent István” University, Debrecen University, Hungarian Bio-culture Federation, Hungarian Vegetable and Fruit Product Board, Hungarian Chamber of Professionals and Doctors of Plant Protection, Central Agricultural Office Directorate for Plant health and Soil/Agri-environmental Protection, Hungarian Sheep Breeders Organisations, National Park Directorates, National Agricultural Chamber, Hungarian Animal Breeders Organisation, Birdlife Hungary, various agri-environmental farmers.

## **Public consultation on the schemes and calculations**

The following partners have expressed their opinion and justified the calculations: Research Institute for Animal Breeding and Nutrition, Hungarian Animals Breeders Organisation, WWF Hungary, BirdLife Hungary, National Society of Conservationists, Central and East European Working Group for the Enhancement of Biodiversity, Committee for the Preservation of Native Hungarian Species, Research Institute for Viticulture and Aenology, Institute for Fruit and Ornamental Plant Production, Association of Hungarian Young Farmers.

## B.1.) arable schemes

AE provision	applied in schemes									baseline (GAEC/usual practice)	payment calculation
	integrated	organic	tanya	HNVA bustard	HNVA crane	HNVA bird	HNVA falcon	water erosion	wind erosion		
provisions of organic production (Reg. 2092/1991)		x								use of fertilisers and pesticides	income loss based on yield and price differences
extended soil sample analysis in 1st and 5th year of the scheme	x	x	x	x	x	x	x	x	x	simplified soil analysis in every 5 years	cost difference of simplified and extended soil analysis
preparation and application of nutrient management plan	x	x	x	x	x	x	x	x	x	nutrient management plan is not prepared	partial cost of nutrient management plan
preparation and application of land use/cropping plan	x	x	x	x	x	x	x	x	x	land use/cropping plan is not prepared	cost of land use/cropping plan

AE provision	applied in schemes									baseline (GAEC/usual practice)	payment calculation
	integrated	organic	tanya	HNVA bustard	HNVA crane	HNVA bird	HNVA falcon	water erosion	wind erosion		
field plot size cannot exceed 2 hectares			x							average field plot size is over 50 ha	increased machinery cost due to small plotsize
maximum N application is 90 kg/ha/year				x	x	x	x			national average N application is 78 kg/ha/year	no payment
medium deep soil loosening once in the 5 years	x	x	x					x		soil loosening is not applied	cost of soil loosening minus cost of ploughing
crop rotation rules	x	x	x	x	x	x	x	x	x	basic rules of crop rotation (GAEC)/agronomically appropriate crop rotation is not typical	no payment
cropping pattern - horizontal schemes (max 60% of corn, wheat, sunflower, min 10% of leguminous crops)	x	x								65% share of corn, wheat, sunflower, 4% share of leguminous crops in cropping pattern	gross margin difference compared to national average cropping pattern
cropping pattern - horizontal schemes (max 50% of corn, wheat, sunflower, min 10% of leguminous crops)			x							65% share of corn, wheat, sunflower, 4% share of leguminous crops in cropping pattern	gross margin difference compared to national average cropping pattern
cropping pattern for bustard				x						65% share of corn, wheat, sunflower, 4% share of leguminous crops in cropping pattern	gross margin difference compared to national average cropping pattern
cropping pattern for crane/wild goose					x					65% share of corn, wheat, sunflower, 4% share of leguminous crops in cropping pattern	gross margin difference compared to national average cropping pattern
cropping pattern - bird habitat						x				65% share of corn, wheat, sunflower, 4% share of leguminous crops in cropping pattern	gross margin difference compared to national average cropping pattern
cropping pattern - red legged falcon							x			65% share of corn, wheat, sunflower, 4% share of leguminous crops in cropping pattern	gross margin difference compared to national average cropping pattern
cropping pattern - water erosion								x		65% share of corn, wheat, sunflower, 4% share of leguminous crops in cropping pattern	gross margin difference compared to national average cropping pattern
cropping pattern - wind erosion									x	65% share of corn, wheat, sunflower, 4% share of leguminous crops in cropping pattern	gross margin difference compared to national average cropping pattern
green manuring once in the 5 years	x	x	x	x	x	x	x			green manuring is not used	cost of green manuring
environmentally pesticide use	x	x	x	x	x	x	x			use of licenced/permitted pesticides	extra cost of environmentally friendly pesticides
no insecticides to be used				x			x			normally applied	income loss due to yield loss
slurry, sewage, seage sludge is not allowed				x	x	x	x			applied only occasionally	no payment
application of pest forecasting in plant protection	x	x	x							pest forecasting is not applied	extra labour cost related to pest forecasting activities
amelioration and irrigation is prohibited				x	x	x	x			not typical	no payment
use of rodenticide and soil disinfection is prohibited				x	x	x	x			typically applied	income loss related to pest damage
5% area remain uncut when multiannual leguminous crops are cultivated				x	x	x	x			not applied	income loss due to unharvested crop



AE provision	applied in schemes									baseline (GAEC/usual practice)	payment calculation
	integrated	organic	tanya	HNVA bustard	HNVA crane	HNVA bird	HNVA falcon	water erosion	wind erosion		
bird protecting cutting method				x	x	x	x			not applied	extra machinery cost due to special harvesting method
bird deterring chain use when mowing				x			x			not applied	extra machinery cost due to the use of bird deterring chain
shared timing of alfalfa cutting (50% early -50% late)				x						not applied	income loss due to quality loss of late harvested crop
reporting the cutting date and location				x	x	x	x			not applied	no payment
only daytime machinery working				x	x	x	x			happens rarely (campaign works -harvesting)	no payment
cereal harvesting can be started only after 1st of July				x						harvesting starts normally end of June	no payment
reporting the finding of a bird nest				x						not applied	no payment
6 m pesticide free margin				x		x	x			not applied	income loss due to yield loss
row cultivation is not allowed after 1st of May				x						not applied	income loss due to yield loss
snow removal on 10% of rape fields				x						not applied	income loss due to yield loss
upkeep of green fallow after cereal harvesting					x	x	x			not applied	extra cost of fallow management
stem-crushing of green fallow							x			not applied	no payment
mulching of 10% of corn before harvesting, upkeep till February					x					not applied	income loss due to yield loss
herbicide use only once in 1 farming year						x				not applied	income loss due to yield loss
winter/spring soil cover								x		not applied	extra cost of cover crop cultivation
contour cultivation to be applied								x		not applied	extra cost of machinery use
green manuring after winter crops									x	not applied	extra cost of green manuring
direction of cultivation rectangular to common wind direction									x	not applied	extra cost of machinery use
ploughing is allowed only once in 5 years (non-ploughing tillage)									x	not applied	extra cost of tillage

## B.2) grassland schemes

AE provision	applied in schemes						baseline (GAEC/usual practice)	payment calculation
	extensive	organic	HNVA bustard	HNVA habitat	environmental land use change	nature conservation land use change		
provisions of organic production (Reg. 2092/1991)		x					use of pesticides/mineral fertilisers	extra cost of organic fodder
grassland management by grazing	x	x	x	x	x	x	minimum maintenance of grasslands (at least 1 cutting/year)	no payment
grassland management by 2x mowing	x	x	x	x	x	x	minimum maintenance of grasslands (at least 1 cutting/year)	cost of extra mowing
grazing density must be between 0,2-1 LU/ha	x	x	x	x			minimum maintenance of grasslands (at least 1 cutting/year)	no payment
grazing density must be between 0,2-0,5 LU/ha					x	x	minimum maintenance of grasslands (at least 1 cutting/year)	no payment
sheperding/sectioning grazing	x	x	x	x	x	x	typically corral or free grazing is applied	extra cost of sheperd/sectioning
yield improvement by overseeding/ fertilisation/irrigation is prohibited	x	x	x	x	x	x	fertilisers and pesticide are applied	income loss due to yield loss
increase of grazing livestock to 0,3 LU/ha by the end of the 3rd year	x	x	x	x			minimum maintenance of grasslands (at least 1 cutting/year)	no payment
increase of grazing livestock to 0,2 LU/ha by the end of the 3rd year					x	x	minimum maintenance of grasslands (at least 1 cutting/year)	no payment
autumn "clearing" mowing and bale removal	x	x			x		not applied	extra cost of cleaning cutting
bale removal by the end of October	x	x			x		not relevant	no payment
harrowing, grassland aeration is prohibited			x	x		x	not relevant	no payment
10% uncut area to be left			x	x		x	not applied	income loss due to unharvested yied
bird friendly mowing methods			x	x		x	not applied	extra cost of special harvesting method
bird deterring chain use when mowing			x	x		x	not applied	extra cost of special harvesting method
bale removal within 1 month			x	x		x	not relevant	no payment

AE provision	applied in schemes						baseline (GAEC/usual practice)	payment calculation
	extensive	organic	HNVA bustard	HNVA habitat	environmental land use change	nature conservation land use change		
draining of surface waters is prohibited			x	x	x	x	excess water is drained	extra cost of fodder to supplement missing yield
in bustard habitats grazing can be started after 31st of May (up to 50% of all grassland in scheme)			x				not applied	extra cost of fodder to supplement missing yield
electric fences can only be settled by the permission of NPD			x	x		x	electric fences can be settled without NPD permissions	no payment
only daytime machinery work is allowed			x	x		x	not relevant	no payment
1st cutting is after 30th June			x	x		x	1st cutting is in 2nd part of April	extra cost of fodder to supplement missing yield
reporting the timing and location of the mowing			x	x		x	not applied	no payment
reporting on bird nests found			x	x		x	not applied	no payment
1st cutting on 50% of the area after 15th June, 2nd cutting on other 50% of the area after 30th July			x				not applied	extra cost of fodder to supplement missing yield
1st cutting is after 15th June				x		x	1st cutting is in 2nd part of April	extra cost of fodder to supplement missing yield
chemical plant protection is not allowed	x	x	x	x	x	x	chemical plant protection is typical	higher cost of weed control
in the 1st year only mowing is allowed					x	x	typical	no payment
from second year utilisation by grazing/mowing					x	x	typical	no payment
mowing is allowed after 1st May					x	x	1st cutting is in 2nd part of April	extra cost of fodder to supplement missing yield
oversowing of the grassland is only possible once during the 5 years					x	x	regular oversowing is occasional	no payment

### B.3.) permanent crop schemes

AE provision	schemes			baseline (GAEC/usual practice)	payment calculation
	integrated	organic	traditional orchards		
provisions of organic production (Reg. 2092/1991)		x		fertiliser and pesticide use	income loss based on yield and price differences
extended soil sample analysis in 1st and 5th year of the scheme	x	x	x	soil analysis is not obligatory	cost of extended soil analysis
leaf nutrient analysis for nutrient management	x	x		not applied	cost of leaf nutrient analysis
nutrient management plan	x	x	x	not applied	partial cost of nutrient management plan
prohibition of using sewage/sewage sludge	x	x	x	not relevant	no payment
environmentally friendly pesticide use	x	x		use of licenced/permitted pesticides	extra cost of environmentally friendly pesticides
sex pheromon trap use	x	x		not applied	cost of pheromone traps and extra labour cost
application of pest forecasting	x	x	x	not applied	extra labour cost related to pest forecasting activities
bird cavity placing in the plantation	x	x	x	not applied	cost of bird cavity placing and maintenance
insect hiding place establishment		x		not applied	cost of insect hiding place establishment
nutrient management only by FYM or compost			x	use of mineral fertiliser is typical	income loss based on yield differences
upkeep and management of grass cover between trees			x	not applied	management cost of grass cover
only organic pest management is allowed			x	licensed pesticides are allowed to use	income loss due to yield loss
only thinning pruning can be applied			x	productive pruning is applied typically	no payment

## Justification – apple and grape payments

The agri-environmental payment rates are higher in the case of integrated apple and grape productions than in the integrated production of stone fruits and berries. The production conditions of apple and grape cultures are relatively more intensive compared with stone fruits and berries. On the one part the average plant protection treatments are twice more in apple and in grape productions than in cultures of stone and berries (see table). On the other part the environment-friendly plant protection products are relatively more expensive than the conventional ones and required more special knowledge in practice. Apart from this the selective pesticides are applicable against only one, or some pest. On other treatment by other selective pesticide is necessary when other pest is occurred in the case of use of environmental friendly pesticides. The production system (e.g. pruning and harvesting) is also more costly in apple and grapes. Plant protection forecast instruments with a relatively high cost proportion are also used for well-timed plant protection treatments in apple and grape cultures timing.

Table: Plant protection technology by fruit groups

Plant technology	protection	quanti ty units	apples	stone fruits	berries	grapes
Total average treatment number		pc	17	9	7	12
Total average pesticide cost		€/ha	1189	668	622	952

## B.4.) wetland schemes

AE provisions	schemes			baseline (GAEC/usual practice)	payment calculation
	reed management	wetland maintenance	wetland creation		
reed management is applied	x			reed field remain uncut/unmanaged	no payment
reed harvesting is allowed between 15 December and 28th February	x			harvesting occur outside the period referred	no payment
15 cm high stubble must be left	x			zero stubble	income loss due to yield loss
20% area must be unharvested	x			not applied	income loss due to yield loss
draining of surface water is prohibited		x		water drainage typical	income loss due to yield loss
use of yield improvement by fertiliser/pesticides is not allowed		x		yield improvement by other fertilisers	income loss due to yield loss
utilisation of the area by grazing/mowing		x		typical	no payment
increase of grazing livestock to 0,2 LU/ha by the end of the 3rd year		x	x	minimum maintenance of grasslands	no payment
harvesting only by bird friendly mowing methods		x		normal harvesting techniques	extra cost due to special harvesting
wetland creation			x	arable farming/grassland mangement	income loss due to limitation of land use
water retention must be applied on the area, no drainage			x	water drainage typical	income loss due to yield loss
use of yield improvement by fertiliser/pesticides is not allowed			x	yield improvement by mineral fertilisers	income loss due to yield loss
vegetation must be cut 2 times during the year			x	cut once per year	extra cost of cutting
during the mowing min. 15 cm high stubble must be kept		x	x	zero stubble	income loss due to yield loss
grazing density must be under 0,5 LU/ha		x	x	minimum maintenance of grasslands (at least 1 cutting/year)	no payment

## **C) Preservation of native and endangered farm animals' genetic resources through breeding – measure 214B**

### **C.1.) General aspects:**

A part of emerging costs is specific to species, while another part is general in nature. Cost of the extra quantity feed due to longer farming time represents a significant amount from these latter costs. The revenue loss is also resulted from the difference between the sales prices and performance of an intensive vs. indigenous farm animal breed (meat, milk, egg production). Respect of the breeding programme (data collection, processing and evaluation, animal recording, registration, type classification, breeding value estimation, use of different selection methods, line or family preservation, higher male:female ratio, higher number of mating groups etc.) results in significant amount of extra work and thus, extra costs which shall be taken into account at the calculation of the support.

### **Explanation of the main cost components occurring during the breeding of native breeds**

Extra feed cost: indigenous farm animals require higher amount of feed (both forage and concentrate) due to the longer, slower growth of these animals compared to intensive breeds. This extra feeding period means 5 to 20 per cent more feeding time (day) than for intensive breeds. The costs of this extra time are calculated for each breed in table 2.

Extra herd management cost: although indigenous farm animals are generally kept under extensive conditions, herd management (in order to accomplish the breeding program) should be more accurate and precise therefore it is more expensive than for other livestock farming systems. Extra costs consist of extra staff expenditure (more skilled manpower, more working time per animal), higher male to female ratio (2 to 20 times more male breeding animals are needed than for intensive breeds because of lower reproduction capacity, and more mating groups have to be created and maintained within a given breed for line or family preservation).

Difference in sale price: sale price of indigenous breeds is 10 to 50 per cent less (apart from the Blonde Mangalitza) than for intensive, marketable breeds. The highest disparity can be observed in the case of horse breeds (price of native breeds compared to horserace breeds).

Cost of data collection: precise and perfect data collection (pedigree, performance, veterinary, sanitary data) in extensively kept livestock is rather difficult, for example: blood sampling for DNA tests, veterinary operations, type classification, body measurements, weighing etc. To fulfill the requirements of the breeding program, these operations should be done (by the farmer himself or by the breeding organization).

Cost of data processing: the collected data are processed by the breeding organizations as a service, so the breeders pay for it.

Selection on the base of genetic merit: this is the work done in order to realize the breeding program of a given breed elaborated by the breeding organization. This includes performance test, progeny test, breeding value estimation. Each native breeds has its own special evaluation system with specific index. All these operations demand highly sophisticated and expensive software as well as skilled staff.

- Pig: the annual number of mangalica piglets does not reach half of the average of the intensive breed. This results in significant revenue loss at sales. Furthermore, the separation of piglets occurs later and the swines for slaughter reach their slaughter weight not within 6 but 11-12 months.

- Sheep and goats: selling of native breed flock is challenging since there is no demand. Sales price hardly reaches half of the amount paid for modern breeds, while farming requires 30% more time (lamb reaches the required sales weight later). The frequency of twin farrowing is half of the index of modern breed.

- Poultry: the farming of a given number of farm animal requires ten times more starting parent flock and 2-3 times more time than in case of intensive hybrids. This, at the same time, means that the cost of foddering is 7-8 times higher than that for intensive hybrids. Moreover, the livestock unit “multipliers” referring to laying hen and other poultry determined in Annex V. of Regulation No. 1974/200//EC cannot be applied to various native poultry breeds since they are too general and do not consider the characteristics of the certain poultry breeds. The five pedigree stocks of old Hungarian species are very much different from each other, regarding their body weight, egg production and other reproducing and rearing abilities.

## **C.2.) Example – Hungarian Grey Cattle payments**

The daily gain and dressing percentage of Hungarian Grey Cattle is smaller compared to modern beef breeds, thus it can be purchased weighing less and at lower price at the same cost level. Weaned calf:

modern beef breed	300 kg	500 Ft/kg	= 150.000 Ft
<u>Hungarian Grey Cattle</u>	<u>250 kg</u>	<u>350 Ft/kg</u>	<u>= 87.500 Ft</u>
Deficiency			62.500 Ft



The extensive husbandry of Hungarian Grey Cattle allows smaller expenses and that is why only 40.000 Ft, i.e. **160 euro revenue loss/ cow** is in the calculation.

### Breed preserving stock:

Only 40.000 Ft, i.e. 160 euro revenue loss/ cow is in the calculation.

#### Nucleus stock:

*The expenses are calculated for 100 cows):*

- The good condition of breeding animals as it is prescribed in the breeding regulation must be maintained during the whole year.
- In order to fulfil the surplus tasks for the routine everyday work extra skilled manpower must be employed (*4.300 euro/year/100cows\**)
- In order to keep closer sex ratio the number of bulls shall be increased by 1 every year/50 cow. (*1200 euro*)
- The permanent identification (tattoo, chips) and data collection is obligatory
- The data of breeding diary must be reported regularly to the breeding organization
- The parentage testing for both sexes is obligatory (*4000 euro*) *laboratory expenses*
- The weighing of weaned and 30 months old calves is necessary for both sexes (*150 euro*). *Renting or amortisation*
- Using the computerized coordination system of the breeding organization or keeping his own private herd-book registration (*150 euro*) *operator*
- Maintenance of lines and families which is not profitable (*1000 euro*), the expenses of further breeding of old family members (too old cows)
- Maintaining the herd size with the young females and males of the herd
- The best bull calves should be kept for breeding purpose in his own herd or in the young bull farms (*600 euro*) *2 young bull / year\**
- When selling the surplus animals the instructions of the breeding organization must be taken into consideration. (*1000 euro*) / year expenses of 2 selected young bull's keeping for two and a half years for the maintenance of the breed.

## Summarized

12 400 euro / 100 cows calculated expenses of the nucleus herds.

For one cow: 124 euro i.e.31.000 HUF

### *Total expenses*

284 euro/cow (= 160 euro revenue loss, + 124 euro extra cost)

160 euro/cow only deficiency compensation for preservation herds.

## D) Forestry measures

### D.1) The first afforestation of agricultural land - Measure 221

#### Collection of data:

The calculation of costs has been based on a nationwide data collection conducted by the territorial organs of the forestry authority by questioning several beneficiary groups and by stand types and natural endowments, considering regional and ecological differences. In the course of data processing, the average costs have been calculated by calculating average costs that take the area of afforestation so far into consideration. On the basis of the result of the data collection, and its own research, the calculation of the costs were done by the Forest Research Institute.

The afforestation costs include the material costs of the afforestation, the actual costs of afforestation and all directly related and necessary costs (eg.: planning, plant protection costs).

#### Calculation method of establishment:

By using the methodology described above, the nationwide values of spending relating to the first installment and maintenance of the 6 target stocks were received. The next step was the determination of intensity of the contribution. Pursuant to the forestry strategic trends based on the domestic forestry potential and preferring the long-term forest use, for the purpose of creating a proper target stock structure, the target stocks have been classified into two priority categories as follows, according to which the intensity of contribution is different.

Target stock	Oak and beech	Other hard broadleaves stocks	Other soft broadleaves stocks	Black locust	Poplar	Pine
Priority	High	High	High	Medium	Medium	Medium
On average land	70%	70%	70%	70%	70%	50%

Further differentiation of the contributions is resulted from the fact that difference is made between the areas with slopes below ten degree and over ten degree in the case of areas to be afforested. The data show that the costs are by 10% higher as an average in the areas with slopes over ten degree, because the use of machinery is limited on the higher slopes.

In the case of supplementary contributions, the cost intensities were defined pursuant to the expert opinion of the Forestry Research Institute in the 50% of the real costs.

### **Calculation method of maintenance costs:**

In the case of maintenance costs, the total cost intensity of operations for 5 years has been reviewed and the value resulted in this way has been distributed evenly during the 5 years available.

### **Calculation method of support for loss of income**

When establishing calculation method for the support for loss of income, our primary criterion was to adjust ourselves to the average level of contributions to be received prior to the afforestation and to take into consideration the profit lost due to suspension of production. The grasslands and the other agricultural areas subject to a more intensive cultivation have basically been separated from each other. The amount of the revenue-compensating aid is no case exceed the value of EUR 242/ha. In this way, we would like to avoid the chance of over-financing.

In case non-farmers (natural persons), considering the Annex of the 1698/2006 EC Reg. the maximum support for loss of income is 150 €/ha, despite of the calculated loss of income is 242 €in arable land.

The calculated loss of income in grassland is 92 €/ha, in case of non-farmers this value was reduced with the ratio 150/242, resulting 57 €/ha. In this way, the farmers, and the non-farmers has equal opportunities without reference to the cultivating branch of the land to be afforested.

In 2009 for the inchoation of the national Association of Private Forest Owners in Hungary the amount of the support was reviewed. The methodology of the calculation was the same as the previous one, but in the case of the raw data the inflation was also taken into consideration, the expenditures of non stand types were standardized and the costs of maintenance were updated. The increase of the support involves only the costs of establishment and maintenance without support for loss of income.

1. The amounts of the support of first afforestation are based on the expenditure from 2006. According to the data of the Hungarian Central Statistical Office the extent of inflation was 8 % in 2007, and 6 % in 2009. Because of these datas the support update is 14 %.

## 2. Standardization of the expenditures of non stand types

Type of cost	€/hec
Planning (site survey and implementation plan)	161
Geodesic survey	198
Fees taxes	81
Deep ploughing (40-50 cm)	262
Disking	94
Transport and pit storage of reproductive material	97

The update of the standardized expenditure was based on the rate of the year 2008 published by Agricultural Machine Contractors.

The correction with the inflation and the standardization induce 200-300 €increase in every stand types.

The amount of the support of the establishment in every stand types

Stand types	Applied from 2007		Applied from 2010	
	Euro/hec	Euro/hec	Euro/hec	Euro/hec
	<10°	>10°	<10°	>10°
Oak and beech	1520	1830	1721	2065
Other hard broad-leaves	1040	1240	1291	1549
Other soft broad-leaves	940	1130	1148	1378
Pine	670	810	853	1023
Improved poplar	880	-	1177	-
Black locust	810	970	1090	1308

## 3. Update of the costs of maintenance

The costs of maintenance that follow the establishment depend on the stand type, soil type and the weather. So it is really difficult to create a calculation which considers every factor.

- The costs of the row cultivation by hand is costly, about 300 €/hectar. But it is not needed to execute it on every occasion, for this the calculation accounts for only the 50 % of costs of the row cultivation by hand. The row cultivation by hand needs one time the case of pine and black locust stand types and two times improved poplar stand type. On that score the costs of these stand types were calculated proportionately.

- Row cultivation by machine needs two times.

- The costs of the wood preservative consist of plant protection and chemical control against game bite.

The replant consists of balled plants and the manual work, because the replant is not able to do with machine. Accordingly the costs of replant are composed of the 20 % of the costs of the original numbers of the balled plants and the 80 % of the costs of the wages of the work of the establishment. In case of the black locust stand type the costs contain only 5 % of the costs of the original numbers of the balled plants and the 20 % of the costs of the wages of the work of the establishment.

Technology	Numbers of work a year	Cost
Row cultivation by hand	1	150 €/hec/year
Row cultivation by machine	2	2 X 56 €/hec/year
Wood preservative	1	206 €/hec/year
Replant	1	Depend on stand types

The amount of the support of the maintenance in every stand types

Stand types	Applied from 2007		Applied from 2010	
	Euro/hect	Euro/hect	Euro/hect	Euro/hect
	<10°	>10°	<10°	>10°
Oak and beech	236	284	432	519
Other hard broad-leaves	241	290	391	469
Other soft broad-leaves	174	209	369	443
Pine	192	230	262	314
Improved poplar	186	-	301	361
Black locust	156	187	210	252

The higher amounts of the support are applied only the case of support claim from 2010.

## **D.2.) First establishment of agroforestry systems on agricultural land - Measure 222**

### **The determining method of planting costs:**

When calculating the normative support unit prices for the individual agro-forestry systems the entrance prices have been decreased by the support proportions listed in the annex of 1698/2005/EC.

Payment rates are uniform, calculated on a per hectare basis, so payment procedure is not by invoice.

Parallel to the correction of the implementing costs according to the significant increasing of prices in the 2007-2008 years, we divided it in two parts to create possibility to the farmers who already have grass on their land to take support for tree plantation only, which support is reduced with the cost of the grass plantation.

Concerning the costs of the measure in case of the planning and the soil preparations we used the same data like we had used in the “The first afforestation of agricultural land” measure because these operational and functional costs are the same for the two measures. The correction of the 2008. year inflation also appears in this calculation for the same reason

The price of the bigger (higher) forest, and the fruit tree seedlings is more expensive than the normal forest tree seedlings, because farmers have to purchase these special seedlings in horticultural nurseries where the price-level is higher. Considering the prescriptions of the measure, where the planting of the fruit trees is also an optional possibility, it is very important to confirm the higher seedling prices. The price of the planting is also higher in this measure compared to mechanical forest planting, because the necessary hole is deeper and farmers have to do it manually.

Only this method and the attached price level can ensure the completion of the necessary nutrient supply duties for the bigger seedlings.

### **Information sources used for calculations**

- Central Agricultural Office Forestry Directorate
- Ministry of Agriculture and Rural Development
- Forest Research Institute
- Expert's estimation
- Other sources (Hungarian Tax and Financing Administration Office, University of Szent István, Central Statistical Office, etc.)

In case of expert' estimations, the numbers were accepted only after verifying by Central Agricultural Office Forestry Directorate.



### **D.3.) The first afforestation of non-agricultural land - Measure 223**

The calculation methods of the amounts of support:

Collection of data:

The calculation of costs has been based on a nationwide data collection conducted by the territorial organs of the forestry authority by questioning several beneficiary groups and by stand types and natural endowments, considering regional and ecological differences. In the course of data processing, the average costs have been calculated by calculating average costs that take the area of afforestation so far into consideration. On the basis of the result of the data collection, and its own research, the calculation of the costs were done by the Scientific Institute of Forestry.

The afforestation costs include the material costs of the afforestation, the actual costs of afforestation and all directly related and necessary costs (eg.: planning, plant protection costs).

Calculation method of establishment:

By using the methodology described above, the nationwide values of spending relating to the establishment and maintenance of the 6 target stocks were received. The next step was the determination of intensity of the contribution. Pursuant to the forestry strategic trends based on the domestic forestry potential and preferring the long-term forest use, for the purpose of creating a proper target stock structure, the target stocks have been classified into two priority categories as follows, according to which the intensity of contribution is different.

Target stock:	Oak and beech	Other hard frondous stocks	Other soft frondous stocks	Black locust	Poplar	Pine
Priority	High	High	High	Medium	Medium	Medium
on average land	70%	70%	70%	70%	70%	50%

Further differentiation of the contributions is resulted from the fact that difference is made between the areas with slopes below ten degree and over ten degree in the case of areas to be afforested. The data show that the costs are by 10% higher as an average in the areas with slopes over ten degree, because the use of machinery is limited on the higher slopes.

In the case of supplementary contributions, the cost intensities were defined pursuant to the expert opinion of the Forestry Research Institute in the 50% of the real costs.

Calculation method of maintenance costs:

In the case of maintenance costs, the total cost intensity of operations for 5 years has been reviewed and the value resulted in this way has been distributed evenly during the 5 years available.

The rate of support for establishment costs:

The rate of support for the first removal may be maximum 80% of eligible costs in mountain areas, in underprivileged areas other than mountain areas and in Natura 2000 areas. In other areas, it may be maximum 70% of eligible costs.

The rate of support is between 50 and 70% and it depends on the planned type, on the machine-passable or machine non-passable area

#### **D.4.) Compensation support provided for farming on Natura 2000 payments - Measure 224**

Detailed justification of support amounts for farming on Natura 2000 payments(Measure code: 224)					
		Group 1.	Group 2.	Group3.	Group 4.
1	• Changes to future target forest type	67	67	67	67
2	• Protection of forest edge	42	36	33	26
3	• Raising the cutting age	73	47	36	33
4	• Introducing time restrictions for logging	55	50	45	38
5	• Introducing full or partial restrictions for logging				
a	❖ cleaning, selection thinning, health-related logging	70	63	55	52
b	❖ final thinning, logging for stock care, logging for final felling	60	57	47	42
6	• Maintaining and leaving certain tree species intact during forest tending interventions in order to improve the structure and composition of forests	21	16	x	x
7	• Maintaining and leaving dead wood, tree identification	62	41	28	x
8	• Maintaining and leaving witness trees or groups of witness trees in case of final felling	62	35	26	x
9	• Maintaining and leaving trees with special features (forked, hollow, nest-holding, etc.)	29	16	13	10

<i>Age classes/forest stand type groups</i>	<i>Oak-beech</i>	<i>Other indigenous hard broadleaves</i>	<i>Other indigenous soft broadleaves</i>	<i>Other forest</i>
	Group 1.	Group 2.	Group3.	Group 4.
	€/hectare/year			
0-5 years	67	67	67	67
6-20 years	166	150	133	116
21-60 years	250	200	183	
61 years - cutting age	382			
above cutting age		283	183	150

<i>NHRDP unit prices</i>					
<i>Age classes/forest stand type groups</i>	<i>Oak-beech</i>	<i>Other native hard broad leaves</i>	<i>Other native soft broad leaves</i>	<i>Other forest</i>	
	€/hectare/year				
0-5 years	40	40	40	40	
6-20 years	100	90	80	70	
21-60 years	150				
61 years - cutting age		120		90	
above cutting age	200	170	110		

The revision of the district forestry plans and the impact assessment – which was needed for the compliance with the Natura 2000 criterias of these plans – proved that in the case of classified higher naturality category forests the introduction of restriction for logging is more often necessary.

As a consequence of the above mentioned facts, the rate of the income foregone is the highest in the case of higher naturality category forests.

The calculation of average price carried out during impact assessment shows that for higher naturality category forests (the) income foregone, in the case of so-called *derivative and transitional forests* at least by 8%, in the case of *natural and nature-like forests* at least by 15% could exceed the income foregone resulting from the restrictions related to the *cultural forests and tree plantation forests*.

The rate of support – in those cases when district forestry plans order it, which plans were complied with Natura 2000 legislations – must exceed the maximum amount declared in the Regulation 1698/2005/EC. The reason for the exceedance is

that those forests which belong to the older age classes stocks and to the oak-beech forest stand types the ecological value – in most of the cases – fit to the added value of logging.

Due to the added value of logging, more restrictions come up, moreover, restrictions appear in economically valuable forests, and that is to say, effects of these will be cumulative.

The determination of support rates were calculated – in conformity with article 53 of (EC) n° 1974/2006 – in cooperation with the Central Agricultural Office Forestry Directorates and the Forest Research Institute as an independent expert.

#### **D.5.) Forest environment payments - Measure 225**

The inventory of Hungarian forests based on official data of the National Forest Data Base, which includes the sites' features too, and on this data base the authorities can determine the directions of possible developments for environment protection and they can control also their fulfillment

Cost calculation based on the data from the National Forest Data Base, study papers prepared by the Forest Research Institute and the University of Western Hungary, as well as various bodies of the forestry authority, surveys with different beneficiary groups. In the course of the data processing, we also carried out a comparison with the costs of afforestation.

With respect to the individual schemes, the cost items to be considered are: lost revenue, wage-type costs (manual and machinery-aided treatment, chemical protection and plantation) and materials needed for plantation.

#### **Methodology of calculation:**

**The changes of the inflation rate** due to the increase of **fuel prices and labour costs** as well as other expenditures that has taken place since the approval of NHRDP have made it necessary to revise the unit prices of support. As the result of the revision 40% increase of the support amounts on average is thought to be justified in order that this measure should be adapted to the changing conditions and be able to fulfil its important role in the future as well (see the detailed calculations in the Appendix).

In the case of two schemes (Postponement of final felling in order to protect soil and habitat , Maintenance of forests for public welfare purposes) in spite of the calculated loss of income (€ 411 and 352) we consider justified that the level of support should be proportional to that of the other schemes. Therefore we stated the figures in the table accordingly.

In several cases the above correction resulted in 200 €/ha/year, which is **higher** than the **rate of support stated** in the Appendix of 1698/2005/EC.

In accordance however with the \*\*\*\*\* **remark:** „*These sums can be increased in the case of the operations mentioned in Article 16a, and in other exceptional cases considering the concrete conditions justified in the rural development program.*

These concrete conditions are the following: at the time of working out the measure **detailed and rigorous requirements were prescribed with significant nature conservation results, the costs** of which however **reached the limit of 200 €/ha/year even then** calculated by using data available on the actual costs at that time (2006-2007 years).

### **Resources:**

#### **Available resources**

- before the reallocation of resources: €77,3 million
- after the reallocation of resources **€41,3 million**

#### **Resources used/allocated so far:**

- support applications in 2009 year (295 pieces): **€6 million** allocated
- support applications in 2010 year (174 pieces): **€5 million** allocated
- support applications in 2011 year (215 pieces): **€5 million** under allocating

#### **Forecasted demand** for resource of support applications in 2012-2013 years:

- calculated with the original support rate and 228 applications per year:  
€10,3 million
- **calculated with the increased support rate** (and 342 applications): **€22,4 million**

#### **Expected remaining amount:**

- calculated with the original support rate: €15 million
- **calculated with the increased support rate: €2,9 million**

The above calculation took into account an beyond optimistic increase (50%) of number of application in years 2012. and 2013.

Considering the above, it is stated that the increase of the rate of support does not jeopardise the implementation of the program.

See further in Annex 16.



## Detailed justification of increasing the rate of support of the Forest-environment payments measure (Measure code: 225)

### Incurring special costs by the schemes

Cost of seedlings					
Title of cost	EUR/pc	EUR/ha	Comment	Info source	Reference period
seedling cost for forest tree species	5,64	374,54	one meter high seedling	expert's estimation	2010
berry seedling cost	2,25	749,08	average cost of berry seedlings	expert's estimation	2010
seedlings for hedgerow	0,21	0,00	average cost of tree and bush seedlings	expert's estimation	2010
micorhized seedling cost	8,99	7490,76	oak or hazelnut seedling micorhized by truffle	University of Szent István	2010

Cost of other forest installments					
Title of cost	EUR/m	EUR/ha	Comment	Info source	Reference period
cordon establishment	1,31	1573,05	1200 m/ha	expert's estimation	2010
fence establishment	3,12	781,82	250 m/ha	expert's estimation	2010
electric fence	1,36	0,00		expert's estimation	2010
formation of shoulder	12,53	0,00		expert's estimation	2010
formation of furrow	0,00	409,05		expert's estimation	2010
cost of tree identification (EUR/ha)	0,00	22,50	cost of paint and painting	MGSZH	2010

individual protection	0,19	0,00	EUR/piece	expert's estimation	2010
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Cost of grassland establishment			
Title of cost	EUR/ha	Info source	Reference period
Ploughing	79,79	MaRD	2010
Rolling	11,61	MaRD	2010
Seedbed preparation	24,38	MaRD	2010
Surface management	15,72	MaRD	2010
Sowing	29,96	MaRD	2010
Cost of grass seed	234,08	MaRD	2010
mowing	42,70	MaRD	2010
cost of autumn clearcutting	24,34	MaRD	2010

Clearing cost of invasive tree species			
Title of cost	EUR/ha	Info source	Reference period
Machinery cost	33,71	MGSZH	2010
Cost of hand labour	45,88	MGSZH	2010
Cost of chemical ingredients	114,80	MGSZH	2010
Machinery cost of chemical control	39,33	MGSZH	2010
Cost of transportation	14,23	MGSZH	2010
cost of offset clearing	26,22	MGSZH	2010
Total cost	274,16	MGSZH	2010

Income loss calculation				
Title of cost	EUR	Unit	Info source	Reference period
Average yield of wood	0,82	m3	expert's estimation	2010
value of wood	56,18	EUR/m3	expert's estimation	2010
cost of tree cutting	11,24	EUR/m3	expert's estimation	2010



taxes, fees etc.	11,24	EUR/m3	expert's estimation	2010
profit of tree	7415,80	EUR/ha	expert's estimation	2010
Bank interest rate	0,00	%	expert's estimation	2010
Income forgone in one year	407,87	EUR/ha	expert's estimation	2010

Cost of labour, technical assistance					
Title of cost	EUR	Unit	Comment	Info source	Reference period
wage of one physical worker including taxes	352,06	EUR/month	to assure intensive maintenace of social forests one physical worker per 10 hectares is necessary	APEH / Hungarian Tax and Financial Control Administration	2010
cost of professional engineer	168,54	EUR/day	expert cost of Pro Sylva Hungaria covering the official identification of harvestable trees, one expert handles 5 hectare per day	expert's estimation	2010

## Detailed justification of increasing the rate of support of the Forest-environment payments measure (Measure code: 225)

### Totalized calculated costs by the schemes

#### 1. Invasive tree and shrub control

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
	0	
<b>subtotal</b>	0	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		
clearing cost of invasive species	274	
	0	
<b>subtotal</b>	274	
<b>Total losses</b>	274	
<b>Income loss</b>		
<b>Support rate</b>	274	

#### 2. Conversion of non-indigenous forest stands by manual maintenance 1st year

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
	0	
<b>subtotal</b>	0	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		

cost of hand maintenance (2X mowing, chemical control)	274
	0
<b>subtotal</b>	274
<b>Total losses</b>	274
<b>Income loss</b>	
<b>Support rate</b>	274

## 2. Conversion of non-indigenous forest stands by manual maintenance from 2nd year

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
	0	
<b>subtotal</b>	0	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		
hand maintenance ( two times mowing)	106	
	0	
<b>subtotal</b>	106	
<b>Total losses</b>	106	
<b>Income loss</b>		
<b>Support rate</b>	106	

## 3. Delayed felling for soil and habitat protection

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
income forgone in one year due to restricted cutting	411	
<b>subtotal</b>	411	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		
	0	
<b>subtotal</b>		
<b>Total losses</b>	411	
<b>Income loss</b>		
<b>Support rate</b>	280	

## 4. Maintenance of forests of public welfare

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
	0	
<b>subtotal</b>	0	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		
wage of one physical worker	352	
	0	
<b>subtotal</b>	352	
<b>Total losses</b>	352	
<b>Income loss</b>		
<b>Support rate</b>	280	

#### 5. Reduction the clear-cutting of native forests

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
value of 5 m3 dead tree	50	
value of single tree (1m3)		
offset clearing		
33% loss of total yield		
<b>subtotal</b>	174	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		
	0	
<b>subtotal</b>		
<b>Total losses</b>	224	
<b>Income loss</b>		
<b>Support rate</b>	224	

#### 6. Creation and maintenance of forest clearings 1st year

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
	0	
<b>subtotal</b>	0	
<b>Cost savings</b>		
		0

<b>subtotal</b>	0
<b>Extra costs</b>	
cost of mowing ( 2 times)	85
Machinery cost	34
Cost of chemical ingredients	115
cost of offset clearing	26
Cost of transportation	14
<b>subtotal</b>	274
<b>Total losses</b>	274
<b>Income loss</b>	
<b>Support rate</b>	274

#### 6. Creation and maintenance of forest clearings from 2nd year

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
	0	
<b>subtotal</b>	0	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		
cost of autumn mowing	24	
cost of offset clearing	26	
	0	
<b>subtotal</b>	50	
<b>Total losses</b>	50	
<b>Income loss</b>		
<b>Support rate</b>	50	

#### 7. Selection forest management

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
value of 5 m3 dead tree	50	
<b>subtotal</b>	50	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		
expert fee	56	
hand maintaining two times	92	
forest protection cost	32	
<b>subtotal</b>	230	
<b>Total losses</b>	230	
<b>Income loss</b>		

<b>Support rate</b>	230
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#### 8. A Creation and maintenance of micro-habitats

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
value of 10 m3 dead tree	101	
<b>subtotal</b>	101	
<b>Cost savings</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Extra costs</b>		
cost of tree identification	22	
	0	
<b>subtotal</b>	123	
<b>Total losses</b>	123	
<b>Income loss</b>		
<b>Support rate</b>	123	

#### 8. B Leaving groups of trees after final felling

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
income of 11 m3 tree	129	
<b>subtotal</b>	129	
<b>Cost savings</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Extra costs</b>		
	0	
<b>subtotal</b>		
<b>Total losses</b>	129	
<b>Income loss</b>		
<b>Support rate</b>	129	

#### 8. C Scrub control to ensure forest regeneration 1st year

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
	0	
<b>subtotal</b>	0	
<b>Cost savings</b>		
		0

<b>subtotal</b>	0
<b>Extra costs</b>	
complex scrub control (chemical and physical control)	274
	0
<b>subtotal</b>	274
<b>Total losses</b>	274
<b>Income loss</b>	
<b>Support rate</b>	274

#### 8. C Scrub control to ensure forest regeneration from 2nd year

Items	Losses [Euro/ha]	Gains [Euro/ha]
<b>Extra Income</b>		
		0
<b>subtotal</b>		<b>0</b>
<b>Income loss</b>		
	0	
<b>subtotal</b>	0	
<b>Cost savings</b>		
		0
<b>subtotal</b>		0
<b>Extra costs</b>		
scrub control (mowing two times)	106	
	0	
<b>subtotal</b>	106	
<b>Total losses</b>	106	
<b>Income loss</b>		
<b>Support rate</b>	106	

**Detailed justification of avoiding overcompensation by the Forest-environment payments measure (Measure code: 225) after introduction of Natura 2000 payments (Measure code: 224)**

		Group 1.	Group 2.	Group3.	Group 4.						
1	• Changes to future target forest type	67	67	67	67						
2	• Protection of forest edge	42	36	33	26	Age classes/forest stand type groups	Oak-beech	Other indigenous hard broadleaves	Other indigenous soft broadleaves	Other forest	
3	• Raising the cutting age	73	47	36	33						
4	• Introducing time restrictions for logging	55	50	45	38						
5	• Introducing full or partial restrictions for logging						Group 1.	Group 2.	Group3.	Group 4.	
a	❖ cleaning, selection thinning, health-related logging	70	63	55	52		€/hectare/year				
b	❖ final thinning, logging for stock care, logging for final felling	60	57	47	42	0-5 years	67	67	67	67	
6	• Maintaining and leaving certain tree species intact during forest tending interventions in order to improve the structure and composition of forests	21	16	x	x	6-20 years	166	150	133		
7	• Maintaining and leaving dead wood, tree identification	62	41	28	x	21-60 years	250			116	
8	• Maintaining and leaving witness trees or groups of witness trees in case of final felling	62	36	26	x	61 years - cutting age		200			
9	• Maintaining and leaving trees with special features (forked, hollow, nest-holding, etc.)	29	16	13	10	above cutting age					
							382	283	183	150	
NHRDP unit prices											
Age classes/forest stand type groups		Oak-beech	Other native hard broad leaves	Other native soft broad leaves	Other forest						
		€/hectare/year									
0-5 years		40	40	40	40						
6-20 years		100	90	80							
21-60 years		150			70						
61 years - cutting age			120								
above cutting age		200	170	110	90						
		m3	expense s euro (100%)	Deduction of measure 225 (60%)							
Creation and maintenance of micro-habitats (Forest-environment payments, Measure 225)		10	123								
NATURA 2000 (Measure 224)		5	62	37	At Natura 2000 correlate to table C13						
Leaving groups of trees after final felling (Forest-environment payments, Measure 225)		11	129								
NATURA 2000 (Measure224)		5	62	37	At Natura 2000 correlate to table C14						
Reduction the clear-cutting of native forests (Forest-environment payments, Measure 225)		without the cost of tree identification	50								
NATURA 2000 (Measure 224)		20+50	70	42	20 euro = 33 % of table Natura 2000 C11 (like Measure 225 calculation) + 50 euro unit price of "leaving dead wood" like in the Measure 225 together give the total amount (70 euro - 100%), of wich 60 % the deduction (42 euro)						

**D.6.) Restoring forestry potential and introduction of preventive actions - Measure 226.**



The determining method of planting costs:

When calculating the normative support for the measure, the data collected from different sources (professional associations, universities, FRI, forestry authority etc.). Payment rates are uniform, calculated on a per hectare basis, so payment procedure is not by invoice.

Information sources used for calculations

- Central Agricultural Office Forestry Directorates
- Ministry of Agriculture and Rural Development
- Forest Research Institute
- Expert's estimation

In case of expert' estimations, the numbers were accepted only after verifying by Central Agricultural Office Forestry Directorates. The data processing, the background calculations and the determination of support rates were managed by independent advisory company organized by continuous consultation with Central Agricultural Office Forestry Directorates, and relevant forestry experts.

The maximum amount of the support is based on the calculated cost of afforestation under measure 221 (maximum 2065 euros/hectare) and of the expenses which arise during the removal of the damaged forest stands, namely the cost from the fuel and the wage (maximum 300 euros/hectare). The determination of support rates were calculated – in conformity with article 53 of (EC) n° 1974/2006 – in cooperation with independent experts.

<b>Calculation of support rate - Removal of damaged forest stand</b>					
	<b>Avarage e removal cost of 1m3 damaged wood</b>	<b>Avarage growing stock of forest stands in the 1-10 years age class</b>	<b>Calculate d support amount</b>	<b>Info source</b>	<b>Refer ence period</b>
<b>Unit</b>	<b>€m3</b>	<b>m3/ha</b>	<b>(€ha)</b>		
<b>Slopes 10 degree and under 10 degree</b>	<b>6,4</b>	<b>31,25</b>	<b>200</b>	<b>MGS ZH, ERTI</b>	<b>2010</b>
<b>Slopes over 10 degree</b>	<b>9,6</b>	<b>31,25</b>	<b>300</b>	<b>MGS ZH, ERTI</b>	<b>2010</b>

During disasters the biggest damage occurs in the young forest stands and these forest stands are also the most vulnerable for climate change. Due to that fact, the

subsidy rate of the removal of damaged forest stands was calculated on the bases of the average growing stock of the mentioned forest stands, by the approval of designated independent expert.

The land preparation costs of the older forest stands could be only higher compare to the calculated amount. As a consequence of the above mentioned fact, the over compensation is not possible.

#### **D.7) Non-productive investments on forest areas - Measure 227.**

##### Collection of data:

The calculation of costs has been based on a nationwide data collection conducted by the territorial organs of the forestry authority by questioning several beneficiary groups and by stand types and natural endowments, considering regional and ecological differences. In the course of data processing, the average costs have been calculated by calculating average costs that take the area of afforestation so far into consideration. On the basis of the result of the data collection, and its own research, the calculation of the costs were done by the Forest Research Institute. The afforestation costs include the material costs of the afforestation, the actual costs of afforestation and all directly related and necessary costs (eg.: planning, plant protection costs).

##### Information sources used for calculations

- Central Agricultural Office Forestry Directorates
- Ministry of Agriculture and Rural Development
- Forest Research Institute
- Office for greenbelt planning, and regional development
- Expert's estimation

In case of expert' estimations, the numbers were accepted only after verifying by Central Agricultural Office Forestry Directorates. The data processing, the background calculations and the determination of support rates were managed by independent advisory company organized by continuous consultation with Central Agricultural Office Forestry Directorates, and relevant forestry experts.

## **E) Animal welfare payments – measure 215.**

### **General aspect**

Calculation is composed of the following steps: the definition of baselines of the certain animal-welfare provision elements, data collections for calculating the income foregone, and increase in cost by management provisions (including the calculations of revenue loss/ revenue increase/ cost decrease/ cost increase factors).

### **Expert involvement in the planning/payment calculation**

In line with the Article 53 of Council Regulation 1974/2006/EC, the calculation of support amount has been completed by a group of independent experts: László Dorgai, Szabolcs Biró and András Molnár research fellows of Research Institute of Agricultural Economics.

### **Collection of data**

In line with the Article 53 of Council Regulation 1974/2006/EC, the calculation of support amount has been completed by independent experts. The basis for calculations have been the economic data of FADN system (year 2008) run by the Research Institute of Agricultural Economics (operative costs, cost of grazing; provision of extra hay; mandatory surveillance; preventive plan for sudden technological disorder or shutdown; good milking technology and plan). The Hungarian Veterinarian Chamber provided data for protection against parasites in terms of service costs. The Central Agricultural Office Animal Breeding Directorate ENAR system (Single Identification and Registration System for bovine animals) provides stocking density baselines.

### **Public consultation on the schemes and calculations**

The following partners have expressed their opinion and justified the calculations: Research Institute for Animal Breeding and Nutrition - Herceghalom, Hungary

#### **E.1.) Animal welfare payments**

<b>Animal welfare provisions</b>	<b>baseline (mandatory standards)</b>	<b>payment calculation</b>
reducing stocking density (foaling box; resting space)	MARD Decree No. 32/1999. (III.31.) Annex I. pts. 20-22.	income loss and increasing specific cost (of littering)

mandatory surveillance	Calves: MARD Decree No. 32/1999. (III.31.) Annex I. pt. 8. Heifer and cow: MARD Decree No. 32/1999. (III.31.) 12.§ (1) Prevalence of surveillance: MARD Decree No. 32/1999. (III.31.) 11.§	increasing specific cost (of labour and service charges differentiated by the size of the herd above and under 50 LU)
preventive plan (for sudden technological disorder or shutdown)	MARD Decree No. 32/1999. (III.31.) 7.§ (1) – (4), 12.§ (3)	increasing specific cost (of labour and service charges)
good milking technology and plan (for preventive interventions)	Milking technology: Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for on the hygiene of foodstuffs Section IX. Chapter I. paragraphs. II. A, B, C Preventive interventions: MARD Decree No. 32/1999. (III.31.) 3.§ b)	increasing specific cost (of labour and service charges)
transaction cost (for compulsory commitments)	Authorized by Art. 27. (10) of Commission Regulation (EC) No 1974/2006	flat rate of service costs
protection against parasites	MARD Decree No. 41/1997 (V.28.) 629.§ (1) a), 630.§ (1)-(2)	charge of Hungarian Veterinarian Chamber and increasing specific cost (of labour and service charges)
provision of natural conditions (grazing)	MARD Decree No. 32/1999. (III.31.) 5.§ (1) – (2)	increasing specific cost for grazing specific cost of fence/electric fence
provision of extra hay	MARD Decree No. 32/1999. (III.31.) 4.§ (2)	Purchase price and/or production and storing cost of hay
transaction cost (for optional commitments)	Authorized by Art. 27. (10) of Commission Regulation (EC) No 1974/2006	flat rate of service costs

## Summarized

### Maximum amount of support for compulsory commitments

up to 50 LU: 40 – 55 Euro/LU  
above 50 LU: 33 – 48 Euro/LU

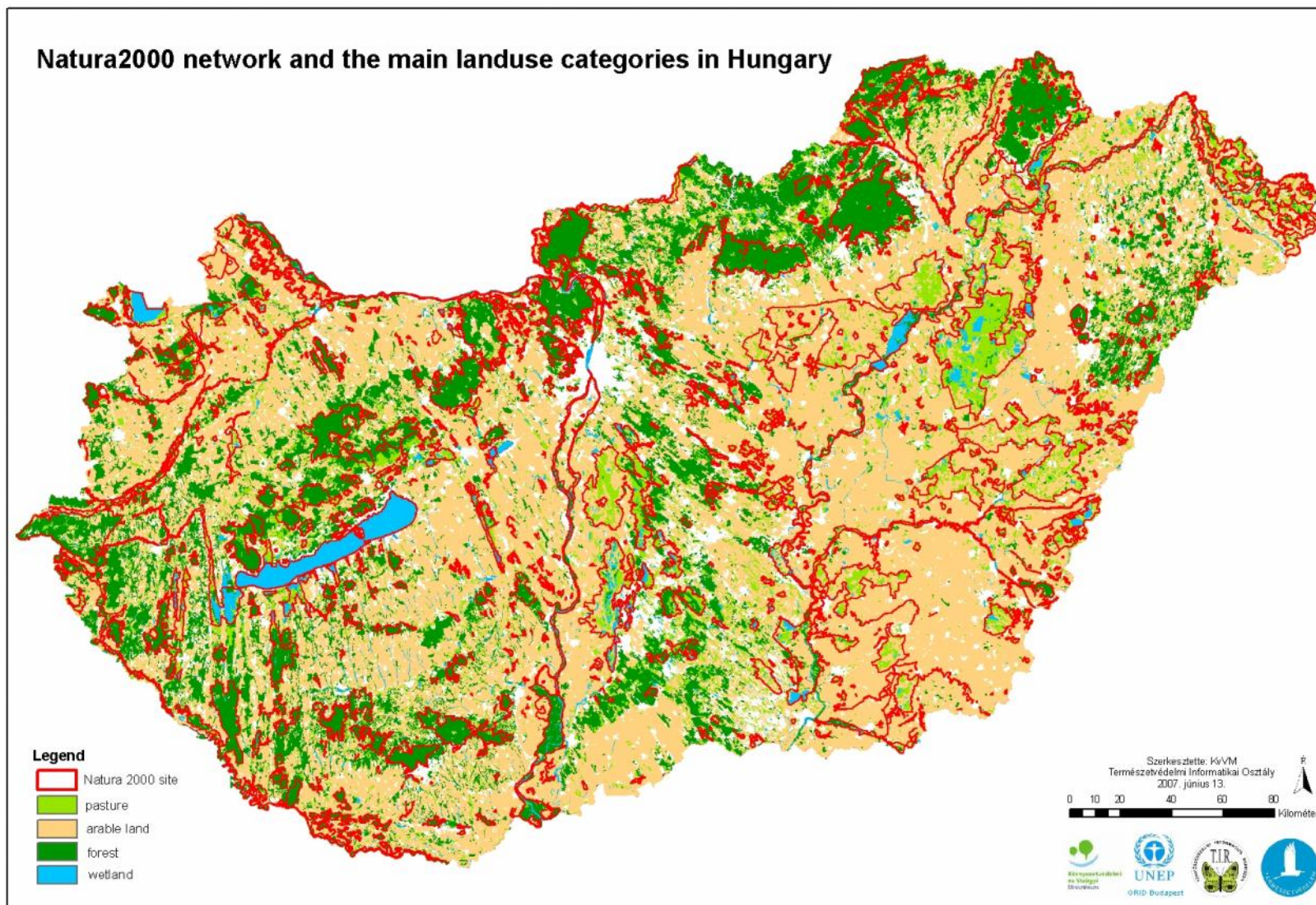
### Maximum amount of support for optional commitments

71 Euro/LU

### Maximum grand total of support amounts

up to 50 LU: 114 – 129 Euro/LU  
above 50 LU: 107 – 122 Euro/LU

## Annex 8: Natura 2000 network and the main landuse categories in Hungary



## **Annex 9: Agri-environment schemes**

### General requirements of the schemes

- implementation of the management prescriptions of the scheme undertaken, compliance with the eligibility criteria during the entire term of the support (5 year, or in case of changing the land use based on environmental protection purposes scheme 10 years)
- compliance with the guidelines set forth in Article 4 and 5, as well as Annex III of Regulation 1782/2003/EC pertaining to mutual correspondence, and the requirements stipulated in Annex IV of the Regulation on the maintenance of “good agricultural and environmental conditions” in the area of the farm.
- compliance with the minimum requirements of nutrient management and the pesticide use on the whole farm.
- keeping farm management records for the whole farm
- participation on 2 agri-environmental trainings (organised by MARD) during the 5 years of the programme

### **A. ARABLE FARMING SCHEMES**

#### **A.1. Integrated arable crop production scheme**

##### Objectives of the scheme:

- reduction of unfavourable environmental impacts arising from the not sound use of pesticides and improper nutrient management,
- protection and improvement of the conditions of soils,
- restoration of the desirable nutrient balance of the soils,

- improvement of food safety,
- contribution to the preservation of biodiversity.

Eligibility criteria:

- the smallest eligible monocrop parcel is 0.3 ha,
- the smallest eligible area: 1 ha,
- the largest eligible monocrop parcel cannot exceed 75 ha,
- eligible crops: all the arable crops and vegetables, as well as vegetables cultivated in plantations, except rice

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+
a land use plan has to be prepared and applied annually,	Land use plan is not prepared		Help to find optimal land use/intensity	+
once during the 5-year period of the scheme, application of medium-deep (40–60 cm) soil loosening;	Soil loosening is not applied		Reduce soil compaction	+
compliance with crop rotation rules <sup>40</sup> ;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	-



share of winter wheat, corn and sunflower altogether may not exceed 60% within the cropping pattern during the 5 year scheme period, while the proportion of leguminous crops should be at least 10%;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
cultivation and underploughing of green-manure crops at least once within the 5-year period of the scheme; it is possible in secondary planting too;	Green manuring is not used		Improve soil physical/chemical status	+
only environmentally friendly pesticides are allowed to be applied;	Use of pesticides with licence		Reduce environmental pressure	+
plant protection activities should be carried out on the basis of documented pest forecasts /plant-protection observations.	Pest forecasting is not applied		Reduce environmental pressure	+

<sup>40</sup> See at the end of this Annex

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

## **A.2. Management of traditional homesteads scheme**

### **Objectives of the scheme:**

- preservation of traditional farming systems operated with low external inputs;
- preservations of traditional landscapes of cultural history;
- reduction of environmental pressure due to the use of pesticides and fertilizers.

### **Eligibility criteria:**

- the smallest eligible monocrop parcel is 0.3 ha;
- the smallest eligible area: 1 ha;
- the largest eligible area cannot exceed 50 ha;
- at least 30% of the UAA of the holding must be taken into the scheme
- the largest eligible arable monocrop parcel cannot exceed 2ha, vegetable monocrop parcel 0,5 ha;
- eligible crops: all the arable crops and vegetables, as well as vegetables cultivated in plantations, except rice;
- the inhabited area related to the area entered to the scheme is registered in the registry of assets as “tanya” or as an outskirt dwelling- and farm building established for agricultural production purposes

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+
a land use plan has to be prepared and applied annually;	Land use plan is not prepared		Help to find optimal land use/intensit	+
application of a mosaic-like, small-parcel cropping;	Large arable fields, average is 50 ha		Help to find optimal land use/intensity	+
once during the 5-year period of the scheme, application of medium-deep (40–60 cm) soil loosening;	Soil loosening is not applied		Reduce soil compaction	+

compliance with crop rotation rules;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	-
share of winter wheat, corn and sunflower altogether may not exceed 50% within the cropping pattern during the 5 year scheme period, while the proportion of leguminous crops should be at least 10%;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
cultivation and underploughing of green-manure crops at least once within the 5-year period of the scheme; it is possible in secondary planting too;	Green manuring is not used		Improve soil physical/chemical status	+
only environmentally friendly pesticides are allowed to be applied;	Use of pesticides with licence		Reduce environmental pressure	+
plant protection activities should be carried out on the basis of documented pest forecasts /plant-protection observations.	Pest forecasting is not applied		Reduce environmental pressure	+

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

### A.3. Organic arable crop production scheme

#### Objectives of the scheme:

- contribution to the preservation and enhancement of biodiversity;
- reduction of unfavourable environmental impacts arising from the not sound use of pesticides and improper nutrient management;
- protection and improvement of the conditions of soils;
- restoration of the desirable nutrient balance of the soils;
- contribution to food safety.

Eligibility criteria:

- the smallest eligible monocrop parcel is 0.3 ha;
- the smallest eligible area: 1 ha;
- the largest eligible monocrop parcel cannot exceed 75 ha;
- eligible crops: all the arable crops and vegetables, as well as vegetables cultivated in plantations, except rice
- all arable land entering into the scheme must be registered and controlled by any of the inspection and certification bodies acknowledged in Hungary.

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
full compliance with the requirements of Council Regulation 834/2007/EEC and its successor;	Use of licenced pesticides and fertilisers	MARD Regulation 79/2009. (VI. 30.)	Reduce environmental pressure	+
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+
a land use plan has to be prepared and applied annually;	Land use plan is not prepared		Help to find optimal land use/intensity	+

once during the 5-year period of the scheme, application of medium-deep (40–60 cm) soil loosening;	Soil loosening is not applied		Reduce soil compaction	+
compliance with crop rotation rules;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	-
share of winter wheat, corn and sunflower altogether may not exceed 50% within the cropping pattern during the 5 year scheme period, while the proportion of leguminous crops should be at least 10%;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
cultivation and underploughing of green-manure crops at least once within the 5-year period of the scheme; it is possible in secondary planting too;	Green manuring is not used		Improve soil physical/chemical status	+
plant protection activities should be carried out on the basis of documented pest forecasts /plant-protection observations.	Pest forecasting is not applied		Reduce environmental pressure	+

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

#### **A.4. Zonal schemes for nature conservation on arable land**

The following schemes are eligible only in arable land in designated High Nature Value Areas (HNVA) situated on arable lands, and within these areas lands belonging to the designated zones can be subject to applications with even higher priorities.

##### Eligibility criteria:

- the smallest eligible monocrop parcel is 0.3 ha;
- the smallest eligible area: 1 ha if they are situated in designated HNVA;
- the largest eligible monocrop parcel cannot exceed 75 ha;
- eligible crops: all the arable crops and vegetables, as well as vegetables cultivated in plantations, except rice.

#### **A.4.1. Arable crop production scheme with great bustard habitat development requirements**

##### Objectives of the scheme:

- regional, ecological, sustainable land use for agricultural purposes, contribution to the fulfillment of nature conservation and environmental protection objectives;
- extending of farming methods that contribute to the preservation of the natural values of the landscape units concerned;
- proper management of the habitats of the great bustard, stone curlew, roller, imperial eagle, sakeret, ash-coloured falcon and other protected bird species associated with arable lands;
- preservation and enhancement of agricultural biodiversity.

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
<b>General</b>				
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+

annually;				
a land use plan has to be prepared and applied annually;	Land use plan is not prepared		Help to find optimal land use/intensity	+
no liquid manure, wastewater, sewage sludge and any compost containing sewage sludge are allowed to apply;	Listed materials occasionally used	Government Decree No. 50/2001 (IV. 3.)	Reduce environmental pressure by lowering production intensity	-
no melioration nor irrigation can be applied;	Yield improvement applied very occasionally	Act CXXIX of 2007. Section 38.	Reduce environmental pressure by lowering production intensity	-
no rodent-control agents and soil sterilizers are allowed;	Rodent control /soil sterilization is applied regularly	Act XLVI. of 2008.	Reduce environmental pressure by lowering production intensity	-
Insecticides except for insects of rape, mustard and oil radish cannot be applied;	Insecticides are applied regularly	Act XLVI. of 2008.	Reduce environmental pressure by lowering production intensity	+
in the period from 01 March to 31 July, machinery working activities should be conducted only from sunrise to sunset;	Nighttime machinery work happens very seldom (campaign works)		Avoid bird/nest harm/destruction	+
in the case of protected bird nest or nestling found, harvesting must be stopped and the designated associate of the competent national nature conservation authority should be notified immediately;	Protected birds and their nests must not be harmed		Avoid bird/nest harm/destruction	+
0,5 - 1ha protecting zone must be set around the nest found.	Protected birds and their nests must not be harmed		Avoid bird/nest harm/destruction	-
<b>further provisions for perennial leguminous crops:</b>				

the whole area of perennial leguminous fodder crops or crop mixes (e.g. alfalfa-grass) must be cultivated during the 5 year scheme period;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
no mineral or organic nutrient may be supplied, the application of less than 90 kg/ha N is allowed only upon planting and oversowing;	Normally (average) 85 kg of total N /ha is used		Reduce environmental pressure by lowering production intensity	+
only environmentally friendly pesticides can be used;	Use of pesticides with licence		Reduce environmental pressure	+
during the 5 years once an oversowing with alfalfa may be made in August–September;	Oversowing is regularly applied		Not relevant	-
<b>when harvesting perennial fodder crops (leguminous crops: alfalfa, clover, etc.):</b>				
during all harvests, at least 5%, but maximally 10% unharvested area should be left adjacent to the edges of the parcels concerned;	All crop is harvested		Support biodiversity/bird population increase	+
bird-friendly harvesting methods should be applied;	Normal harvesting techniques are applied		Support biodiversity/bird population increase	+
the use of game-detering chains during the harvesting is compulsory;	game-detering chains normally not used		Avoid bird/nest harm/destruction	+
at least 50% of the cropped fodder area may be cut first after 15 June; in the other 50% of the area the first growth may be cut after 25 April, while the second growth may be harvested after 30 June, with the exception that in the first case in the territories of the Dunavölgyi –plateau, the Homokhátság and the Hortobágy HNVA the earliest date of harvesting is 30 June;	Crop is harvested in one run when optimally ripened		Avoid bird/nest harm/destruction	+



harvested before 31 July, at least 5 days prior to the start of harvesting, the location and planned starting date of mowing should be notified to the competent national nature conservation authority in written form, via the fax number or e-mail address specified for this purpose;	Timing and location of harvesting is not reported		Avoid bird/nest harm/destruction	-
<b>further provisions for mixed arable production:</b>				
compliance with crop rotation rules;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	+
only environmentally friendly pesticides are allowed to be applied;	Use of pesticides with licence		Reduce environmental pressure	+
the total dosage of applied mineral and organic fertilizers cannot exceed 90 kg N /ha/year;	Normally (average) 85 kg of total N /ha is used		Reduce environmental pressure by lowering production intensity	-
compliance with the following crop structure; at least 20% cereals; at least 20% leguminous fodder crops at least 20% green fallow; at least 10% oilseed rape; up to 20% other crops;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
in case of harvesting of cereals a 25 cm high stubble should be left;	Less high stubble is regularly left		Avoid bird/nest harm/destruction	+
at least a 6-metre wide spray free margin should be kept wherein only mechanical pest control may be applied as required;	Spray free margins are not applied		Reduce environmental pressure	+

for oilseed rape, at least 5%, but not more than 10% of the rape cultivated allotted by the responsible nature conservation body should be cleared of snow to ensure winter feeding of birds;	Snow cover is not removed from rape		Increase biodiversity by feed supply for the birds	+
In case of harvesting leguminous fodder crops as part of the crop rotation the provisions of the same scheme for harvesting of perennial leguminous fodder crops need to be applied.			Avoid bird/nest harm/destruction	

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

#### **A.4.2. Arable crop production scheme with wild goose and crane protection requirements**

##### Objectives of the scheme:

- provision of appropriate autumn–winter feeding sites for considerable goose, duck and crane stocks arriving certain characteristic areas of the country during their migration;
- apart from the general bird protection requirements for arable lands, the establishment of special crop structures and the restriction of harvesting contributes to the provision of proper feeding base, as well as to the improvement of the living conditions of small bird species;
- preservation and enhancement of agricultural biodiversity.

<b>Scheme provisions</b>	<b>Baseline</b>	<b>Regulation of baseline*</b>	<b>Environmental impact</b>	<b>Payment calculation element</b>
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General				
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+
a land use plan has to be prepared and applied annually;	Land use plan is not prepared		Help to find optimal land use/intensity	+
no mineral or organic nutrient may be supplied, the application of less than 90 kg/ha N is allowed only upon planting and oversowing;	Normally (average) 85 kg of total N /ha is used		Reduce environmental pressure by lowering production intensity	+
no liquid manure, wastewater, sewage sludge and any compost containing sewage sludge are allowed to apply;	Listed materials occasionally used	Government Decree No. 50/2001 (IV. 3.)	Reduce environmental pressure by lowering production intensity	-
no melioration nor irrigation can be applied;	Yield improvement applied very occasionally	Act CXXIX of 2007. Section 38.	Reduce environmental pressure by lowering production intensity	-
only environmentally friendly pesticides can be used;	Use of pesticides with licence		Reduce environmental pressure	+
no rodent-control agents and soil sterilizers are allowed;	Rodent control /soil sterilization is applied regularly	Act XLVI. of 2008.	Reduce environmental pressure by lowering production intensity	-

Insecticides except for insects of rape, mustard and oil radish cannot be applied;	Insecticides are applied regularly	Act XLVI. of 2008.	Reduce environmental pressure by lowering production intensity	+
compliance with crop rotation rules;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	-
compliance with the following crop structure: at least 30% cereals; at least 20% leguminous fodder crops, at least 20% green fallow; at least 20% corn up to 20% other crops;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
at least on 10% of the entire area of corn prior to harvesting, ripe, standing corns should be crushed with mulcher; this area should be left uncultivated at least until next 28 February.	All crop is harvested Autumn cultivation (plough up) is general		Support biodiversity/bird population increase	+
<b>when harvesting fodder crops (leguminous crops: alfalfa, clover, etc.):</b>				
during all harvests, at least 5%, but maximally 10% unharvested area should be left in the middle of the parcels concerned;	All crop is harvested		Support biodiversity/bird population increase	+
bird-friendly harvesting methods should be applied;	Normal harvesting techniques are applied		Support biodiversity/bird population increase	+
the use of game-detering chains during the harvesting is compulsory;	game-detering chains normally not used		Avoid bird/nest harm/destruction	+
at least 5 days prior to the start of harvesting, the location and planned starting date of mowing should be notified to the competent national nature conservation authority in written form, via the fax number or e-mail address specified for this purpose;	Timing and location of harvesting is not reported		Avoid bird/nest harm/destruction	-

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

#### A.4.3. Arable crop production scheme with bird and small game habitat development requirements

Objectives of the scheme:

- reduction of harmful impacts on wild birds, small games with the following requirements: limited use of pesticides, establishment of parcel edges as free of pesticides, application of proper harvesting and crop cultivation technologies, use of smaller amounts of fertilizers;
- important aims include the ensuring of proper living conditions for the partridge and quail;
- preservation and enhancement of agricultural biodiversity.

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
<b>General</b>				
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+
a land use plan has to be prepared and applied annually;	Land use plan is not prepared		Help to find optimal land use/intensity	+
no mineral or organic nutrient may be supplied, the application of less than 90 kg/ha N is allowed only upon planting and oversowing;	Normally (average) 85 kg of total N /ha is used		Reduce environmental pressure by lowering production intensity	+

no liquid manure, wastewater, sewage sludge and any compost containing sewage sludge are allowed to apply;	Listed materials occasionally used	Government Decree No. 50/2001 (IV. 3.)	Reduce environmental pressure by lowering production intensity	-
no melioration nor irrigation can be applied;	Yield improvement applied very occasionally	Act CXXIX of 2007. Section 38.	Reduce environmental pressure by lowering production intensity	-
only environmentally friendly pesticides can be used;	Use of pesticides with licence		Reduce environmental pressure	+
no rodent-control agents and soil sterilizers are allowed;	Rodent control /soil sterilization is applied regularly	Act XLVI. of 2008.	Reduce environmental pressure by lowering production intensity	-
Insecticides except for insects of rape, mustard and oil radish cannot be applied;	Insecticides are applied regularly	Act XLVI. of 2008.	Reduce environmental pressure by lowering production intensity	+
compliance with crop rotation rules;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	-
compliance with the following crop structure; at least 30% cereals, at least 20% leguminous fodder crops; at least 10% green fallow; up to 25% other cultures;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	
chemical weed-control allowed only once a business year;	Chemical weed control is applied 2-3 times per year		Support biodiversity/bird population increase	+
at least a 3-metre wide spray free margin should be kept wherein only mechanical pest control may be applied as required;	Green fallow is not applied		Support biodiversity/bird population increase	+
during the 5-year term of the programme, medium-deep or deep soil loosening may be performed maximum once;	Soil loosening is not applied		Maintain the low input status of the land	-
<b>when harvesting fodder crops (leguminous crops: alfalfa, clover, etc.):</b>				

during all harvests, at least 5%, but maximally 10% unharvested area should be left adjacent to the edges of the parcels concerned;	All crop is harvested		Support biodiversity/bird population increase	+
bird-friendly harvesting methods should be applied;	Normal harvesting techniques are applied		Madarak/fészkek sérülésének/megsemmisülésének elkerülése	+
the use of game-detering chains during the harvesting is compulsory;	game-detering chains normally not used		Avoid bird/nest harm/destruction	+
at least 5 days prior to the start of harvesting, the location and planned starting date of mowing should be notified to the competent national nature conservation authority in written form, via the fax number or e-mail address specified for this purpose;	Timing and location of harvesting is not reported		Avoid bird/nest harm/destruction	-

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

#### A.4.4. Arable crop production scheme with red-footed falcon habitat development requirements

##### Objectives of the scheme:

- regional, ecological, sustainable land use for agricultural purposes, contribution to the fulfillment of nature conservation and environmental protection objectives;
- dissemination of farming methods that contribute to the preservation of the natural values of the landscape units concerned;
- proper management of the habitats of the red-footed falcon, imperial eagle, sakeret and other protected bird species associated with arable lands;
- preservation and enhancement of agricultural biodiversity.

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation
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				element
<b>General</b>				
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+
a land use plan has to be prepared and applied annually;	Land use plan is not prepared		Help to find optimal land use/intensity	+
no liquid manure, wastewater, sewage sludge and any compost containing sewage sludge are allowed to apply;	Listed materials occasionally used	Government Decree No. 50/2001 (IV. 3.)	Reduce environmental pressure by lowering production intensity	-
no melioration nor irrigation can be applied;	Yield improvement applied very occasionally	Act CXXIX of 2007. Section 38.	Reduce environmental pressure by lowering production intensity	-
only environmentally friendly pesticides can be used;	Use of pesticides with licence		Reduce environmental pressure	+
no rodent-control agents and soil sterilizers are allowed;	Rodent control /soil sterilization is applied regularly	Act XLVI. of 2008.	Reduce environmental pressure by lowering production intensity	-
Insecticides except for insects of rape, mustard and oil radish cannot be applied;	Insecticides are applied regularly	Act XLVI. of 2008.	Reduce environmental pressure by lowering production intensity	+
in the period from 01 March to 31 July, machinery working activities should be conducted only from sunrise to sunset;	Nighttime machinery work happens very seldom (campaign works)		Avoid bird/nest harm/destruction	-



in the case of protected bird nest or nestling found, harvesting must be stopped and the designated associate of the competent national nature conservation authority should be notified immediately;	Protected birds and their nests must not be harmed		Avoid bird/nest harm/destruction	-
<b>further provisions for perennial leguminous crops:</b>				
on the whole area perennial leguminous fodder crops or crop mixes (e.g. alfalfa-grass) must be cultivated during the 5 year scheme period	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
no mineral or organic nutrient may be supplied, the application of less than 90 kg/ha N is allowed only upon planting and oversowing;	Normally (average )85 kg of total N /ha is used		Reduce environmental pressure by lowering production intensity	-
only environmentally friendly pesticides can be used;	Use of pesticides with licence		Reduce environmental pressure	+
during the 5 years once an oversowing with alfalfa may be made in August–September;	Oversowing is regularly applied		Not relevant	-
<b>when harvesting perennial fodder crops (leguminous crops: alfalfa, clover, etc.):</b>				
during all harvests, at least 5%, but maximally 10% unharvested area should be left adjacent to the edges of the parcels concerned;	All crop is harvested		Support biodiversity/bird population increase	+
bird-friendly harvesting methods should be applied;	Normal harvesting techniques are applied		Support biodiversity/bird population increase	+
the use of game-deterring chains during the harvesting is compulsory;	game-deterring chains normally not used		Avoid bird/nest harm/destruction	+
the harvesting of the individual parcels should be done on different days;	Crop is harvested in one run when optimally ripened		Avoid bird/nest harm/destruction	+

harvesting of the area must be finished in case of first cut: by 20 May, in case of second cut: 30th June;				
In case of blocks larger than 3 ha each block has to be divided into two equal parts and if the harvesting of the first 50% was finished the harvesting of the remaining 50% can only be started 10 days later.	Crop is harvested in one run when optimally ripened		Avoid bird/nest harm/destruction	+
<b>further provisions for other arable crops:</b>				
compliance with crop rotation rules;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	-
only environmentally friendly pesticides can be used;	Use of pesticides with licence		Reduce environmental pressure	+
no mineral or organic nutrient may be supplied, the application of less than 90 kg/ha N is allowed only upon planting and oversowing;	Normally (average) 85 kg of total N /ha is used		Reduce environmental pressure by lowering production intensity	+
compliance with the following crop structure: at least 30% cereals; at least 20% leguminous fodder crops, at least 20% green fallow; up to 20% other crops;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
at least a 6-metre wide spray free margin should be kept wherein only mechanical pest control may be applied as required;	Spray free margins are not applied		Increase biodiversity by feed supply for the birds	+
<b>for the stem-crushing, cutting of green fallows:</b>				
the stem-crushing, harvesting of the individual parcels should be done on different days;			Avoid bird/nest harm/destruction	+

for parcels larger than 3 ha for stem-crushing, harvesting work, the parcel should be divided into two equal parts, and the stem-crushing, harvesting in the second 50% may be started only 10 days after the harvesting of the first 50%;			Increase biodiversity by feed supply for the birds	+
bird-friendly harvesting methods should be applied;			Support biodiversity/bird population increase	+
the use of game-deterring chains during the harvesting is compulsory;			Avoid bird/nest harm/destruction	+

\* For those prescriptions which have no legal background indicated, the baseline implies general management practices.

## **A. 5. Anti-erosion schemes**

### **A. 5.1. water erosion control scheme**

#### **Objectives of the scheme:**

- reduction of water erosion;
- preservation of soil quality;
- reduction of water pollution.

#### **Eligibility criteria:**

- eligible lands are arable land with slope of 5-12%; designated in the LPIS;
- the smallest eligible monocrop parcel is 0.3 ha;

- the smallest eligible area: 1 ha;
- the largest eligible monocrop parcel cannot exceed 75 ha.
- eligible crops: all arable crops, except vegetables and rice.

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+
a land use plan has to be prepared and applied annually;	Land use plan is not prepared		Help to find optimal land use/intensity	+
during the 5-year period of the scheme, application of medium-deep (40–60 cm) soil loosening;	Soil loosening is not applied		Reduce soil compaction	+
compliance with crop rotation rules;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	-
the aggregated share of winter corn, hybrid corn, sweet corn, potato, tobacco, sugarbeet, fodder beet jerusalem artichoke and sunflower should not exceed 20% within the cropping pattern during the 5 year scheme period;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Improve soil physical/chemical status	+
after the harvesting of winter crops, the cultivation of green-manure crops is obligatory	Green manuring is not applied		Improve soil physical/chemical	+

,that are to be ploughed under as the soil becomes suitable for cultivation, in two weeks' time before sowing at the latest.			status, protection against erosion	
the use of cover crops are obligatory before spring crops, they should be ploughed under as the soil becomes suitable for cultivation, in two weeks' time before sowing at the latest;	Minimum soil cover is obligatory on land over 12% slope		Improve soil physical/chemical status, protection against erosion	+
the direction of the cultivation must be rectangular to the direction of the slope.	Direction of the cultivation must be rectangular to the direction of the slope on land over 12% slope		Improve soil physical/chemical status, protection against erosion	+

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

## A. 5.2. wind erosion control scheme

### Objectives of the scheme:

- reduction of water erosion;
- preservation of soil quality;
- reduction of air and water pollution.

### Eligibility criteria:

- eligible areas are wind erosion affected sampling areas designated in LPIS
- the smallest eligible monocrop parcel is 0.3 ha;
- the smallest eligible area: 1 ha;
- the largest eligible monocrop parcel cannot exceed 75 ha,
- eligible crops: all arable crops, except vegetables and rice

<b>Scheme provisions</b>	<b>Baseline</b>	<b>Regulation of baseline*</b>	<b>Environmental impact</b>	<b>Payment calculation element</b>
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+
a land use plan has to be prepared and applied annually;	Land use plan is not prepared		Help to find optimal land use/intensity	+
during the 5-year period of the scheme, application of medium-deep (40–60 cm) soil loosening;	Soil loosening is not applied		Reduce soil compaction	+
compliance with crop rotation rules;	Compliance with basic crop rotation rules (GAEC)	MARD Regulation No 50/2008. (IV. 24.) Annex 1.	Improve soil physical/chemical status	-
the share of winter crops must be at least 60%, while the proportion of spring crops cannot be more than 40%, the aggregated share of the following plants should be at least 20%: millet, buckwheat, durra, Sudani grass, setaria, fibre hemp, sainfoin, vetches, clover, hardy bean, alfalfa, bluebell, clover, coronilla;	Share of wheat, corn, sunflower is 65%, share of leguminous crops is 4%		Reduce environmental pressure by lowering production intensity	+
after the harvesting of winter crops, the	Green manuring is not		Improve soil	+

cultivation of green-manure crops is obligatory ,that are to be ploughed under as the soil becomes suitable for cultivation, in two weeks' time before sowing at the latest.	applied		physical/chemical status, protection against erosion	
ploughing is allowed only once during the 5 years	Primary soil cultivation is ploughing		Improve soil physical/chemical status, protection against erosion	+

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

## **B. AGRI-ENVIRONMENTAL MEASURES PERTAINING TO GRASSLANDS**

### **B. 1. Extensive grassland management scheme**

#### Objectives of the scheme:

- contribution to the preservation and enhancement of biodiversity;
- preservation, maintenance of proper living conditions for plant species and ecosystems, as well as animal species that are associated with grasslands;
- maintenance of favourable environmental status provided by extensive grassland management

#### Eligibility criteria:

- the smallest eligible area is 1 ha
- the smallest eligible monocrop parcel is 0.3 ha,
- regarding the grassland area entered into the scheme grazed livestock density should be at least 0.2 LU/ha;

- animal species to be grazed: bovine animals, sheep, goat, buffalo, horse, donkey and mule;
- livestock must be under the farmer (holder) name
- livestock must be registered in relevant registers and documentation (SIS, AIS, horse passport)

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
<b>For grazing:</b>				
minimum grazing density must be 0.2 LU /ha on the grassland;	Minimum maintenance of grassland (mowed once/year)		Grassland habitat is maintained in appropriate condition	-
it is prohibited to overgraze the grassland;				
no oversowing, chemical weed control, fertilization, irrigation is allowed	170 kg N, chemical weed control, oversowing may be applied		Extensive habitat conditions are is maintained	+
by the end of the third year of the scheme 0.3 LU/ha value for grazed livestock should be reached;	Minimum maintenance of grassland		Grassland habitat is maintained in appropriate condition	+
application of shepherding / sectioning grazing;	Normally free grazing is applied		Avoidance of habitat damage	+
haymaking is allowed once per year for winter feeding;	Minimum maintenance of grassland		Grassland habitat is maintained in appropriate condition	-



annual clearing cutting to be carried out in the autumn, thereafter the hay should be removed from the land by 31 October.	Clearing cutting is not applied		Supporting the habitat renewal	+
<b>For cutting (area cut only):</b>				
grasslands should be utilized by 2 cuttings a year;	Minimum maintenance of grassland		Gradual vegetation growth is assured (flora improvement)	+
no oversowing, chemical weed control, fertilization, organic manuring and irrigation is allowed,	170 kg N, chemical weed control, oversowing may be applied Minimum maintenance of grassland		Extensive habitat conditions are maintained	+
after cutting, the hay should be removed from the land by 31 October.	Bales may be left on the field for winter		Maintenance of habitat regeneration	-

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

## B.2. Organic grassland management scheme

### Objectives of the scheme:

- contribution to the preservation and enhancement of biodiversity;
- preservation, maintenance of proper living conditions for plant species and communities, as well as animal species that are associated with grasslands;
- maintenance of favourable environmental status provided by extensive grassland management.

### Eligibility criteria:

- the smallest eligible area is 1 ha
- the smallest eligible monocrop parcel is 0.3 ha,
- regarding the grassland area entered into the scheme grazed livestock density should be at least 0.2 LU/ha;
- animal species to be grazed: bovine animals, sheep, goat, buffalo, horse, donkey and mule;
- livestock must be under the farmer (holder) name
- livestock must be registered in relevant registers and documentation (SIS, AIS, horse passport)
- the grasslands and livestock entering into the scheme should be registered by any of the acknowledged supervision and certification organization in Hungary.

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
full compliance with the requirements of Council Regulation 834/2007/EEC and Council Regulation 889/2008/EEC	170 kg N, chemical weed control may be applied	MARD Regulation 79/2009. (VI. 30.)	Reduction of environmental pressure	+
<b>For grazing:</b>				
minimum grazing density must be 0.2 LU /ha on the grassland;	Minimum maintenance of grassland (mowed once/year)		Grassland habitat is maintained in appropriate condition	-
it is prohibited to overgraze the grassland;				
no oversowing, irrigation is allowed;	oversowing may be applied		Extensive habitat conditions are maintained	+
application of shepherding / sectioning grazing;	Normally free grazing is applied		Avoidance of habitat damage	+

haymaking is allowed once per year for winter feeding;	Minimum maintenance of grassland		Gradual vegetation growth is assured (flora improvement)	-
annual clearing cutting to be carried out in the autumn, thereafter the hay should be removed from the land by 31 October.	Clearing cutting is not applied		Supporting the habitat renewal	+
<b>For cutting (area cut only):</b>				
grasslands should be utilized by 2 cuttings a year;	Grasslands are cut once per year		Gradual vegetation growth is assured (flora improvement)	+
no oversowing and irrigation is allowed,	oversowing may be applied		Extensive habitat conditions are maintained	+
after cutting, the hay should be removed from the land by 31 October.	Bales may be left on the field for winter		Maintenance of habitat regeneration	-

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

### **B. 3. Zonal schemes for nature conservation in grasslands**

These schemes may be applied for grasslands situated in High Nature Value Areas, and within these areas lands belonging to the designated zones can be subject to applications with higher priorities.

#### Eligibility criteria

- eligible areas are designated HNVA grassland areas (defined in LPIS)
- the smallest eligible area is 1 ha
- the smallest eligible monocrop parcel is 0.3 ha,
- regarding the entire grassland area entered into the scheme livestock density should be at least 0.2 LU/ha;

- animal species to be grazed: bovine animals, sheep, goat, buffalo, horse, donkey and mule;
- livestock must be under the farmer (holder) name
- livestock must be registered in relevant registers and documentation (SIS, AIS, horse passport)

### B.3.1. Grassland management scheme with great bustard habitat development requirements

#### Objectives of the scheme:

- application of the methods of environmentally friendly farming methods that are suitable for the preservation of the natural habitats and values of High Nature Value Areas;
- the protection of the stocks of the following animal species, as well as the maintenance and establishment of proper habitats for them: great bustard, stone curlew, roller, imperial eagle, sakeret, red-footed falcon, ash-coloured falcon, Danubian meadow viper;
- preservation and enhancement of agricultural biodiversity.

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
<b>For grazing:</b>				
minimum grazing density must be 0.2 LU /ha on the grassland;	Minimum maintenance of grassland (mowed once/year)		Grassland habitat is maintained in appropriate condition	-
it is prohibited to overgraze the grassland;				
application of shepherding / sectioning grazing;	Normally free grazing is applied		Grassland habitat is maintained in appropriate condition	+
no oversowing, chemical weed control, fertilization, irrigation and livestock manure is allowed except nutrient	170 kg N, chemical weed control, oversowing may be applied		Extensive habitat conditions are maintained	+

supply by manure of grazing animals;				
no harrowing, grass aeration are allowed to apply;	Harrowing is normally applied to improve yield		Extensive habitat conditions are maintained	-
autumn clearing mowing is compulsory;	Harrowing is normally applied to improve yield		Harrowing is normally applied to improve yield	-
surface standing waters, inland waters, puddles may not be drained;	Surface waters normally drained to allow cutting		Extensive habitat conditions are maintained	+
electric fences may be applied only on the permission of the competent national nature conservation authority;	Electric fences established without permission		Landscape aspect	-
on 50% of the grassland entered into the scheme breeding sites of the great bustard should be designated by the nature conservation authority, grazing on these areas can be performed only after 31 May;	Grazing normally started after 20th April		Bird protection during breeding period	+
at least 5 days prior to the start of mowing, the location and planned starting date of mowing should be notified in writing (by letter, fax or email) to the competent national nature conservation authority;	Timing and location of harvesting is not reported		Avoid bird/nest harm/destruction	-
szilárdító kaszálás elvégzése kötelező, mely után a kaszálékot legkésőbb október 31-ig a területre kell hordani;	Grasslands are cut once per year		Gradual vegetation growth is assured (flora improvement)	+
<b>For cutting:</b>				

no oversowing, chemical weed control, mineral fertilization, organic manuring and irrigation is allowed;	170 kg N, chemical weed control, oversowing may be applied		Grassland habitat is maintained in appropriate condition	+
harrowing, grass aeration is prohibited;	Minimum maintenance of grassland		Extensive habitat conditions are maintained	+
after cutting, the hay should be removed from the land within 1 month;	Bales may be left on the field for winter		Maintenance of habitat regeneration	-
at each harvesting at least 10%, but maximally 15% unharvested zones should left, in different areas for the individual harvesting activities;	Whole crop is harvested		Maintenance of habitat regeneration	+
bird-friendly harvesting methods should be applied;	Normal harvesting methods are applied		Provision of hiding places for birds, population increase	+
the use of game-scaring chains for harvesting is required;	Game-deterring chains are normally not used		Bird protection during breeding period	+
surface standing waters, inland waters, puddles may not be drained;	Surface waters normally drained to allow cutting		Extenzív él helyi feltételek fenntartása	+
for hay harvesting, working processes may be executed only from sunrise to sunset;	Nighttime harvesting occasionally happens, allowed		Madarak védelme a költési idő szak alatt	-
first harvesting can only be started after 15 June, with the exception that	First harvesting normally started in early May		Provision of hiding places for birds, population increase	+

in the territories of the Dunavölgyi-plateau, the Homokhátság and the Hortobágy the earliest date of harvesting is 30 June;				
at least 5 days prior to the start of harvesting, the location and planned starting date of harvesting should be notified in writing (by letter, fax or email) to the competent national nature conservation authority;	Timing and location of harvesting is not reported		Avoid bird/nest harm/destruction	-
in the event of encountering the nest or nestlings of ground-nesting bird species under enhanced protection, cutting must be stopped and the designated associate of the competent national nature conservation authority should be notified immediately;	Protected birds and their nests must not be harmed		Bird protection during breeding period	
0.5-1 ha protecting zone must be set around the nest found.	Protected birds and their nests must not be harmed			

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

### B.3.2. Grassland management scheme with habitat development requirements

#### Objectives of the scheme:

- maintenance of the nesting and feeding sites of the ground-nesting bird species under enhanced protection in wet meadows (crake, ash-coloured falcon, eagle owl) by preserving and utilizing these meadows with proper care;
- preservation of the habitats of other protected species, such as the Danubian meadow viper, various orchid species, fritillary, Siberian blue-flag, snakeweed, great burnet, summer snow-flake, old man's beard, gentian;

- establishment of protective zones around the vulnerable natural zones of these regions;
- preservation and enhancement of agricultural biodiversity.

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
<b>For grazing:</b>				
minimum grazing density must be 0.2 LU /ha on the	Minimum maintenance of grassland (mowed once/year)		Grassland habitat is maintained in appropriate condition	-
grassland and it is prohibited to overgraze the grassland;				
application of shepherding / sectioning grazing;	Normally free grazing is applied		Avoidance of habitat damage	+
no oversowing, chemical weed control, fertilization, irrigation and livestock manure is allowed except nutrient supply by manure of grazing animals;	170 kg N, chemical weed control, oversowing may be applied		Extensive habitat conditions are is maintained	+
no harrowing, grass aeration are allowed to apply;	Harrowing is normally applied to improve yield		Extensive habitat conditions are is maintained	-
haymaking is allowed once a year for winter feeding if strictly keeping the scheme provisions on haymaking;	Harrowing is normally applied to improve yield		Extensive habitat conditions are is maintained	-
surface standing waters, inland	Surface waters		Extensive habitat conditions are	+



waters, puddles may not be drained;	normally drained to allow cutting		is maintained	
electric fences may be applied only on the permission of the competent national nature conservation authority;	Electric fences established without permission		Landscape aspect	-
at least 5 days prior to the start of mowing, the location and planned starting date of mowing should be notified in writing (by letter, fax or email) to the competent national nature conservation authority.	Timing and location of harvesting is not reported		Avoid bird/nest harm/destruction	-
autumn clearing mowing is compulsory;	Grasslands are cut once per year		Gradual vegetation growth is assured (flora improvement)	+
<b>For cutting:</b>				
no oversowing, chemical weed control, mineral fertilization, organic manuring and irrigation is allowed;	170 kg N, chemical weed control, oversowing may be applied		Grassland habitat is maintained in appropriate condition	+
no harrowing, grass aeration are allowed to apply;	Minimum maintenance of grassland		Extensive habitat conditions are maintained	+
after cutting, the hay should be removed from the land within 1 month;	Bales may be left on the field for winter		Maintenance of habitat regeneration	-

at each harvesting at least 10%, but maximally 15% unharvested zones should left, in different areas for the individual harvesting activities;	Whole crop is harvested		Maintenance of habitat regeneration	+
bird-friendly harvesting methods should be applied;	Normal harvesting methods are applied		Provision of hiding places for birds, population increase	+
the use of game-detering chains for harvesting is required;	Game-detering chains are normally not used		Bird protection during breeding period	+
surface standing waters, inland waters, puddles may not be drained;	Surface waters normally drained to allow cutting		Provision of hiding places for birds, population increase	+
at least 50% of the cropped fodder area may be cut first after 31 July, with the exception in the territories of the rség-Vendvidék, the Hanság HNVA, where the 50% of the area the first growth may be cut before 1. June, and the second growth may be harvested after 15. July	First harvesting normally started in early May, second cutting normally in June/July		Bird protection during breeding period	+
at least 5 days prior to the start of mowing, the location and planned starting date of mowing should be notified in writing (by letter, fax or email) to the competent national nature conservation authority	Timing and location of harvesting is not reported		Avoid bird/nest harm/destruction	-

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

## **B.4. Schemes for the conversion of arable land into grassland management**

### **B.4.1. Environmental land use change scheme**

#### *Objectives of the scheme:*

- elimination of the risk of water pollution of agricultural origin;
- reduce the risk erosion;
- enhanced protection of vulnerable water sources.
- mitigation of the risks of environmental pressure originating from agricultural activities in the following areas: areas and flood plans regularly flooded with inland waters;
- establishment of flood plain landscape management and implementation of changes in landscape use in target areas affected by VPP;
- establishment of new grassland habitats towards the enhancement of biodiversity;
- reduction of environmental pressure due to the use of pesticides and fertilizers;

#### *Eligibility criteria:*

- eligible areas are (defined in LPIS): the protective zones of vulnerable drinking water resources, arable land with higher than 12% slope, and on target areas of the Vásárhelyi Plan, on the territory of which landscape management is based on built flood reservoirs, areas affected by floods or with a high risk of inland water and arable lands within LFA defined in the smallest eligible monocrop parcel is 0.3 ha,
- the smallest eligible area is 1 ha;
- regarding the area entered into the scheme livestock density should be at least 0.1 LU/ha from the 2nd year of the scheme;
- animal species to be grazed: bovine animals, sheep and goat, buffalo, horse, donkey, mule;
- livestock must be under the farmer (holder) name

- livestock must be registered in relevant registers and documentation (SIS, AIS, horse passport)
- duration of the scheme is 10 years

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
<b>In the first year of the scheme:</b>				
Land use change	Arable farming		Reduction of environmental pressure	+
On the established grassland chemical weed control allowed only once	Chemical weed control applied when necessary		Supporting the generation of grass habitat	+
Only mowing is allowed at 1 time	New grasslands are mowed only and once/year		Gradual vegetation growth is assured (flora improvement)	-
<b>From the second year of the scheme:</b>				
cultivation of the grassland by: 2 times mowing per year, or grazing or mixed management (mowing/grazing);	Minimum maintenance of grassland (mowed once/year)		Avoidance of habitat damage	+
mowing is allowed only after 1 May;	First harvesting normally started in early May		Avoidance of habitat damage	+
application of shepherding / sectioning grazing;	Normally free grazing is applied		Grassland habitat is maintained in appropriate condition	+
no mineral or organic fertilizer and pesticides are allowed;	Fertilisers may be applied, allowed		Extensive habitat conditions are maintained	+

minimum grazing density must be 0.1 LU /ha on the grassland;	Minimum maintenance of grassland (mowed once/year)		Extensive habitat conditions are is maintained	-
it is prohibited to overgraze the grassland;				
by the end of the third year of the scheme the 0.2 grazeable livestock unit/ha should be reached;	Minimum maintenance of grassland (mowed once/year)		Extensive habitat conditions are is maintained	-
grassland may be oversown only once during the 10 years of the scheme.	Oversowing may be applied when necessary		Extensive habitat conditions are is maintained	-

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

#### **B.4.2. Nature conservation land use change scheme**

##### Objectives of the scheme:

- extension of grassland in HNVA (Natura 2000 and ESA areas) with high biodiversity;
- the nature-friendly grassland utilization technology allows the spread of the characteristics species of the neighbouring natural and semi-natural grasslands to the arable lands to be converted, and thereby the evolution of such grass communities within a short while that are similar to the natural communities;
- preservation and enhancement of agricultural biodiversity.

##### Eligibility criteria:

- eligible areas: arable land in designated HNVAs (defined in LPIS)
- the smallest eligible monocrop parcel is 0.3 ha,
- the smallest eligible area is 1 ha;
- animal species to be grazed: bovine animals, sheep;
- regarding the area entered into the scheme livestock density should be at least 0.1 LU/ha from the 2nd year of the scheme;

- livestock must be under the farmer (holder) name
- livestock must be registered in relevant registers and documentation (SIS, AIS, horse passport)
- duration of the scheme is 5 years

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
<b>In the first year of the scheme:</b>				
Land use change;	Arable farming		Reduction of environmental pressure	+
On the established grassland chemical weed control allowed only once;	Chemical weed control applied when necessary		Supporting the generation of grass habitat	+
Only mowing is allowed at 1 time;	New grasslands are mowed only and once/year		Bird protection during breeding period	-
Mowing is allowed only after 15 June;	First harvesting normally started in early May		Bird protection during breeding period	+
at least 5 days prior to the start of mowing, the location and planned starting date of mowing should be notified in writing (by letter, fax or email) to the competent national nature conservation authority;	Timing and location of harvesting is not reported		Avoid bird/nest harm/destruction	-
<b>From the second year of the scheme:</b>				
Implementation of scheme provisions B.3.1 or B.3.2 (according to the location of the area).	See B.3.1. or B.3.2.			

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

## C. AGRI-ENVIRONMENTAL MEASURES FOR PERMANENT CROPS

### **C. 1. Integrated fruit and grape production scheme**

#### Objectives of the scheme:

- reduction of unfavourable environmental impacts originating from the chemicals used in the course of agricultural production;
- protection and improvement of the conditions of soils,
- contribution to food safety;
- contribution to the preservation and enhancement of biodiversity.

#### Eligibility criteria:

- the smallest eligible monocrop parcel is 0.3 ha;
- the smallest eligible plantation area is 0.5 ha;
- applications may be submitted existing, non-yielding and yielding plantations;
- eligible crops: all the fruit species and vines
- only homogeneous plantations are eligible;

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+

performance of leaf analyses annually;	Leaf analysis not applied		Recovering nutrient deficit, avoid soil degradation	+
based on the results of the soil/leaf tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Reduce environmental pressure	+
no sewage sludge or compost containing sewage sludge is allowed to apply in the plantations;	These substances occasionally are applied	Government Decree No. 50/2001 (IV. 3.)	Reduce environmental pressure	-
only environmentally friendly pesticides are allowed to apply;	Use of pesticides with licence		Improve soil physical/chemical status	+
application of sex pheromon traps in 2 traps/4 ha density in order to establish the individual number of pestiferous insects and the foreseeable extent of damage, considering that the number of traps on territories under 2 ha is 1;	Sex pheromone traps are not applied		Reduce environmental pressure	+
plant-protection interventions should be carried out on the basis of documented forecasts or plant-protection observations;	Pest forecasting is not applied		Reduce environmental pressure	+
6 nest boxes /ha should be settled in the plantations;	Nest boxes are not settled		Improve biodiversity status/reduce environmental pressure	+
tree/vine absence cannot exceed 10%	Tree/vine absence is allowed		Not relevant	-

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.



## **C. 2. Organic fruit and grape production scheme**

### **Objectives of the scheme:**

contribution to the preservation and enhancement of biodiversity;  
strengthening of natural self-regulatory processes;  
preservation of endangered species representing cultural-historical and genetic value;  
reduction of unfavourable environmental impacts arising from the use of pesticides and improper nutrient management,  
protection and improvement of the conditions of soils,  
contribution to food safety;

### **Eligibility criteria:**

the smallest eligible monocrop parcel is 0.3 ha;  
the smallest eligible plantation area is 0.5 ha;  
eligible crops: all the fruit and grape  
applications may be submitted existing, non-yielding and yielding plantations;  
the plantation should be registered by any of the acknowledged organic supervision and certification organization in Hungary.

<b>Scheme provisions</b>	<b>Baseline</b>	<b>Regulation of baseline*</b>	<b>Environmental impact</b>	<b>Payment calculation element</b>
full compliance with the requirements of Council Regulation 834/2007/EEC and Council Regulation 889/2008/EEC	Licensed fertilizers and pesticides are used	MARD Regulation 79/2009. (VI. 30.)	Reduce environmental pressure	+
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+

laboratories;				
performance of leaf analysis annually;	Leaf analysis not applied		Recovering nutrient deficit, avoid soil degradation	+
based on the results of the soil/leaf tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Reduce environmental pressure	+
application of sex pheromon traps in 2 traps/4 ha density in order to establish the individual number of pestiferous insects and the foreseeable extent of damage, considering that the number of traps on territories under 2 ha is 1;	Sex pheromone traps are not applied		Reduce environmental pressure	+
plant-protection interventions should be carried out on the basis of documented forecasts or plant-protection observations;	Pest forecasting is not applied		Reduce environmental pressure	+
6 nests/ha be settled in the plantations;	Nest boxes are not settled		Improve biodiversity status/reduce environmental pressure	+
in the plantations, hiding places, reproduction sites for predatory insects in a density of at least 1 m2/ha should be established, maintained on an annual basis, and preserved for five years;	Hiding places for predator insects are not applied		Improve biodiversity status/reduce environmental pressure	+
tree/vine absence cannot exceed 15%	Tree/vine absence is allowed		Not relevant	-

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

### **C. 3. Traditional fruit production scheme**

#### **Objectives of the scheme:**

- Maintenance of traditional forms of farming that are also important in terms of the landscape;
- sustaining the favourable environmental impacts arising from the low level of use of plant protection materials;
- contribution to the preservation and enhancement of biodiversity.

#### **Eligibility criteria:**

- the smallest eligible monocrop parcel is 0.3 ha,
- the smallest eligible plantation area is 0.5 ha ;
- support applications may be submitted existing, non-yielding and yielding plantations;
- at least in 30 tree/ha and maximum 80 tree/ha fruit tree density is necessary .
- eligible fruit species: apple, pear, quince, naseberry, plum, cherry, sour cherry, apricot, peach, walnut, hazelnut, almond in homogenous and mixed stocks.

<b>Scheme provisions</b>	<b>Baseline</b>	<b>Regulation of baseline*</b>	<b>Environmental impact</b>	<b>Payment calculation element</b>
based on soil samples collected in the year prior to or in the first year of the scheme, as well as in the fifth year of the scheme an extended soil examination must be carried out in accredited soil laboratories;	Simplified soil analysis once in every 5 years		Contribute to the reduction of physical degradation of soils	+
based on the results of the soil tests, a nutrient management plan has to be prepared and applied annually;	Nutrient management plan is not prepared		Recovering nutrient deficit, avoid soil degradation	+

only organic manure and compost are allowed for nutrient supply of trees;	Licensed fertilizers are allowed to use	MARD Regulation 37/2006. (V. 18.)	Reduce environmental pressure	+
no sewage sludge or compost containing sewage sludge may be applied in the plantations	These substances are not used in permanent crops		Reduce environmental pressure	-
the ground of the plantations should be covered with grass, once a year such grass may be utilized by means of cutting and /or grazing, such cutting or grazing should be scheduled after 15 June, hay should be removed;	Interrows are not grassed so not managed		Reduce environmental pressure	+
at least 3 nest boxes/ha should be placed and maintained in the plantations;	Nest boxes are not settled		Improve biodiversity status/reduce environmental pressure	+
for plant protection interventions, only pesticides allowed in organic farming can be used;	Licensed pesticides are allowed to used		reduce environmental pressure	+
for fruit trees, after foliage-shaping pruning only spacing pruning may be performed (except for peach).	Productive pruning is allowed		Maintain low intensity production/ reduce environmental pressure	

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

## D. AGRI-ENVIRONMENTAL MEASURES FOR OTHER LAND USE

### D. 1. Reed management scheme

Objectives of the scheme:

- preservation and development of wetland habitats;
- provision of habitats (feeding and nesting sites) for insects, amphibians; for otters and birds;
- reduction of environmental pressure;

Eligibility criteria

- 
- the smallest eligible reed covered monocrop parcel is 1 ha;
- the smallest eligible reed covered area is 1 ha;

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
on the area reed management should be applied;	Minimum maintenance of reedfields		Maintenance of habitat	-
(transportation, drawing, etc.) may be carried only in the period between 15 December and 15 February, without damaging the rhizome of the reed;	Reed harvesting and transportation is allowed between 1st Dec – 31st March		Avoid habitat damage	-
stubble of at least 10-cm height should be left when harvesting;	Zero stubble is left at harvesting		Maintain habitat spots/nesting areas	+
at least 60%, but maximally 80% of reeds should be harvested annually, 20% of reed should be left unharvested in different locations biannually.	Whole crop is harvested		Upkeep habitat areas/nesting areas	+

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

## D. 2. Scheme for the maintenance of natural wetlands, marshes, bogs

### Objectives of the scheme:

- preservation and development of wetland habitats;
- provision of habitats (feeding and nesting sites) for insects, amphibians and birds;
- reduction of environmental pressure;

### Eligibility criteria:

- the smallest eligible area is 1 ha;
- the smallest eligible monocrop parcel is 0.3 ha;
- only wetland areas designated in LPIS can be entered
- regarding the area entered into the scheme livestock density should reach at least 0.1 LU/ha;
- animal species to be grazed: bovine animals, sheep;
- livestock must be under the farmer (holder) name
- livestock must be registered in relevant registers and documentation (SIS, AIS, horse passport)

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
no draining or dewatering is allowable in these areas;	These areas are drained to involve in production		Maintenance of wetland habitat	+
manure, fertilizer, pesticides cannot not be used;	Fertilizer and pesticides are not used		Upkeep of extensive land use/habitat	+

areas entered into the scheme should be utilized by means of grazing or cutting, minimum grazing density must be 0.1 LU/ha on the grassland and it is prohibited to overgraze the grassland;	Minimum maintenance of UAA		Maintenance of habitat in proper condition	-
by the end of the third year of the scheme the 0.2 livestock unit/ha value for the animal stock/grazing density should be reached;	Minimum maintenance of UAA		Maintenance of habitat in proper condition	-
cutting may be performed only under dry soil conditions, with the use of nature-friendly harvesting methods;	Machinery work can be applied under appropriately dry conditions, normal harvesting method;		Avoid bird/nest damage	+
stubbles of at least 10 cm should be left;	zero stubble is applied		Upkeep of bird habitat/hiding places	+

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

### **D. 3. Scheme for the establishment and management of wetlands**

#### Objectives of the scheme:

- withdrawal of areas that are unsuitable for arable farming or grass management from cultivation;
- extension, development of the areas of wetland habitats;
- reduction of environmental pressure;
- establishment of floodplain land management in VPP target areas

#### Eligibility criteria:

- eligible areas are: arable land and grassland regularly or permanently affected by floods or inland water, or in areas where water inundation is possible especially in target areas of Vásárhelyi Plan designated in LPIS eligible arable land regularly affected by flood or inland water or areas where water inundation is possible especially in target areas of Vásárhelyi Plan designated in LPIS, where landscape management is based on built flood reservoirs;
- the smallest eligible area is 0.3 ha;
- the smallest eligible monocrop parcel is 0.3 ha;
- regarding the area entered into the scheme livestock density should reach at least 0.1 LU/ha from the 2<sup>nd</sup> year of the scheme
- animal species to be grazed: cattle, sheep, buffalo;
- livestock must be under the farmer (holder) name
- livestock must be registered in relevant registers and documentation (SIS, AIS, horse passport)

Scheme provisions	Baseline	Regulation of baseline*	Environmental impact	Payment calculation element
there should be ensured to keep water on the areas as long as possible;	Wet areas are drained to involve them into production		Maintenance of wetland habitat	+
no draining may be performed, except for water management for landscape management purposes in VPP areas;	Wet areas are drained to involve them into production		Maintenance of wetland habitat	+
fertiliser, pesticides cannot be used;	Fertilizer and pesticides are not used		Upkeep of extensive land use/habitat	-
areas entered into the scheme should be utilized by means of grazing or cutting, minimum grazing density must be 0.1 LU /ha on the grassland and it is prohibited to overgraze the grassland;	Minimum maintenance of UAA		Upkeep of extensive land use/habitat	-



by the end of the third year of the scheme 0.2 livestock unit/ha livestock/grazing density should be reached;	Minimum maintenance of UAA		Upkeep of extensive land use/habitat	-
cutting may be performed only under dry soil conditions, with the use of nature-friendly harvesting methods,	Machinery work can be applied under appropriately dry conditions, normal harvesting method		Avoid bird/nest damage	+
stubble of at least 10 cm height should be left;	zero stubble is applied		Upkeep of bird habitat/hiding places	+
the use of game-deterring chains during the harvesting is compulsory.	game-deterring chains normally not used		Avoid bird/nest harm/destruction	+

\* For those prescriptions which has no legal background indicated, the baseline implies general management practices.

### Crop rotation rules:

- a. sugar beet, beetroot, fodder beet, potatoes, faba beans, soybeans and lupine are not to be grown more than once in 4 years
- b. sunflower not to be grown more than once in 5 years
- c. dry peas not to be grown more than once in 7 years
- d. there must be at least 2 years between 2 leguminous crop
- e. alfalfa must not be followed by a leguminous crop
- f. the following crops must not follow each other: soybean, oilseed rape, sunflower

## **Annex 10: Zonal limitations in agri-environment payments:**

Within the agri-environment payments, for those farming on protected areas and designated lands for soil- and water protection (Water Framework Directive) reasons, there is a possibility to implement special regulations beyond the horizontal ones. The regulations that can be implemented on such areas are called zonal regulations. Only the farmer farming on a land that is physically limited, registered in the LPIS or duly certified by the relevant organisations.

The criteria for designating the zonal schemes:

Conservation zonal schemes:

Can be demanded only on arable and grasslands lands of given High Environmental Value and within these it can be applied for with higher priorities in the designated zones. The system of High Environmental Value lands is defined based on the Natura 2000 lands and the lands of the Environmentally Sensitive Areas, where a given agricultural utilization supports the great species and habitat diversity, the presence of species considered to be important based on the European nature conservation aspects or both. The different areas being important conservation-wise, that serve basis for the demarcation of the High Environmental Value areas are presented on map.

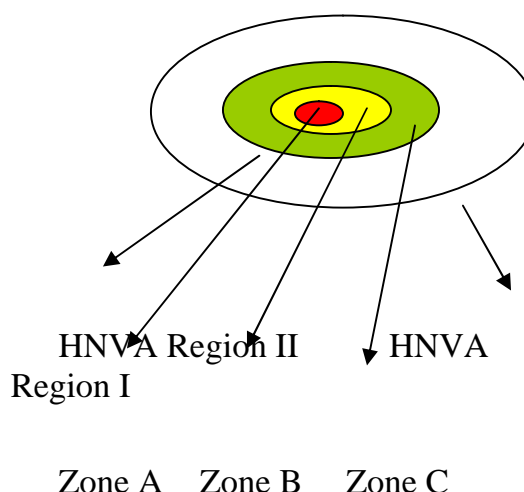
### **General Methodology for the Zonal Limitation:**

HNVA Regions I and II may be identified in the country in several separated and isolated locations where nature conservation management objectives and professional principles do justify such limitation. Regions and zones are established exclusively along professional principles, primarily by environmental protection priorities, conservation management objectives and the most influential management features.

These Regions and zones identify different nature conservation objectives and not chronological order! Based on the Regions and zones defined within the system of HNVA horizontal and zonal schemes, relevant areas may be determined more accurately and in a more specified manner.

## Regions and Zones:

These Regions include a larger area which may further be divided into smaller zones. These HNVA's are practical to be identified as Regions I. and II. In Region I primarily zonal nature conservation schemes are necessary to be established, while in Region II. horizontal schemes with more significant nature conservation returns are also suitable. Additional 1-3 zones (A-B-C) are required within Region I for the special and effective accomplishment of various environmental goals.



Certain zonal environmental protection objectives are eligible only in certain HNVA's (HNVA Region I.). Inside the given zones of the HNVA Region I. certain zonal schemes (producers wishing to participate in such schemes) gain advantage at the scoring (priority zones for schemes: A-B-C).

### Soil conservation zonal schemes (Anti-erosion schemes):

The basis for the designation against water erosion is the areas used for arable lands with an inclination between 5-12%. Those areas can be impounded for protecting against the erosion caused by the wind that are, at the same time, sand or loess soil areas exposed to wind erosion.

### Schemes aiming at water conservation:

Beneficiary is entitled for using the land for set-aside aiming at water protection on the protective area of vulnerable water resources or on arable lands with an inclination higher than 12%.

## Annex 11: List of rare vegetable varieties with a cultural or genetic value

Species	Variety	References	Area in cultivation (ha)	Available in
Tomato ( <i>Lycopersicon esculentum</i> L.)	Ökörszív	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Fóti	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Tápláni	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Lugas	FAO WIEWS, ECP/GR	<1 ha	kitchen-garden
Green Pepper ( <i>Capsicum annuum</i> L.)	Bogyesz	FAO WIEWS, ECP/GR	<5 ha	Tápió-valley, Jászság
	Bocskor	FAO WIEWS, ECP/GR	<5 ha	Békés- és Hajdú county
	Bugaci	FAO WIEWS, ECP/GR	<1 ha	Duna-Tisza plain
	Kalinkói	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Gogos paradicsom-paprika	FAO WIEWS, ECP/GR	<1 ha	Békés- és Csongrád county
	Szentesi	FAO WIEWS, ECP/GR	<1 ha	Békés- és Csongrád county
Hungarian Pepper ( <i>Capsicum annuum</i> var. <i>longum</i> )	Boldogi	FAO WIEWS, ECP/GR	<1 ha	Mátja alja
	Kalocsai	FAO WIEWS, ECP/GR	<1 ha	Kalocsa
	Dokomlási	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Onion ( <i>Allium cepa</i> L.)  Onion ( <i>Allium cepa</i> var. <i>aggregatum</i> G. Don)	Alsógödi	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Jászsági	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Csokros	FAO WIEWS, ECP/GR	<1 ha	Tiszántúl
Garlic ( <i>Allium sativum</i> L.)	Kadarkúti	FAO WIEWS, ECP/GR	<1 ha	Somogy county
	Makói	FAO WIEWS, ECP/GR	<1 ha	Makó
	Cigándi	FAO WIEWS, ECP/GR	<1 ha	Tiszántúl
	Sárospataki	FAO WIEWS, ECP/GR	<1 ha	Tokaj-Hegyalja

Leek ( <i>Allium porrum</i> L.)	Nagykátai	FAO WIEWS, ECP/GR	<1 ha	Tápió valley
Chives ( <i>Allium schoenoprasum</i> L.)	Napkori	FAO WIEWS, ECP/GR	<1 ha	Tiszántúl
	Taktaharkányi	FAO WIEWS, ECP/GR	<1 ha	Tiszántúl
Welsh Onion ( <i>Allium fistulosum</i> L.)	Nagykátai	FAO WIEWS, ECP/GR	<1 ha	Tápió valley
Lettuce ( <i>Lactuca sativa</i> L.)	Villányi	FAO WIEWS, ECP/GR	<1 ha	Dél-Baranya
	Csehi- mindszenti	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Fiadi	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Isztiméri	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Hernádcécei	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Biri	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Cabbage ( <i>Brassica oleracea</i> convar. capitata var. capitata f. alba )	Vecsési	FAO WIEWS, ECP/GR	<50 ha	Pest
	Hajdúsági	FAO WIEWS, ECP/GR	<15 ha	Debrecen
Colewort ( <i>Brassica oleracea</i> convar. capitata var. sabauda)	Mohácsi szí	FAO WIEWS, ECP/GR	<5 ha	Mohács
Spinach ( <i>Spinacea oleracea</i> L.)	Békési	FAO WIEWS, ECP/GR	<1 ha	Tiszántúl
New Zeland spinach ( <i>Tetragonia tetragoniodes</i> (Pall.) O. Kuntze	Sajószentpéteri	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Garden sorrel ( <i>Rumex acetosa</i> L.)	Pallagi	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Parsley ( <i>Petroselinum crispum</i> . (Mill.) Nym.	Napkori	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Gyomaendr di	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Parsnip ( <i>Pastinaca sativa</i> L.)	Semjéni	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Celery ( <i>Apium graveolens</i> L.)	Monostorapáti	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Radish ( <i>Raphanus sativus</i> L.)	Nagykállói	FAO WIEWS, ECP/GR	<1 ha	gene reserve

## Annex 12.: List of rare arable crops varieties with a cultural or genetic value

Species	Variety	References	Area in cultivation (ha)	Available in
Wheat ( <i>Triticum aestivum</i> L. subsp. <i>aestivum</i> var. <i>erythrosperrum</i> )	Tiszavidéki	FAO WIEWS (World Information and Early Warning System)	<1 ha	gene reserve
	Mez ségi	FAO Treaty (International Treaty on Plant Genetic Resources for Food and Agriculture)	<1 ha	gene reserve
	Bánkúti 1201	ECP/GR (European Cooperational Programme for Genetic Resources Networks)	5-10 ha	Great Plain
Einkorn ( <i>Triticum monoccocum</i> L.)		ECCDB (ECP/GR European Central Crop Data Basis)	<1 ha	gene reserve
Emmer ( <i>Triticum dicoccon</i> Schrank)		FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
Barley ( <i>Hordeum vulgare</i> L.)	Gádorosi fekete	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
Maize ( <i>Zea mays</i> L.)	Mindszent pusztai fehér	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Bánkúti lófogú sárga	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Mez hegyesi sárga lófogú	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Putyi	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Piros kukoricák	FAO WIEWS, FAO Treaty, ECP/GR	5-10 ha	rség, Tiszántúl
	Iregi 12 hetes	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Száznapos	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Sárga magyar	FAO WIEWS, FAO Treaty, ECP/GR	5-10 ha	Tiszántúl
Sunflower ( <i>Helianthus annuus</i> L.)	Nagykállói	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Bajai fehér	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
Millet ( <i>Panicum miliaceum</i> L.)	Fert di piros	FAO WIEWS, ECP/GR	<1 ha	gene reserve

	Mesterháza i	FAO WIEWS, ECP/GR	<5 ha	Great Plain
Bean ( <i>Phaseolus vulgaris</i> L.)	Futó fürjbabok	FAO WIEWS, FAO Treaty, ECP/GR	<50 ha	secondary crop countrywide
	Bokor fürjbabok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	in gardens countrywide
	Pacsibab	FAO WIEWS, FAO Treaty, ECP/GR	<10 ha	secondary crop Great Plain
	Menyecske babok	FAO WIEWS, FAO Treaty, ECP/GR	<20 ha	Great Plain
	Büdösk ba bok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Fecskehasú babok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Gyöngybab ok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Cukorbabo k	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Gesztenyeb abok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Gyíkbabok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Békahátúb abok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Libamájba bok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Békési rizsbabok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
	Tolnai borsóbabok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	dispersedly
Scarlet bean ( <i>Phaseolus coccineus</i> L.)	Fehér salátabab	FAO WIEWS, FAO Treaty, ECP/GR	<10 ha	in gardens country wide
	Tarka salátabab	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	in gardens country wide
Chickpea ( <i>Cicer arietinum</i> L.)	Békéscsaba i	FAO WIEWS, FAO Treaty, ECP/GR	<10 ha	Duna-Tisza plain
Cow pea ( <i>Vigna unguiculata</i> (L.) Walp.)	Bajai	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Mohácsi	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
Faba bean ( <i>Vicia faba</i> L.)	Tataházi	FAO WIEWS, FAO Treaty, ECP/GR	<50 ha	countrywide
Peanut ( <i>Arachis hypogaea</i> L.)	Kisteleki, Tápiószelei	FAO WIEWS, ECP/GR	<5 ha	south-Great Plain
Potato ( <i>Solanum tuberosum</i> L.)	Porvai	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
	Aranyalma	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	in gardens country wide
	Somogyi	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	in gardens country wide

Jerusalem artichoke ( <i>Helianthus tuberosus</i> L.)	Farmosi	FAO WIEWS, ECP/GR	<1 ha	gene reserve
	Nagykállói	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Kidney vetch ( <i>Anthyllis vulneraria</i> L.)	Helyi típusok	FAO WIEWS, ECP/GR	<1 ha	gene reserve
White sweet clover ( <i>Melilotus alba</i> Medik.)	Helyi típusok	FAO WIEWS, FAO Treaty, ECP/GR	<5 ha	Duna-Tisza plain
Alsike clover ( <i>Trifolium hybridum</i> L.)	Helyi típusok	FAO WIEWS, FAO Treaty, ECP/GR	<1 ha	gene reserve
Corn spurrey ( <i>Spergula arvensis</i> L.)	Helyi típusok	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Mallow ( <i>Malva verticillata</i> L.)	Helyi típusok	FAO WIEWS, ECP/GR	<1 ha	gene reserve
Squash ( <i>Cucurbita maxima</i> Duch.ex Lam)	Helyi típusok	FAO WIEWS, ECP/GR	<50 ha	Great Plain
Fodder melone ( <i>Citrullus lanatus</i> Pang.)	Újszilvási	FAO WIEWS, ECP/GR	<1 ha	gene reserve



## Annex 13: Number of protected native farm animals and number of endangered farm animals

### Number of protected native farm animals (number of registered females)

Species / Breed		
<b>Cattle and buffalo</b>		
Magyar szürke	5932	6862
Magyar bivaly	369	404
<b>Donkey</b>		
Magyar parlagi számár	49	
<b>Pig</b>		
Szürke mangalica	4581	6549
Fecskéhasú mangalica	798	895
Vörös mangalica	1054	1576
<b>Sheep</b>		
Hortobágyi racka (fehér)	2792	2991
Hortobágyi racka (fekete)	1678	1740
Gyimesi racka	1304	1542
Cigája	2078	2182
Cikta	236	196
<b>Goat</b>		
Magyar kecske		
<b>Hen</b>		
Sárga magyar	1569	1525
Kendermagos magyar	1331	750
Fehér magyar	299	262
Fogolyszín magyar	322	161
Fehér erdélyi kopasznnyakú	273	222
Fekete erdélyi kopasznnyakú	189	110
Kendermagos erdélyi kopasznnyakú	597	430
<b>Guineafowl</b>		
Magyar parlagi gyöngytyúk	227	215

<b>Goose</b>		
Fodrostollú magyar lúd	518	237
Magyar lúd	-	246
<b>Turkey</b>		
Bronzpulyka	340	286
Rézpulyka	167	148
<b>Rabbit</b>		
Magyar óriás		

**Number of protected native farm animals**  
(number of registered females)

<b>Cattle</b>		
Magyar tarka	6241	5779
<b>Horse</b>		
Gidrán	200	200
Hucul	114	130
Kisbéri félvér	866	874
Lipicai	549	844
Furioso-north star	452	479
Nóniusz	632	614
Shagya-arab	562	566
<b>Carp</b>		
Nyurga ponty		
T ponty		

## **Annex 14: List of plant varieties concerned in genetical conservation under Art. 39. Section (5)**

According to the FAO International Treaty on Plant Genetic Resources for Food and Agriculture and associated Community regulations, accessions (open pollinated populations, traditional, obsolete varieties, land races, populations and lines of wild species related to cultivated plants) are entitled for financial support if they are not registered in National and/or EU variety lists and are not commercially available on the seed market. This is to avoid „trade distorting” actions while supporting the conservation and utilization of endangered genetic resources. Registered cultivars subject to maintenance breeding and their propagating material is available commercially, therefore there is no need for their conservation as genetic resources in ex situ collections. Just as an example: there are some 110 cultivars of winter wheat registered in Hungary but in contrast there are several hundreds of land races (Tiszavidéki, Mez ségi, Somogyi etc) obsolete varieties (Bánkúti 1201, 1205, 5, 114; Székács wheats, Fleischmann wheat varieties, Kompolti, Karcagi, etc cultivars) and formerly used breeder's lines those are reach sources of genes underlying important agronomic characters like bread baking quality, tolerance to environmental stresses, resistance to pests and disease, etc). Such genetic resources of crop plants would disappear soon and forever as the viability of their seed lots declines.

Hungary is especially rich in diverse variants of cultivated plants (like flint and dent type of open pollinated maize varieties, several thousands of bean land races and local types, green and red peppers, cherry and sour cherry varieties, variable peach and apricot types, local, semi wild plum plantations, and traditional grape varieties in vineyards). The FAO Report on the Status of the World of PGRFA (1996) lists nearly 80.000 unique accessions in the Hungarian genetic resources collections, and the EURISCO genetic resources information system include already 42.000 unique accessions maintained in Hungarian collections. These figures indicate the magnitude of work of identifying the unduplicated unique accessions to be preserved and that work is coordinated by the Hungarian Gene Bank Council. Exploration and collection of endangered local types in remote areas are also important component of genetic resources conservation. This activity should also cover variants of all species grown in Hungary and not yet utilized in scientifically based breeding programmes.

Cultivated species	Hungarian name of the plant
<i>Achillea filipendulina</i>	Páfránylevelű cickafark
<i>Achillea millefolium</i>	Községes cickafark
<i>Agropyron cristatum</i>	Taréjos búzaf
<i>Agropyron elongatum</i>	Magas tarackbúza
<i>Agropyron intermedium</i>	Deres tarackbúza
<i>Agrostis alba</i>	Tarackos tippán
<i>Agrostis alba</i> subsp. <i>gigantea</i>	Óriás tippán
<i>Agrostis capillaris</i>	Cérnatippán
<i>Alcea rosea</i> ( <i>Althaea rosea</i> )	Kerti mályva
<i>Allium ascalonicum</i>	Mogyoróhagyma
<i>Allium cepa</i> var. <i>aggregatum</i>	Csokroshagyma
<i>Allium cepa</i> var. <i>cepa</i>	Vöröshagyma
<i>Allium fistulosum</i>	Téli hagyma
<i>Allium galanthum</i>	Díshagyma
<i>Allium porrum</i>	Poréhagyma
<i>Allium sativum</i>	Fokhagyma
<i>Allium schoenoprasum</i>	Metél hagyma
<i>Allium tuberosum</i>	Tatár hagyma
<i>Alopecurus pratensis</i>	Réti ecsetpázsit
<i>Amaranthus caudatus</i>	Bókoló amaránt
<i>Amaranthus cruentus</i>	Bíbor amaránt
<i>Amaranthus hypochondriacus</i>	Piros amaránt
<i>Amygdalus communis</i> ( <i>Prunus dulcis</i> var. <i>sativa</i> )	Édesmandula
<i>Anethum graveolens</i>	Kapor
<i>Anthoxanthum odoratum</i>	Illatos borjúpázsit
<i>Anthyllis vulneraria</i> subsp. <i>vulneraria</i>	Nyúlzapuka

<i>Apium graveolens</i> var. <i>graveolens</i>	Ersszagú zeller
<i>Apium graveolens</i> var. <i>rapaceum</i>	Kerti zeller
<i>Apium graveolens</i> var. <i>secalinum</i>	Metél zeller
<i>Arachis hypogaea</i>	Amerikaimogyoró
<i>Arrhenatherum elatius</i>	Franciaperje
<i>Asparagus officinalis</i>	Spárga
<i>Atriplex hortensis</i>	Kerti laboda
<i>Avena byzantina</i>	Bizánci zab
<i>Avena sativa</i>	Abrakzab
<i>Avena strigosa</i>	Érdes zab
<i>Basella alba</i>	Fehér spenót
<i>Benincasa hispida</i>	Viasztök
<i>Beta vulgaris</i> var. <i>cicla</i>	Mangold
<i>Beta vulgaris</i> var. <i>conditiva</i>	Cékla
<i>Beta vulgaris</i> var. <i>crassa</i>	Takarmányrépa
<i>Beta vulgaris</i> var. <i>altissima</i>	Cukorrépa
<i>Borago officinalis</i>	Kerti borágó
<i>Brassica juncea</i>	Szareptai mustár
<i>Brassica napus</i> subsp. <i>napus</i>	Olajrepce
<i>Brassica napus</i> var. <i>napobrassica</i>	Karórépa
<i>Brassica nigra</i>	Fekete mustár
<i>Brassica oleracea</i> convar. <i>acephala</i> var. <i>gogylodes</i>	Karalábé
<i>Brassica oleracea</i> convar. <i>acephala</i> var. <i>sabellica</i>	Szárnyas káposzta
<i>Brassica oleracea</i> convar. <i>acephala</i> var. <i>viridis</i> ( <i>acephala</i> )	Marhakáposzta
<i>Brassica oleracea</i> convar. <i>botrytis</i> var. <i>botrytis</i>	Karfiol

<i>Brassica oleracea</i> convar.botrytis var.italica	Brokkoli
<i>Brassica oleracea</i> convar.capitata var.capitata f.alba	Fejes káposzta
<i>Brassica oleracea</i> convar.capitata var.capitata f.rubra	Vörös káposzta
<i>Brassica oleracea</i> convar.capitata var.sabauda	Kelkáposzta
<i>Brassica oleracea</i> convar.fruticosa var.gemmifera	Bimbóskel
<i>Brassica rapa</i> subsp.rapa (campestris var.rapifera)	Tarlórépa
<i>Brassica rapa</i> subsp.chinensis	Kínai káposzta
<i>Brassica rapa</i> subsp.pekinensis	Pekingi káposzta
<i>Bromus erectus</i>	Sudár rozsok
<i>Bromus inermis</i>	Árva rozsok
<i>Cajanus cajan</i>	Kajánbab
<i>Calendula officinalis</i>	Körömvirág
<i>Callistephus chinensis</i>	Kerti szirózsa
<i>Camelina sativa</i>	Magvas gomborka
<i>Cannabis sativa</i>	Kender
<i>Capsicum annuum</i> var.cerasiforme	Cseresznyepaprika
<i>Capsicum annuum</i> var.grossum	Étkezési paprika
<i>Capsicum annuum</i> var.longum	F szerepaprika
<i>Capsicum annuum</i> var.lycopersiciforme	Paradicsompaprika
<i>Capsicum baccatum</i>	Bogyós paprika
<i>Capsicum frutescens</i>	Cserjés (chili) paprika
<i>Carthamus tinctorius</i>	Sáfrányos széklice
<i>Carum carvi</i>	F szerkömény

<i>Chamomilla recutita</i>	Orvosi székf
<i>Cheiranthus cheiri</i>	Sárgaviola
<i>Clarkia elegans</i>	Pompás klárka
<i>Cicer arietinum</i>	Csicseriborsó
<i>Cichorium endivia</i>	Endívia
<i>Cichorium intybus</i> var.foliosum	Cikóriakatáng
<i>Citrullus lanatus</i> subsp.lanatus	Takarmány görögdinnye
<i>Citrullus lanatus</i> subsp.vulgaris	Görögdinnye
<i>Citrullus colocynthis</i>	Sártök
<i>Cnicus benedictus</i>	Benedekf
<i>Coix lacryma-jobi</i> var.ma-yuen	Jób könnye
<i>Coriandrum sativum</i>	Koriánder
<i>Coronilla varia</i>	Tarka koronafürt
<i>Cosmos bipinnatus</i>	Sallangos pillangóvirág
<i>Cosmos sulphureus</i>	Sárga pillangóvirág
<i>Crambe abyssinica</i>	Abesszín tátorján
<i>Crotalaria juncea</i>	Krotalária (Bengálikender)
<i>Cucumis anguria</i>	Anguria uborka
<i>Cucumis melo</i>	Sárgadinnye
<i>Cucumis sativus</i>	Uborka
<i>Cucurbita ficifolia</i>	Laskatök
<i>Cucurbita maxima</i>	Sütök
<i>Cucurbita moschata</i>	Pézsmatök
<i>Cucurbita pepo</i> subsp.pepo convar microcarpina	Díszök
<i>Cucurbita pepo</i> convar.giromotiina	Cukkini (Csíkos tök)
<i>Cucurbita pepo</i> convar.patissonina	Csillagtök (Patiszon)
<i>Cucurbita pepo</i> convar.pepo	Úritök (Étkezési spárgatök)
<i>Cydonia oblonga</i>	Birs

<i>Cynara cardunculus</i>	Kárdi
<i>Cynoglossum officinale</i>	Orvosi ebnyelv
<i>Cynoglossum amabile</i>	Kerti ebnyelv
<i>Cynosurus cristatus</i>	Taréjos cincor
<i>Cyperus esculentus</i>	Mandulaf
<i>Cyperus involucratus</i> (alternifolius subsp.flabelliformis)	Galléros palka
<i>Dactylis glomerata</i>	Csomós ebír
<i>Dalea gattingeri</i> (Petalostemon)	Bíborrojt
<i>Datura innoxia</i>	Indián maszlag
<i>Datura metel</i>	Egyiptomi maszlag
<i>Datura meteloides</i>	Maszlag
<i>Datura stramonium</i>	Csattanó maszlag
<i>Daucus carota</i> subsp.sativus	Sárgarépa
<i>Deschampsia cespitosa</i>	Sédbúza
<i>Desmodium canadense</i>	Kanadai hüvelycsomó
<i>Dianthus barbatus</i>	Török szegf (Szakállas)
<i>Dianthus deltoides</i>	Fenyérszegf (Mezei)
<i>Dianthus plumarius</i>	Tollas szegf (Német)
<i>Digitalis ferruginea</i>	Rozsdás gy sz virág
<i>Digitalis purpurea</i>	Piros gy sz virág
<i>Digitaria sanguinalis</i>	Pirók ujjasmuhar
<i>Dorycnium pentaphyllum</i>	Cserjésed dárda here
<i>Dracocephalum moldavica</i>	Kerti sárkányf
<i>Echinacea purpurea</i>	Lángvörös kasvirág
<i>Echinochloa colonum</i> (Panicum colonum)	Sáma-köles
<i>Echinochloa crus-galli</i> var.frumentacea	Japánköles
<i>Echinops ruthenicus</i> subsp.ritro	Kék szamárkönyér

<i>Eleusine coracana</i>	Ujjasköles
<i>Eleusine indica</i>	Aszályf
<i>Eragrostis tef</i> (Poa abyssinica)	Abesszín t tippan (Tef)
<i>Eruca sativa</i>	Borsmustár
<i>Eupatorium cannabinum</i>	Kenderpakóca (Sédkender)
<i>Euphorbia lathyris</i>	Kerti sárf (Hasindító kutyatej)
<i>Fagopyrum esculentum</i>	Pohánka (Hajdina)
<i>Fagopyrum tataricum</i>	Tatárka
<i>Festuca arundinacea</i>	Nádkép csenkesz
<i>Festuca heterophylla</i>	Felemáslevel csenkesz
<i>Festuca ovina</i>	Juhcsenkesz
<i>Festuca pratensis</i>	Réti csenkesz
<i>Festuca rubra</i>	Vörös csenkesz
<i>Festuca sulcata</i> (rupicola)	Barázdált csenkesz (Pusztai)
<i>Foeniculum vulgare</i>	Édeskömény
<i>Fragaria ananassa</i>	Szamóca
<i>Galega officinalis</i>	Kecskeruta
<i>Gazania rigens</i> (splendens)	Pompás záporvirág
<i>Gentiana lutea</i>	Sárga tárnics
<i>Glycine max</i>	Szója
<i>Glycyrrhiza glabra</i>	Édesgyökér
<i>Gomphrena globosa</i>	Kerti golyófüzény (Bírborka)
<i>Gossypium hirsutum</i>	Hegyvidéki gyapot
<i>Guizotia abyssinica</i>	Négermag
<i>Gypsophila elegans</i>	Kerti fátyolvirág
<i>Helianthus annuus</i>	Termesztett napraforgó
<i>Helianthus tuberosus</i>	Csicsóka
<i>Helichrysum bracteatum</i>	Kerti szalmavirág

Hibiscus cannabinus	Rostmályva (Kenáf)
Hibiscus esculentus	Gombó (Bámia, Okra)
Holcus lanatus	Gyapjas selyemperje
Hordeum jubatum	Díszárpa
Hordeum vulgare var. distichon	Kétsoros árpa (Tavaszi)
Hordeum vulgare var. hexastichon	Hatsoros árpa ( szi)
Hypericum perforatum	Közönséges orbáncf
Hyssopus officinalis	Izsóp
Iberis amara	Kerti tatárvirág
Iberis umbellata	Erny s tatárvirág
Ibicella lutea	Sárga ördögyszarv
Impatiens balsamina	Keri fájvirág (Nenyúljhózzám)
Inula helenium	Örménygyökér
Ipomoea batatas	Édesburgonya (Batáta)
Ipomoea bona-nox	Hajnalka
Ipomoea purpurea	Bíboros hajnalka
Juglans regia	Közönséges dió
Lablab purpureus (Dolichos lablab)	Sisakbab
Lactuca sativa var. angustana (asparagina)	Spárgasaláta
Lactuca sativa var. capitata	Fejes saláta
Lactuca sativa var. crispa	Metél saláta (Tép )
Lactuca sativa var. longifolia	Kötöz saláta
Lagenaria siceraria	Lopótök
Lallemantia iberica	Feketeszezám
Lathyrus sativus	Szegletes lednek
Lathyrus cicera	Csicserilednek
Lathyrus odoratus	Szagos lednek
Lavandula angustifolia	Keskenyleve levendula

Lavandula latifolia	Széleslevel levendula
Lens culinaris	Termesztett lencse
Leonurus cardiaca	Szúrós gyögyajak
Lepidum sativum	Kerti zsázsa
Levisticum officinale	Lestyán
Limonium sinuatum	Kerti sóvirág
Linum usitatissimum var. mediterraneum	Olajlen
Linum usitatissimum var. usitatissimum	Rostlen
Lolium perenne	Angolperje
Lolium multiflorum	Olaszperje
Lotus corniculatus	Szarvaskerep
Luffa acutangula	Szivacstök
Lupinus albus	Fehér csillagfürt
Lupinus angustifolius	Keskenylevel csillagfürt
Lupinus luteus	Sárga csillagfürt
Lupinus polyphyllus	Erdei csillagfürt
Lycopersicon esculentum convar. esculentum var. esculentum	Termesztett paradicsom
Lycopersicon esculentum convar. parvibaccatum var. cerasiforme	Cseresznyeparadicsom
Lycopersicon esculentum convar. parvibaccatum var. pyriforme	Körteparadicsom
Lycopersicon pimpinellifolium	Ribiszke paradicsom
Malus domestica	Alma
Malva verticillata	Takarmány mályva
Medicago sativa	Termesztett lucerna

Medicago x varia	Homoki lucerna
Melilotus alba	Fehér somkóró
Melissa officinalis	Citromf
Mentha x piperita	Borsmenta
Mespilus germanica	Naspolya
Mirabilis jalapa	Csodatölcsér
Momordica balsamina	Balzsamalma
Momordica charantia	Balzsamuborka (Momordika)
Morus nigra	Fekete eperfa
Morus alba	Fehér eperfa
Nasturtium officinale	Vízitorma
Nicotiana glauca (affinis)	Díszdohány
Nicotiana glauca	Kapadohány
Nicotiana glauca	Közönséges dohány
Nigella damascena	Kerti katicavirág
Nigella arvensis	Sz. rös katicavirág
Ocimum basilicum	Kerti bazsalikom
Ocimum gratissimum	Gerezd bazsalikom
Onobrychis viciifolia	Baltacim
Origanum majorana	Majoránna
Ornithopus sativus	Szerradella (Vetési csibeláb)
Oryza sativa	Termesztett rizs
Panicum miliaceum	Termesztett köles
Papaver bracteatum	Murvásmák
Papaver orientale	Díszmák
Papaver somniferum	Termesztett mák
Pastinaca sativa	Pasztinák
Petroselinum crispum	Petrezselyem

Petunia x hybrida	Nagyvirágú petúnia
Phacelia tanacetifolia	Mézontóf
Phalaris canariensis	Fénymag
Phaseolus acutifolius var. latifolius	Tepari bab
Phaseolus coccineus subsp. coccineus	T. zbab
Phaseolus lunatus var. lunatus	Limabab
Phaseolus vulgaris var. nanus	Bokorbab
Phaseolus vulgaris var. vulgaris (zebra var. purpurascens)	Karósbab
Phleum pratense	Mezei komócsin
Physalis ixocarpa (philadelphica)	Mexikói földicsersznye
Physalis peruviana	Ehet földicsersznye
Physalis pruinosa	Édes földicsersznye
Phytolacca americana	Amerikai alkörmös
Pimpinella anisum	Ánizs
Pisum sativum convar. axiphium	Cukorborsó
Pisum sativum convar. medullare	Vel. borsó
Pisum sativum convar. speciosum	Takarmányborsó
Pyrus domestica	Körte
Poa pratensis	Réti perje
Portulaca grandiflora	Porcsinrózsa (Kossuth-csillag)
Portulaca oleracea var. sativa	Termesztett porcsin
Proboscidea louisianica	Zergeszarv
Prunus amygdalus	Mandula
Prunus avium	Csersznye
Prunus cerasus	Meggy
Prunus domestica	Szilva
Prunus armeniaca	Kajszi
Prunus persica	szibarack



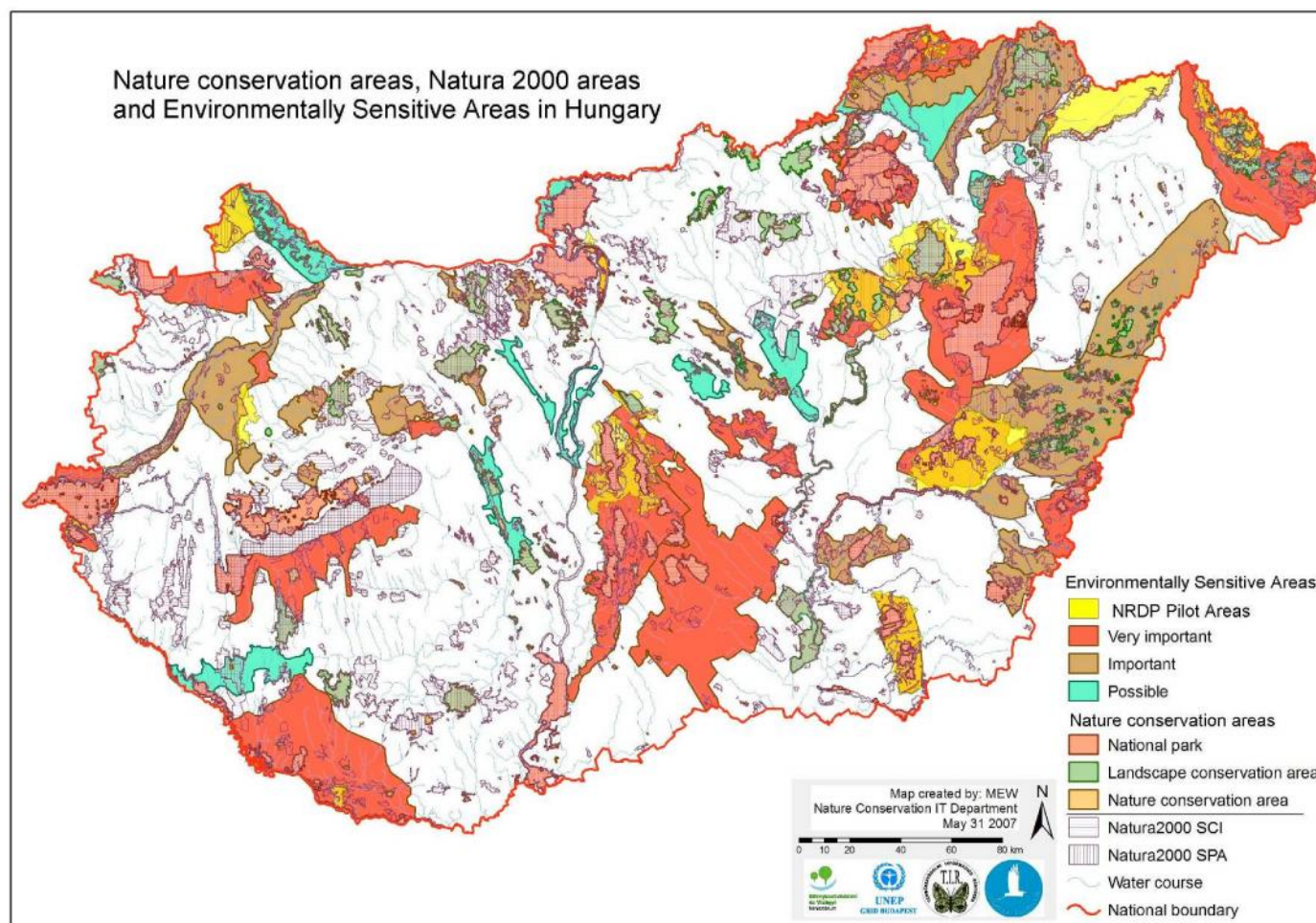
Raphanus sativus var.oliferus	Olajretek
Raphanus sativus var.niger	Fekete retek
Raphanus sativus var.sativus	Hónapos retek
Rheum rhaponticum	Közönséges rebarbara
Ribes nigrum	Feketeribiszke
Ribes rubrum	Kerti ribiszke
Ribes uva-crispa	Köszméte (Egres)
Ricinus communis	Ricinus
Rubus idaeus	Málna
Rubia tinctorum	Fest buzér
Rudbeckia hirta	Borzas kúpvirág
Rumex acetosa var.hortensis (rugosus)	Kerti sóska
Ruta graveolens	Kerti ruta
Salvia farinacea	Hamvas zsálya
Salvia officinalis	Orvosi zsálya (Kerti)
Salvia sclarea	Muskotályzsálya
Sambucus nigra	Fekete bodza
Satureja hortensis	Csombor (Borsikaf )
Scorzonera hispanica	Feketegyökér (Spanyol pozdor)
Scrophularia nodosa	Göcsös görvélyf
Secale cereale	Termesztett rozs
Sesamum indicum	Szezám
Setaria italica var.maxima	Óriás muhar (Csumiz)
Setaria italica var.moharia	Olasz muhar
Silybum marianum	Máriatövis
Silphium perfoliatum	Csészekóró (Szilfium)
Sinapis alba	Fehér mustár
Solanum melongena	Tojásgyümölcs (Padlizsán)

Solanum tuberosum	Burgonya
Sorghum bicolor subsp.bicolor	Szemes cirok
Sorghum bicolor subsp.caffrorum	Kaffer cirok
Sorghum bicolor subsp.durra	Durra köles
Sorghum bicolor subsp.saccharatum	Cukorcirok
Sorghum dochna var.technicum	Sepr cirok
Sorghum sudanense	Szudánif
Spinacea oleracea	Spenót
Tagetes patula	Bársonyvirág (büdöske)
Tetragonia tetragonoides	Új-zélandi spenót
Thymus vulgaris	Kerti kakukkf
Tithonia rotundifolia (speciosa)	Pompás napranéz (Titónia)
Trichosanthes anguina	Kígyóborka
Trifolium alexandrinum	Alexandriai here
Trifolium hybridum	Korcs here (Svéd here)
Trifolium incarnatum	Bíbor here
Trifolium pratense	Vöröshere
Trifolium repens	Fehérhere
Trifolium resupinatum	Perzsahere
Trigonella caerulea	Kékhere
Trigonella foenum-graecum	Görögszéna
Triticum aestivum	Közönséges búza
Triticum compactum	Tömör búza (törpe)
Triticum dicoccon	Tönke
Triticum durum	Kemény szem búza (Dúrum)
Triticum monococcum	Alakor
Triticum polonicum	Lengyel búza
Triticum sinkajae	Csupasz szem alakor

<i>Triticum spelta</i>	Tönköly
<i>Triticum turgidum</i>	Angol búza (Hasas)
x <i>Triticosecale</i>	Tritikálé
<i>Tropaeolum majus</i>	Nagy sarkantyúka
<i>Valeriana officinalis</i>	Orvosi Macskagyökér
<i>Valerianella locusta</i>	Galambbegy saláta (Madársaláta)
<i>Vicia ervilia</i>	Cicorlencse
<i>Vicia faba</i>	Lóbab
<i>Vicia pannonica</i>	Pannon bükköny
<i>Vicia narbonensis</i>	Római bükköny
<i>Vicia sativa</i>	Takarmánybükköny
<i>Vicia villosa</i>	Szöszös bükköny
<i>Vigna angularis</i>	Adzukibab
<i>Vigna mungo</i>	Mungóbab

<i>Vigna unguiculata</i> subsp.cylindrica	Homoki bab
<i>Vigna unguiculata</i> subsp.sesquipedalis	Ölesbab
<i>Vitis vinifera</i>	Sz 1
<i>Zea mays</i> convar.dentiformis	Lófogú kukorica
<i>Zea mays</i> convar.mays	Kemény szem kukorica
<i>Zea mays</i> convar.mays var. japonica	Díszkukorica
<i>Zea mays</i> convar.mays var.tunicata	Pelyvás kukorica
<i>Zea mays</i> convar.microsperma	Pattogató kukorica
<i>Zea mays</i> convar.saccharata	Csemegekukorica
<i>Zinnia angustifolia</i> (linearis)	Keskenylevel rézvirág
<i>Zinnia elegans</i>	Pompás rézvirág
<i>Zinnia haageana</i>	Sáfrányos rézvirág
<i>Zinnia peruviana</i>	Perui rézvirág
<i>Zizania aquatica</i>	Indiánrizs

## Annex 15: Nature conservation areas, Natura 2000 areas and Environmentally Sensitive areas in Hungary



## Annex 16: Forest environment payments

General programme provisions	Baseline of the forestry practice, according to the prescriptions of the forest district plan	Schemes	Impact on environment	Cost calculation
Use of chemicals shall only be allowed (with restricted technology, chemicals or active substances) for the reduction of Calamagrostis epiegeios and aggressively spreading foreign-origin tree and bush species, and in the case of contamination by maybeetle or gypsy moth,. Any use of chemicals shall be reported to the controlling authority 15 days prior to the planned protection measure (hereafter: limited use of chemicals).	General restriction is only in case of protected areas: the permission of the nature conservation authority is needed for the use of bio regulators, pesticides, and other chemicals with an influence for the soil.	general program provisions	Repression of aggressively expanding species, protection the biodiversity, protection of habitat.	no cost calculated
In case of regeneration and stand completion it is allowed to use the seed material originated from the district containing the eligible area. The districts specified in Regulation 110/2003 FVM	In case of artificial regeneration the species and the quality of the reproduction material is determined in the forest district plan, and in a specific regulation	general program provisions	Protection of the genetic resources of the district.	no cost calculated
Stand completion and regeneration should be implemented in order to create a natural forest association consist of tree species adequate for the specific site.	The forest plans has not specific provisions for the completion, and replacement.	general program provisions	Creating indigenous stand types adequate for the site.	no cost calculated

During the programme, elimination of non-organic waste in the area shall be mandatory (with the exception of illegal disposal of construction and community waste), and shall be reported to the controlling authority 5 working days prior to the planned measure. Illegally deposited construction and community waste shall be reported to the authority responsible for environmental protection.	There is only general provision: To place waste and garbage on forest area is prohibited.	general program provisions	Creating forest stands free of waste.	no cost calculated
The area covered by the programme shall be supplied with clearly visible, permanent signs.	The forest plan has no provision for this.	general program provisions	No impact	no cost calculated
Any work done in connection with the provisions of the programme shall be documented daily in the working log, which shall be attached to the payment request.	The forest plan has no provision for this.	general program provisions	No impact	no cost calculated
During the programme period, elimination (with mechanical means and limited use of chemicals) of all viable, aggressively spreading trees and bushes of foreign origin that are older than 1 year .	The forest plan has no provision for this.	Repression of aggressively expanding non-indigenous tree and shrub species	Repression of aggressively expanding species, protection the biodiversity, protection of habitat.	clearing cost of invasive species (complex clearing)
In the course of fellings, the closing density specified in the support regulation must be complied with.	The forest plan has no provision for this.	Repression of aggressively expanding non-indigenous tree and shrub species	Protection of the soil, and repression of aggressively spreading species.	no cost calculated
In accordance with the support regulation, a detailed description of the natural condition must be prepared in the first and last years of the programme,	The forest plan has no provision for this.	selection forest management	No impact	no cost calculated

In line with the contents of the specific management plan, the units for cutting shall be selected by an expert listed in the register managed by the Pro Silva Hungaria Association.	To ensuring about the professional implementation of the forest maintenance, and regeneration, the forestry authority has the right to check about the designation of the trees to be felled. If the designation was wrong the authority must prohibit the work. The provision has a special excess: the designation must be done by an expert	selection forest management	Protection of valuable forest stands.	extra cost - expert fee
In the course of selection cutting, the size of the clearing shall not exceed 700 sq. m.	The forest plan has no provision for this.	selection forest management	Positive effect on diverse habitat, small opened areas.	no cost calculated
The logging in the forest area can be carried out no more than 4 times during the programme.	The forest plan has no provision for this.	selection forest management	Protection of soil, and shrubs.	no cost calculated
In the forest area in question, there shall be no empty areas, other than the ones from the last cutting operation.	The forest plan has no provision for this.	selection forest management	No impact	no cost calculated
Prior to the cutting, a map of 1:10,000 ratio shall be submitted, on which the planned cuts must be indicated by points or zones, depending on size.	The forest plan has no provision for this.	selection forest management	No impact	no cost calculated
In the course of logging operations, the presence of at least 5 cubic metres of dead wood, standing or laying, shall be ensured in the area.	The forest plan has no provision for this.	selection forest management	Positive effect on diverse habitat.	income loss - value of 5m3 dead tree
Free development of the regrowth shall be supported by manual treatment on a continuous basis.	The forest plan has no provision for this. The maintenance is not an obliged, but a supportable activity, in the legislation.	selection forest management	Ensuring the development of the natural stand type.	extra cost - hand maintenance one time yearly

Appropriate natural forest combinations, with the creation of the typical mix for that type of forests shall be ensured for regrowth by the end of the programme.	The forestry authority declares the regeneration ready in a resolution, if the determined species in the appropriate number and ratio, and quality are presented in the forest, according to the forest district plan.	selection forest management	Ensuring the development of the natural stand type.	no cost calculated
Saplings of aggressively spreading tree species shall be eliminated manually or with limited use of chemicals.	The forest plan has no provision for this.	selection forest management	Repression of aggressively expanding species, protection the biodiversity, protection of habitat.	extra cost - hand maintenance one time yearly
The applicant shall ensure protection against wildlife (individual protection of the saplings, alarms or hunting to prevent damages caused by wild animals) in the area involved in the programme, in a way not exceeding the measures included in the support regulation.	It is not permitted to maintain in the forest-land area and in the hunting area directly adjacent to the forest-land area, a game stock in a number and of a species composition, which endangers, the survival of the members of the forest biocoenosis, the good condition of the forest soil, the condition of the forestation, the qualitative and quantitative development of the forest tree stand expected in accordance with its site, and which prevents the natural regeneration of the forest.	selection forest management	Ensuring the development of the natural stand type.	extra cost - forest protection cost – minimal costs were calculated

The final felling connected with the conversion shall be carried out in such a way as to ensure less than 20% of the natural regrowth is damaged during the operation, in line with the regeneration of target stand.	The provision is not in the district plan, only as a non the spot check : 1996. LIV. Act on forest and protection of forest Art. 61. § (4) The forest authority may limit or prohibit the harvesting in case the forest manager does not meet the financial and professional obligations and conditions for forest regeneration in the manner and by the deadline specified in this Act and in a separate legal regulation.. According to the article 83 of the implementation regulation of the act the harvesting can be prohibited, or limited, if the forest manager harvests without permission, or not the with permitted method.	Conversion of non-indigenous forest stands and maintenance based on manual work	Protection of soil, and shrubs.	
If any damage occurs, complete cutting of the trees and, if necessary, their replacement is required.	The forest plan has no provision for this.	Conversion of non-indigenous forest stands and maintenance based on manual work	Ensuring the development of the natural stand type.	no cost calculated
In line with the provisions of the support regulation, free development of the saplings in forest regeneration shall be ensured continuously by manual treatment and/ or limited use of chemicals.	The forest plan has no provision for this. The maintenance is not an obliged, but a supportable activity, in the legislation.	Conversion of non-indigenous forest stands and maintenance based on manual work	Ensuring the development of the natural stand type.	no cost calculated



In the course of wood cutting and material handling, no access or drag trace of deeper than 20 cm shall be allowed and no damage must occur on more than 10% of the area,	There is only general prohibition: The forest manager is obliged to arrange for the protection against erosion and compacting of the forest soil in the course of the forest regeneration, forest tending, harvesting, hauling of timber and of the construction of the access road network.	Conversion of non-indigenous forest stands and maintenance based on manual work	Protection of soil.	no cost calculated
Non indigenous tree species shall be diminished by the end of the programme, by treatment and limited use of chemicals .	The forest plan has no provision for this.	Conversion of non-indigenous forest stands and maintenance based on manual work	Repression of aggressively expanding species, protection the biodiversity, protection of habitat.	extra cost - two times mowing and chemical control
Logging for final felling can only be carried out in the first year of the programme, and with respect to at least 25% and not more than 50% of that portion of the forest.	The forest plan has no provision for this.	Reduction of clear-cutting with artificial regeneration	Protection of soil, and shrubs.	income loss - 25% of income
The size of the land used for felling shall not exceed 0.5 ha.	The forest authority may approve the clear felling if the contiguous not regenerated cutting area is not bigger than ten hectares in the forest-land areas of flat-land and hilly regions, five hectares in mountainous forest-land areas, or in the forests of inundation areas there is no contiguous not regenerated cutting area between the dike and the river, but in the mountainous forest-land area, however, in exceptionally justifiable cases, a clear felling of an area larger than five hectares may also be permitted..	Reduction of clear-cutting with artificial regeneration	Positive effect on diverse habitat, small opened areas.	no cost calculated

From Year 2 of the scheme, logging may only be carried out for health-related matters.	The forest plan has no provision for this.	Reduction of clear-cutting with artificial regeneration	Protection of soil, and shrubs.	no cost calculated
During the programme period, the presence of 5 cubic metres of dead wood, standing or laying, shall be ensured in the area.	The forest plan has no provision for this.	Reduction of clear-cutting with artificial regeneration	Positive effect on diverse habitat.	income loss - value of 5 m3 dead tree
In the area affected by final felling, in every clearing there shall be at least two healthy, standing trees spreading seeds from the main tree species adequate for the site .	Only in case of clearcutting, but generally there is no obligation to leave trees up to 10% of the stand.	Reduction of clear-cutting with artificial regeneration	Protection of the genetic resources of the forest	income loss - value of 1 m3 single tree
Logging may only be carried out in the period from 1 September to 30 April .	The forest plan has no provision for this.	Reduction of clear-cutting with artificial regeneration	Protection of forest stand, and soil.	no cost calculated
In the case of sapling or seed plantations, machinery may be used only for tract-type soil preparation.	The forest plan has no provision for this.	Reduction of clear-cutting with artificial regeneration	Protection of soil.	no cost calculated

Appropriate natural forest combinations, with the creation of a typical mix for that type of forest shall be ensured by the end of the programme.	The forest plan has no provision for this. According to the article 41. § (5) szent: Forest regeneration shall be declared as completed by the forest authority in its resolution - with the preliminary consent of the expert authority of the nature conservation authority in respect of a section effecting a protected natural area, if the individual trees of the tree species set forth in the district forest management plan are present in an appropriate number, proportion and quality, and the tree stand requires no further replacement planting.	Reduction of clear-cutting with artificial regeneration	Ensuring the development of the natural stand type.	no cost calculated
Non indigenous- tree species shall be diminished by the end of the programme through treatment.	The forest plan has no provision for this.	Reduction of clear-cutting with artificial regeneration	Repression of aggressively expanding species, protection the biodiversity, protection of habitat.	no cost calculated
The presence of at least 10 cubic metres dead wood, standing or laying, shall be ensured in the area for the duration of programme.	The forest plan has no provision for this.	Creation and maintenance of the micro habitats	Positive effect on diverse habitat.	income loss - value of 10 m3 dead tree
Standing trees in the area shall be indicated and a full assessment of the body of trees shall be prepared and recorded in a report.	The forest plan has no provision for this.	Creation and maintenance of the micro habitats	No impact	extra cost - tree identification
The implementation of final use is mandatory in the first year,	The forest plan has no provision for this.	Leaving groups of trees after final felling	No impact	no cost calculated

In the course of final use, those groups of tree species typical for that habitat shall be selected and left on a minimum of 5% of the area eligible for assistance.	Only in case of clearcutting, but generally there is no obligation to leave trees up to 10% of the stand.	Leaving groups of trees after final felling	Protection of the genetic resources of the forest, protection of soil.	income loss - value of 11 m3 tree
The area of a group of trees shall be at least 300 sq. m, but not more than 2,500 sq. m.	The forest plan has no provision for this.	Leaving groups of trees after final felling	Positive effect on diverse habitat.	no cost calculated
The canopy closure of a group of trees shall be at least 60%.	The forest plan has no provision for this.	Leaving groups of trees after final felling	Protection of forest stand, and soil.	no cost calculated
The groups of trees shall be indicated in the area and a full assessment of the body of trees shall be prepared and recorded in a report..	The forest plan has no provision for this.	Leaving groups of trees after final felling	No impact	no cost calculated
No logging or access may be allowed to the selected group of trees. That group of trees may also not be damaged by logging in neighbouring areas.	The forest plan has no provision for this.	Leaving groups of trees after final felling	Protection of the genetic resources of the forest, protection of soil.	no cost calculated
A description of the bush species mix shall be prepared in the first year of the programme	The forest plan has no provision for this.	Bush regulation to ensure the success of forest regeneration	No impact	no cost calculated
The bush cover shall be reduced to below 20% for the duration of the programme.	The forest plan has no provision for this.	Bush regulation to ensure the success of forest regeneration	Ensuring the development of the natural stand type.	extra cost - complex bush control (chemical and mechanical control)
Those species of bush typical for the natural forest combination in that region shall be left, equally distributed, with maximum 20% cover.	The forest plan has no provision for this.	Bush regulation to ensure the success of forest regeneration	Ensuring the development of the natural stand type.	no cost calculated

Cutting of protected species of shrubs is prohibited	It is prohibited to endanger protected plants, damage, and endanger their habitat.	Bush regulation to ensure the success of forest regeneration	Ensuring the development of the natural stand type.	no cost calculated
The overall canopy closure of the old stock and of the regrowth shall not drop to below 80% for the duration of the programme.	The forest plan has no provision for this.	Bush regulation to ensure the success of forest regeneration	Protection of soil.	no cost calculated
Only forest-health management can be implemented in the forests.	The forest plan has no provision for this.	Postponement of final felling in order to protect soil and habitat	Ensuring the development of the natural stand type.	income forgone in one year due to restricted cutting
In steep areas, the wood must be stored in layers after logging.	There is only general prohibition: The forest manager is obliged to arrange for the protection against erosion and compacting of the forest soil in the course of the forest regeneration, forest tending, harvesting, hauling of timber and of the construction of the access road network.	Postponement of final felling in order to protect soil and habitat	Protection of soil.	no cost calculated
Natural regeneration shall be ensured in the area, using the method specified in the support regulation (seed retention tract, partial preparation of the soil, building shoulders,	The forest plan has no provision for this.	Postponement of final felling in order to protect soil and habitat	Protection of the genetic resources of the forest, protection of soil.	no cost calculated
Within a radius of 30 metres of park forest equipment, any trees or branches representing a danger shall be cut monthly and eliminated trees shall be replaced with trees of an appropriate size.	The forest plan has no provision for this.	Conservation of forests with public welfare function	No impact	extra cost - wage

Tourist roads shall be kept free from obstructions (e.g. fallen trees and deep ruts), and a space of at least 1 m shall be kept free from bushes.	Any person may at his/her own risk walk in the forest-land area, irrespective of its function, for recreation and sport purposes.	Conservation of forests with public welfare function	No impact	extra cost - wage
Litter bins shall be emptied at least once in a week to keep them operational.	There is only general provision: To place waste and garbage on forest area is prohibited.	Conservation of forests with public welfare function	Creating forest stands free of waste.	extra cost - wage (minimal cost, the delivery fee of the litter is not included)
Litter outside the litter bins shall be collected and removed every two weeks.	There is only general provision: To place waste and garbage on forest area is prohibited.	Conservation of forests with public welfare function	Creating forest stands free of waste.	extra cost - wage (minimal cost, the delivery fee of the litter is not included)
Continuous free of charge access to the area must be guaranteed for visitors.	In the event the forest-land area is visited for recreational purposes the forest manager shall not be able to claim a fee therefore, he shall be entitled, however, to the reimbursement of the damages and expenses actually incurred..	Conservation of forests with public welfare function	No impact	extra cost - wage (minimal cost, the delivery fee of the litter is not included)
No more than 20 trees or bushes of native species of the region shall be left intact on each hectare	The forest plan has no provision for this.	Maintenance of forest clearings	Protection of the genetic resources of the forest, protection of soil.	no cost calculated
The elimination of the remaining trees and bushes shall be carried out in the first year of the programme, in the period 1 November – 30 March.	The forest plan has no provision for this.	Maintenance of forest clearings	Protection of the genetic resources of the forest, protection of soil.	extra cost - cost of mowing two times

In the first year of the programme, stem-crushing shall be carried out twice, at a date agreed upon with the nature conservation manager in the case of a nature conservation area.	The forest plan has no provision for this.	Maintenance of forest clearings	Diversing habitat.	cost of stem crushing two times
From the second year, hay shall be cleaned and offshoots shall be eliminated at least once in a year in autumn.	The forest plan has no provision for this.	Maintenance of forest clearings	Diversing habitat.	no cost calculated
The hay shall be removed from the land within thirty days of cutting.	The forest plan has no provision for this.	Maintenance of forest clearings	Protecting grassland	no cost calculated
From the second year of the programme, no intervention other than the cutting of hay shall be carried out. The trace depth may not exceed 20 cm in the case of transport use.	The forest plan has no provision for this.	Maintenance of forest clearings	Protecting grassland	extra cost - clear cutting
Deer yards, salt provision sites and forest landing must not be established anywhere in the forest. Clearing	The forest plan has no provision for this.	Maintenance of forest clearings	Protecting grassland	no cost calculated
Application of environmentally friendly materials handling methods	The forest plan has no provision for this.	Application of environmentally friendly materials handling methods	Protection of soil.	extra cost above normal transportation practice

## Annex 17: the geographical scope of M311, M313, M321, M322, M323A

Abaliget	Alsóberecki	Arka	Bakonya
Abasár	Alsóbogát	Arló	Bakonybánk
Abaújalpár	Alsódobsza	Arnót	Bakonybél
Abaújkér	Alsógagy	Árokt	Bakonycsernye
Abaújlak	Alsómocsolád	Árpádhalom	Bakonygyirót
Abaújszolnok	Alsónána	Árpás	Bakonyjákó
Abaújvár	Alsónemesapáti	Ártánd	Bakonykoppány
Abda	Alsónyék	Ásotthalom	Bakonykúti
Abod	Alsóörs	Ásványráró	Bakonynána
Ábrahámhegy	Alsópáhok	Aszaló	Bakonyoszlop
Acsa	Alsópetény	Ászár	Bakonypéterd
Acsád	Alsórajk	Aszóf	Bakonypölöske
Acsalag	Alsóregmec	Áta	Bakonyság
Ácsteszer	Alsószerterzsébet	Átány	Bakonysárkány
Adács	Alsószentiván	Atkár	Bakonyszentiván
Ádánd	Alsószentmárton	Attala	Bakonyszentkirály
Adásztevel	Alsószőlők	Babarc	Bakonyszentlászló
Adorjánháza	Alsózuha	Babarcslás	Bakonyszombathely
Adorjás	Alsótelekes	Babócsa	Bakonyszücs
Ág	Alsótold	Bábonymegyer	Bakonytamási
Ágasegyháza	Alsóújlak	Babosdöbréte	Baks
Ágfalva	Alsóvadász	Babót	Baksa
Aggtelek	Ambrózfalva	Bácsbokod	Baktakék
Agyagosszergény	Anarcs	Bácsborsód	Baktüttös
Ajak	Andocs	Bácsszentgyörgy	Balajt
Aka	Andornaktálya	Bácsszlás	Balástya
Akasztó	Andrásfa	Badacsonytördemic	Balaton
Alacska	Annayölgy	Bag	Balatonakali
Alap	Apácatorna	Bagamér	Balatonberény
Alattyán	Apagy	Baglad	Balatoncsicsó
Alcsútdoboz	Apaj	Bagod	Balatonederics
Aldebr	Aparhant	Bágyogszovát	Balatonendréd
Algy	Apátfalva	Baj	Balatonfenyves
Alibánfa	Apátistvánfalva	Bajánsenye	Balatonfőkajár
Almamellék	Apátvarasd	Bajna	Balatongyörök
Almásfüzit	Apc	Bajót	Balatonhenye
Almásháza	Áporka	Bak	Balatonkeresztúr
Almáskamarás	Apostag	Bakháza	Balatonmagyaród
Almáskeresztúr	Aranyosapáti	Bakóca	Balatonmáriafürdő
Álmosd	Aranyosgadány	Bakonszeg	Balatonszőlő

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Balatonrendes	Batyk	Besny	Boldog
Balatonszabadi	Bázakerettye	Beszterec	Boldogasszonyfa
Balatonszárszó	Bazsi	Bezedek	Boldogk újfalu
Balatonszemes	Béb	Bezenye	Boldogk váralja
Balatonszentgyörgy	Becsehely	Bezeréd	Boldva
Balatonszepezd	Becske	Bezi	Bolhás
Balatonsz l s	Becskeháza	Bicsérd	Bolhó
Balatonudvari	Becsvölgye	Bihardancsháza	Boncodfölde
Balatonújlak	Bedegkér	Biharnagybajom	Bonyhádvarasd
Balatonvilágos	Bed	Bihartorda	Bonnya
Balinka	Bejcgertyános	Biharugra	Bordány
Ballószög	Békás	Bikács	Borgáta
Balogunyom	Bekecs	Bikal	Borjád
Balotaszállítás	Békéssámson	Biri	Borota
Balsa	Békésszentandrás	Birján	Borsfa
Bálványos	Bekölce	Bisse	Borsodbóta
Bana	Bélavár	Boba	Borsodgeszt
Bánd	Belecska	Bocfölde	Borsodivánka
Bánfa	Beleg	Boconád	Borsodszentgyörgy
Bánhorváti	Belezná	Bócsa	Borsodszirák
Bánk	Bélmegyer	Bocska	Borsosberény
Bánokszentgyörgy	Beloianisz	Bocskaikert	Borszörcsök
Bánréve	Bels sárd	Boda	Borzavár
Bár	Belvárdgyula	Bodmér	Bosta
Barabás	Benk	Bodolyabér	Botpalád
Baracs	Bénye	Bodonhely	Botykapeterd
Baracska	Bér	Bodony	Bozzai
Báránd	Bérbaltavár	Bodorfa	Bozsok
Baranyahídvég	Bercel	Bodrog	Bózsva
Baranyajen	Beregdaróc	Bodroghalom	B
Baranyaszentgyörgy	Beregsurány	Bodrogkeresztúr	B cs
Barbacs	Berekböszörmény	Bodrogkisfalud	Böde
Bárdudvarnok	Berekfürd	Bodrogolaszi	Bödeháza
Barlahida	Beremend	Bódvalenke	Bögöt
Bárna	Berente	Bódvarákó	Bögöte
Barnag	Beret	Bódvaszilas	Böhönye
Bársonyos	Berkenye	Bogács	Bököny
Basal	Berkesd	Bogád	Bölcske
Baskó	Berkesz	Bogádmindszent	B ny
Báta	Bernecebaráti	Bogdása	Börcs
Bátaapáti	Berzék	Bogyiszló	Börzönce
Baté	Berzence	Bogyoszló	B sárkány
Bátmonostor	Besence	Bojt	B szénfa
Bátor	Beseny d	Bókaháza	Bucsa
Bátorliget	Beseny telek	Bokod	Bucsu
Bátya	Besenyszög	Bokor	Búcsúszentlászló

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Bucsuta	Csanytelek	Csesztreg	Dány
Bugac	Csapi	Csesztve	Daraboshegy
Bugacpusztaháza	Csapod	Csetény	Darány
Bugyi	Csárdaszállás	Csévharaszt	Darnó
Buj	Csarnóta	Csibrák	Darnózseli
Buják	Csaroda	Csikéria	Daruszentmiklós
Buzsák	Császár	Csikóstó	Darvas
Bükkábrány	Császártöltés	Csikvánd	Dávod
Bükkaranyos	Császló	Csincse	Debercsény
Bükkmogyorósd	Csátalja	Csipkerek	Debréte
Bükkösd	Csatár	Csitár	Decs
Bükkszék	Csataszög	Csobád	Dédestapolcsány
Bükkszenterzsébet	Csatka	Csobaj	Dég
Bükkszentkereszt	Csávoly	Csókak	Dejtár
Bükkszentmárton	Csebény	Csokonyavisonta	Demjén
Bükkszécs	Csécse	Csokvaomány	Dencsháza
Bűrös	Csegöld	Csolnok	Dénesfa
Büssü	Csehbánya	Csolyospálos	Derekegyház
Büttös	Csehi	Csoma	Deszk
Cák	Csehimindszent	Csombárd	Detek
Cakóháza	Csém	Csonkahegyhát	Detk
Cece	Csem	Csonkamindszent	Dinnyeberki
Cégénydányád	Csempeszkopács	Csopak	Diósberény
Ceglédbercel	Csegele	Csór	Diósjen
Cered	Csengersima	Csót	Dióskál
Chernelháza	Csengerújfalu	Csöde	Diósviszló
Cibakháza	Csengőd	Csögle	Doba
Cikó	Csénye	Csökm	Doboz
Cirák	Csenyété	Csököly	Dobri
Cún	Csép	Csömend	Dobronhegy
Csabacsád	Csépa	Csömödér	Dóc
Csabaszabadi	Csér	Csönge	Domaháza
Csabdi	Cserdi	Csörnyeföld	Domaszék
Csabrendek	Cserénfa	Csörötnek	Dombegyház
Csáfordjánosfa	Cserépfalu	Csúsz	Dombiratos
Csaholc	Cserépváralja	Csúvár	Domony
Csajág	Cserhátaláp	Csurgónagymarton	Domoszló
Csákány	Cserhátsurány	Dabronc	Dormánd
Csákánydoroszló	Cserhátszentiván	Dabrony	Dorogháza
Csákberény	Cserkeszl	Dad	Dozmat
Csákvár	Cserkút	Dág	Döbörhegy
Csanádalberti	Csernely	Dáka	Döbröce
Csanádapáca	Cserszegtomaj	Dalmand	Döbrököz
Csánig	Csertalakos	Damak	Döbrönte
Csány	Csert	Dámóc	Döge
Csányosrázó	Csesznek	Dánszentmiklós	Dömös

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Dömsöd	Edde	Érsekcsanád	Fels örs
Dör	Edve	Érsekhalma	Fels páhok
Dörgicse	Egerág	Érsekvadkert	Fels petény
Döröske	Egeralja	Értény	Fels rajk
Dötk	Egeraracsa	Erzsébet	Fels regmec
Dövény	Egerbakta	Esztár	Fels szenterzsébet
Drágszél	Egerbocs	Eszteregnye	Fels szentiván
Drávacsehi	Egercsehi	Esztergályhorváti	Fels szentmárton
Drávacsepely	Egerfarmos	Ete	Fels szőlnök
Drávafok	Egerlöv	Etes	Fels tárkány
Drávagárdony	Egerszalók	Etyek	Fels telekes
Drávaiványi	Egerszólát	Fábiánháza	Fels told
Drávakeresztúr	Égerszög	Fábiánsebestyén	Fels vadász
Dráwapalkonya	Egervár	Fácánkert	Fényeslitke
Dráwapiski	Egervölgy	Fadd	Feny f
Drávaszabolcs	Egyed	Fáj	Ferencszállás
Drávaszerdahely	Egyek	Fajs	Fert boz
Drávasztára	Egyházasdengeleg	Fancsal	Fert endréd
Drávatamási	Egyházasfalu	Farád	Fert homok
Drégelypalánk	Egyházasgerge	Farkasgyep	Fert rákos
Dubicsány	Egyházasharaszti	Farkaslyuk	Fert széplak
Dudar	Egyházashetye	Farmos	Fiad
Duka	Egyházashollós	Fazekasboda	Filkeháza
Dunaalmás	Egyházaskesz	Fedémes	Fityeház
Dunaegyháza	Egyházaskozár	Fegyvernek	Fokt
Dunafalva	Egyházasrádóc	Fehértó	Folyás
Dunakiliti	Ellend	Fehérvárcsurgó	Fonó
Dunapataj	El szállás	Feked	Fony
Dunaremete	Encsencs	Feketeerd	Forráskút
Dunaszeg	Endrefalva	Felcsút	Forró
Dunaszekcs	Endr c	Feldebr	Földeák
Dunaszentbenedek	Enese	Felgy	Földes
Dunaszentgyörgy	Eperjes	Felpéc	F nyed
Dunaszentmiklós	Eperjeske	Fels berecki	Fulókércs
Dunaszentpál	Eplény	Fels csatár	Furta
Dunasziget	Epöl	Fels dobsza	Füle
Dunatetőtlen	Erd bénye	Fels egerszeg	Fülesd
Dusnok	Erd horváti	Fels gagy	Fülöp
Dúzs	Erd kövesd	Fels jánosfa	Fülöpháza
Eberg c	Erd kürt	Fels kelecseény	Fülöpjakab
Ebes	Erd smárok	Fels lajos	Fülöpszállás
Écs	Erd smecske	Fels marác	Fülpösdaróc
Ecséd	Erd tarcsa	Fels mocsolád	Fürged
Ecseg	Erd telek	Fels nána	Füzér
Ecsegfalva	Erk	Fels nyárád	Füzérkajata
Ecseny	Érpatak	Fels nyék	Füzérkomlós

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Füzérradvány	Geresdlak	Gyöngyösoroszi	Háromhuta
F zölgy	Gerjen	Gyöngyöspata	Harsány
Gáborján	Gersekarát	Gyöngyössolymos	Hárskút
Gáborjánháza	Geszt	Gyöngyöstarján	Harta
Gacsály	Gesztely	Gy rasszonyfa	Hásságy
Gadács	Gesztteréd	Györe	Hédervár
Gadány	Gétye	Györgyarló	Hedrehely
Gadna	Gibárt	Györköny	Hegyesd
Gádoros	Gic	Gy rladamér	Hegyeshalom
Gagyapáti	Gige	Gy röcske	Hegyfalu
Gagybátor	Gilvánfa	Gy rság	Hegyháthodász
Gagyvendégi	Girincs	Gy rsövényház	Hegyhátmaróc
Galambok	Gógánfa	Gy rszemere	Hegyhátsál
Galgaguta	Golop	Gy rtelek	Hegyhátszentjakab
Galgagyörk	Gomba	Gy rújfalu	Hegyhátszentmárton
Galgahévíz	Gombosszeg	Gy rvár	Hegyhátszentpéter
Galgamácsa	Gór	Gy rzámoly	Hegyik
Gálosfa	Gordisa	Gyugy	Hegymagas
Galvács	Gosztola	Gyulaháza	Hegymeg
Gamás	Gödre	Gyulaj	Hegyszentmárton
Ganna	Gölle	Gyulakeszi	Héhalom
Gánt	Gömörsz l s	Gyúró	Hejce
Gara	Göncruszka	Gyügye	Hej bába
Garáb	Göny	Gyüre	Hej keresztúr
Garabonc	Görbeháza	Gy r s	Hej kürt
Garadna	Görcsöny	Hács	Hej papi
Garbolc	Görcsönydoboka	Hagyárosbörönd	Hej szalonta
Garé	Görgeteg	Hahót	Helesfa
Gasztony	G sfa	Hajdúbagos	Helvécia
Gátér	Grábóc	Hajdúszovát	Hencida
Gávavencsell	Gulács	Hajmás	Hencse
Géberjén	Gutorfölde	Hajmáskér	Hercegekút
Gecse	Gyalóka	Halastó	Hercegszántó
Géderlak	Gyanógeregye	Halászi	Heréd
Gégény	Gyarmat	Halimba	Héreg
Gelej	Gyékenyes	Halmaj	Herencsény
Gelénes	Gyenesdiás	Halmajugra	Heresznye
Gellénháza	Gyepükaján	Halogy	Hermánszeg
Gelse	Gyermely	Hangács	Hernád
Gelsesziget	Gyód	Hangony	Hernádb d
Gemzse	Gyóró	Hantos	Hernádcéce
Gencsapáti	Gyömöre	Harasztifalu	Hernádkak
Gérce	Gyöngyfa	Harc	Hernádkércs
Gerde	Gyöngyösfalu	Harka	Hernádnémeti
Gerendás	Gyöngyöshalász	Harkakötöny	Hernádpetri
Gerényes	Gyöngyösmellék	Háromfa	Hernádszentandrás

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Hernádszurdok	Hugyag	Ják	Kálmánháza
Hernádvécse	Hunya	Jakabszállás	Kálócfa
Hernyék	Hunyadfalva	Jákfa	Káloz
Hét	Husztót	Jákfalva	Kám
Hetefejércse	Ibafa	Jákó	Kamond
Hetes	Iborfia	Jánd	Kamut
Hetvehely	Igar	Jánkmajtis	Kánó
Hetyef	Igrici	Jánosháza	Kántorjánosi
Hevesaranyos	Iharos	Jánoshida	Kány
Hevesvezekény	Iharosberény	Járdánháza	Kánya
Hévízgyörk	Ikervár	Jármi	Kányavár
Hidas	Iklad	Jásd	Kapolcs
Hidasnémeti	Iklanberény	Jászágó	Kápolna
Hidegkút	Iklódbörd ce	Jászsalsószentgyörgy	Kápolnásnyék
Hidegség	Ikrény	Jászboldogháza	Kapoly
Hidvégardó	Iliny	Jászdózsa	Kaposf
Himesháza	Ilk	Jászfels szentgyörgy	Kaposgyarmat
Himod	Illocska	Jászivány	Kaposhomok
Hirics	Imola	Jászjákóhalma	Kaposkeresztúr
Hobol	Imrehegy	Jászkarajen	Kaposmér
Hodász	Ináncs	Jászladány	Kapospula
Hollád	Inárcs	Jászszentandrás	Kaposújlak
Hollóháza	Inke	Jászszentlászló	Kaposszekcs
Hollók	Ipacsfa	Jásztelek	Kaposszerdahely
Homokbödöge	Ipolydamásd	Jéke	Káptalanfa
Homokkomárom	Ipolyszög	Jen	Káptalantóti
Homokmégy	Ipolytarnóc	Jobaháza	Kára
Homokszentgyörgy	Ipolytölgyes	Jobbágyi	Karácsond
Homorúd	Ipolyvece	Jósvaf	Karád
Homrogd	Iregszemcse	Juta	Karakó
Hont	Irota	Kacorlak	Karakószörcsök
Horpács	Ispánk	Kács	Karancsalja
Hort	Istenmezeje	Kacsóta	Karancsberény
Hortobágy	Istvándi	Kajárpéc	Karancskeszi
Horváthertelend	Iszkaszentgyörgy	Kajászó	Karancslapujt
Horvátlöv	Iszkáz	Kajdacs	Karancsság
Horvátzsidány	Isztimér	Kakasd	Kárász
Hosszúhetény	Ivád	Kákics	Karcsa
Hosszúpályi	Iván	Kakucs	Kardos
Hosszúpereszteg	Ivánbattyán	Kál	Kardoskút
Hosszúvíz	Ivác	Kalaznó	Karmacs
Hosszúvölgy	Ivánca	Káld	Károlyháza
Hosztót	Ivándárda	Kálló	Karos
Hottó	Izmény	Kallósd	Kásád
H gyész	Izsófalva	Kállósején	Kaskantyú
Hövej	Jágónak	Kálmánca	Kastélyosdombó

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Kaszaper	Kereki	Kisbeszterce	Kisrosvágy
Kaszó	Kerékteleki	Kisbodak	Kissikátor
Katádfa	Keresztéte	Kisbucsa	Kissomlyó
Katafa	Kerkabarabás	Kisbudmér	Kistamási
Kátoly	Kerkafalva	Kiscsecs	Kistapolca
Katymár	Kerkakutas	Kiscsehi	Kistokaj
Káva	Kerkáskápolna	Kiscs sz	Kistolmács
Kávás	Kerkaszentkirály	Kisdér	Kistormás
Kazár	Kerkateskánd	Kisdobsza	Kistótfalu
Kázsmárk	Kérsemjén	Kisdombegyház	Kisunyom
Kazsok	Kerta	Kisdorog	Kisvarsány
Kecskéd	Kertéssziget	Kisecset	Kisvásárhely
Kehidakustány	Keszeg	Kisfalud	Kisvaszar
Kék	Kesznyéten	Kisfüzes	Kisvejke
Kékcse	Kesz hidegkút	Kisgörb	Kiszombor
Kéked	Kesztölc	Kisgyalán	Kiszsídány
Kékesd	Keszü	Kisgy r	Kisszállás
Kékkút	Kétdodony	Kishajmás	Kisszékely
Kelebia	Kétegyháza	Kisharsány	Kisszekeres
Keléd	Kéthely	Kishartyán	Kisszentmárton
Kelemér	Kétpó	Kisherend	Kissziget
Kéleshalom	Kétsoprony	Kishódos	Kissz l s
Kelevíz	Kétújfalu	Kishuta	Klárafalva
Kemence	Kétvölgy	Kisigmánd	Kocs
Kemendollár	Kéty	Kisjakabfalva	Kocsér
Kemenesh gyész	Kevermes	Kiskassa	Kocsola
Kemeneskápolna	Kilimán	Kiskinizs	Kocsord
Kemenesmagasi	Kimle	Kiskorpád	Kóka
Kemenesmihályfa	Kincsesbánya	Kiskunlacháza	Kokad
Kemenespálfa	Királd	Kiskutas	Kolontár
Kemenessömjén	Királyegyháza	Kisláng	Komjáti
Kemenesszentmárton	Királyhegyes	Kisléta	Komlódótótfalu
Kemenesszentpéter	Királyszentistván	Kislippó	Komlósd
Keménfa	Kisapáti	Kisl d	Komlóska
Kémes	Kisapostag	Kismányok	Komoró
Kemestaródfa	Kisar	Kismarja	Kompolt
Kemse	Kisasszond	Kismaros	Kondó
Kenéz	Kisasszonyfa	Kisnamény	Kondorfa
Kenézl	Kisbabot	Kisnána	Kondoros
Kengyel	Kisbágyon	Kisnémedi	Kóny
Kenyeri	Kisbajcs	Kisnyárad	Konyár
Kercaszomor	Kisbajom	Kispalád	Kópháza
Kercseliget	Kisbárapáti	Kispáli	Koppányszántó
Kerecsend	Kisbárkány	Kispirit	Korlát
Kerecseny	Kisberény	Kisrákos	Koroncó
Kerekharaszt	Kisberzsény	Kisrécse	Kórós

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Kosd	Kuncsorba	Lesencetomaj	Magyardombegyház
Kóspallag	Kunfehértó	Letkés	Magyaregregy
Kótaj	Kunmadaras	Levél	Magyaregres
Kovácsbida	Kunpeszér	Levelek	Magyarföld
Kovácsszénája	Kunszállás	Libickozma	Magyargéc
Kovácsvágás	Kunsziget	Lickóvados	Magyargencs
Kozárd	Kupa	Liget	Magyarhertelend
Kozmadombja	Kupa	Ligetfalva	Magyarhomorog
Köblény	Kurd	Lipót	Magyarkeresztúr
Köcsk	Kurtyán	Lippó	Magyarkeszi
Kökény	Kustánszeg	Liptód	Magyarlak
K kút	Kutas	Lispezsentadorján	Magyarlukafa
Kölcse	Kutasó	Liszó	Magyarmecske
Kölesd	Kübekháza	Litér	Magyarnádalja
Kölked	Küls sárd	Litka	Magyarnándor
Köml	Küls vat	Litke	Magyarpolány
Köml d	Küngös	Lócs	Magyarsarlós
Kömör	Lábod	Lókút	Magyarszecs d
Kömpöc	Lácacséke	Lónya	Magyarszék
Környe	Lad	Lórév	Magyarszentmiklós
Köröm	Ladánybene	Lothárd	Magyarszerdahely
K röshegy	Ládbeseny	Lovas	Magyarszombatfa
Körösnyagarsány	Lajoskomárom	Lovasberény	Magyartelek
Köröstarcsa	Lak	Lovászhetény	Majs
K röstetetlen	Lakhegy	Lovászi	Makád
Körösújfal	Lakitelek	Lovászipatona	Makkoshotyka
Körösszakál	Lakócsa	L kösháza	Maklár
Körösszegapáti	Lánycsók	Löv	Malomsok
K szárhegy	Lápaf	Löv petri	Mályi
K szegdorosló	Lapáncsa	Lucfalva	Mályinka
K szegpaty	Laskod	Ludányhalászi	Mánd
K szegszerdahely	Lasztonya	Ludas	Mánfa
Kötcse	Látrány	Lukácsháza	Mány
Kötegyán	Lázi	Lulla	Maráza
K telek	Leányvár	Lúzsok	Marcalgergelyi
K vágóörs	Lébény	Mád	Marcalt
K vágósz l s	Legénd	Madaras	Márfa
K vágótöttös	Legyesbénye	Madocsa	Máriaalom
Köveg	Léh	Maglóca	Máriakálnok
Köveskál	Lénárddaróc	Magosliget	Máriakéménd
Krasznokvajda	Lendvadedes	Magy	Márianosztra
Kulcs	Lendvajakabfa	Magyaralmás	Markaz
Kunadacs	Lengyel	Magyaratád	Márkháza
Kunágota	Lepsény	Magyarábhegyes	Márkó
Kunbaja	Lesencefalu	Magyarbóly	Markóc
Kunbaracs	Lesenceistvánd	Magyarcsanád	Markotabödöge

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Maróc	Meszes	Molnári	Nagybudmér
Marócsa	Meszlen	Molnaszecs d	Nagycenk
Márok	Mesztegn	Molvány	Nagycsány
Márokföld	Mez csokonya	Monaj	Nagycsécs
Márokpapi	Mez d	Monok	Nagycsepely
Maroslele	Mez falva	Monorierd	Nagycserkesz
Mártély	Mez gyán	Mónosbél	Nagydém
Martonfa	Mez hék	Monostorapáti	Nagydobos
Martonyi	Mez komárom	Monostorpályi	Nagydobsza
Mátételke	Mez ladány	Monoszló	Nagydorog
Mátraballa	Mez lak	Monyoród	Nagyér
Mátradereske	Mez nagymihály	Mórág	Nagyesztergár
Mátramindszent	Mez nyárád	Móricgát	Nagyfüged
Mátranovák	Mez örs	Mórichida	Nagygeresd
Mátraszele	Mez peterd	Mosdós	Nagygörb
Mátraszentimre	Mez sas	Mosonszentmiklós	Nagygyimót
Mátrasz l s	Mez szemere	Mosonszolnok	Nagyhajmás
Mátraterenye	Mez szentgyörgy	Mosonudvar	Nagyharsány
Mátraverebély	Mez szilas	Mozsgó	Nagyhegyes
Mátyásdomb	Mez tárkány	M csény	Nagyhódos
Matty	Mez zombor	Mucsfa	Nagyhuta
Mátyus	Miháld	Mucsi	Nagyigmánd
Máza	Mihályfa	Múcsony	Nagyiván
Mecseknádasd	Mihálygerge	Muhi	Nagykamarás
Mecsekpölöske	Mihályháza	Murakeresztúr	Nagykapornak
Mecsér	Mihályi	Murarátka	Nagykarácsony
Medgyesbodzás	Mike	Muraszemenye	Nagykereki
Medina	Mikebuda	Murga	Nagykeresztúr
Megyaszó	Mikekarácsonyfa	Murony	Nagykinizs
Megyhíd	Mikepércs	Nábrád	Nagykónyi
Megyer	Miklósi	Nadap	Nagykorpád
Meggyeskovácsi	Mikófalva	Nádasd	Nagykozár
Méhkerék	Mikóháza	Nádasdladány	Nagykökényes
Méhtelek	Mikosszéplak	Nágocs	Nagykölked
Mekényes	Milejszeg	Nagyacsád	Nagykör
Mencshely	Milota	Nagyalásony	Nagykutas
Mende	Mindszentgodisa	Nagyar	Nagylak
Méra	Mindszentkál	Nagybajcs	Nagylengyel
Merenye	Misefa	Nagybakónak	Nagylóc
Mérge	Miske	Nagybánhegyes	Nagylók
Mérk	Miszla	Nagybaracska	Nagylózs
Mernye	Mocsa	Nagybarca	Nagymágocs
Mersevát	Mogyorósbánya	Nagybárkány	Nagymizdó
Mesterháza	Mogyoróska	Nagyberény	Nagynyárád
Mesteri	Moha	Nagyberki	Nagyoroszi
Mesterszállás	Mohora	Nagybörzsöny	Nagypáli

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Nagypall	Nemesgulács	Nyáregyháza	Okorág
Nagypeterd	Nemeshany	Nyárló	Okorvölgy
Nagypirit	Nemeshetés	Nyársapát	Olasz
Nagyrábé	Nemeske	Nyésta	Olaszfa
Nagyrada	Nemeskér	Nyim	Olaszfalu
Nagyrákos	Nemeskeresztúr	Nyírábrány	Olaszliszka
Nagyrécse	Nemeskisfalud	Nyírac nád	Olcsva
Nagyréde	Nemeskocs	Nyírad	Olcsvaapáti
Nagyrév	Nemeskolta	Nyírbéltek	Old
Nagyrosvány	Nemesládony	Nyírbogát	Ólmod
Nagysáp	Nemesmedves	Nyírbogdány	Oltárc
Nagysimonyi	Nemesnádudvar	Nyírcsaholy	Onga
Nagyszakácsi	Nemesnép	Nyírcsászári	Ónod
Nagyszékely	Nemespátró	Nyínderzs	Ópályi
Nagyszekeres	Nemesrádó	Nyírgelse	Ópusztaszer
Nagyszénás	Nemesrempehollós	Nyírgyulaj	Orbányosfa
Nagyszentjános	Nemessándorháza	Nyíri	Orci
Nagyszokoly	Nemesvámos	Nyíribrony	Ordacsehi
Nagytálya	Nemesvid	Nyírkákó	Ordas
Nagytevel	Nemesvita	Nyírkársz	Orfalu
Nagytilaj	Nemesszalók	Nyírkáta	Orf
Nagytótfalu	Nemesszentandrás	Nyírkércs	Orgovány
Nagytó ke	Németbánya	Nyírlöv	Ormándlak
Nagyút	Németfalu	Nyírmártonfalva	Ormosbánya
Nagyvarsány	Németkér	Nyírmeggyes	Oroszi
Nagyvát	Nemti	Nyírmihálydi	Oroszló
Nagyvázsony	Neszmély	Nyírpársznya	Orosztony
Nagyvejke	Nézsza	Nyírpazony	Ortaháza
Nagyveleg	Nick	Nyírpilis	Osli
Nagyvenyim	Nikla	Nyírtass	Ostffyasszonyfa
Nagyvisnyó	Nógrád	Nyírtét	Ostros
Nak	Nógrádkövesd	Nyírtura	Oszkó
Napkor	Nógrádmárcal	Nyírvásári	Oszlár
Nárai	Nógrádmegyer	Nyomár	Osztopán
Narda	Nógrádsáp	Nyó gér	Ózdfalu
Naszály	Nógrádsipek	Nyugotszenterzsébet	Ozmánbük
Négyes	Nógrádszakál	Nyúl	Ozora
Nekézseny	Nóráp	Óbánya	Öcs
Nemesapáti	Noszlóp	Óbarok	Öcsény
Nemesbikk	Noszvaj	Óbudavár	Öcsöd
Nemesborzova	Nova	Ócsárd	Ökörítófülpös
Nemesbó d	Novaj	Ófalu	Ölb
Nemesbük	Novajdrány	Ófehértó	Ömböly
Nemescsó	Nó tincs	Óföldrék	Ör
Nemesdéd	Nyalka	Óhíd	Öregcsert
Nemesgörszöny	Nyárad	Okány	Öreglak

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rhalom	Parádsasvár	Pet háza	Pusztaderics
rimagyarósd	Parasznya	Pet mihályfa	Pusztafalu
Örményes	Pári	Petrikeresztúr	Pusztaföldvár
Örménykút	Paszab	Petrivente	Pusztahencse
rtilos	Pásztori	Pettend	Pusztakovácsi
Örvényes	Pat	Piliny	Pusztamagyaród
sagárd	Patak	Piliscsév	Pusztamérges
si	Patalom	Pilismarót	Pusztamiske
Öskü	Patapoklosi	Pincehely	Pusztamonostor
Öttevény	Patca	Pinkamindszent	Pusztaottlaka
Öttömös	Pátka	Pinnye	Pusztaradvány
Ötvöskónyi	Patosfa	Piricse	Pusztaszemes
Pácin	Pátroha	Pirtó	Pusztaszentlászló
Pácsony	Patvarc	Piskó	Pusztaszer
Padár	Pátyod	Pitvaros	Pusztavacs
Páhi	Pázmánd	Pócsa	Pusztavám
Páka	Pázmándfalu	Pocsaj	Püski
Pakod	Pecöl	Pócspetri	Püspökhátvan
Pákozdi	Pécsbagota	Pogány	Püspökmolnári
Palé	Pécsdevecser	Pogányszentpéter	Püspökszilágy
Pálfa	Pécsely	Pókaszeptek	Rábacsanak
Pálfiszeg	Pécsudvard	Polány	Rábacsécsény
Páli	Pellérd	Porcsalma	Rábagyarmat
Palkonya	Pély	Pornóapáti	Rábahídvég
Pálmajor	Penc	Poroszló	Rábakecöl
Pálmonostora	Penészlek	Porpác	Rábapatoná
Pálosvörösmart	Pénzesgy r	Porrog	Rábapaty
Palotabozsok	Penyige	Porrogszentkirály	Rábapordány
Palotás	Pér	Porrogszentpál	Rábasebes
Paloznak	Pere	Pórszombat	Rábaszentandrás
Pamlény	Perecse	Porva	Rábaszentmihály
Pamuk	Pereked	Pósfa	Rábaszentmiklós
Pánd	Perenye	Potony	Rábatamási
Pankasz	Peresznye	Potyond	Rábatöttös
Pányok	Peresztég	Pölöske	Rábcakapi
Panyola	Perkáta	Pölöskef	Ráckeresztúr
Pap	Perkupa	Pörboly	Rád
Pápadereske	Per csény	Pördefölde	Rádfalva
Pápakovácsi	Peterd	Pötréte	Rádóckölked
Pápasalamon	Péterhida	Prügy	Radostyán
Pápateszér	Péteri	Pula	Ragály
Papkeszi	Pétfürd	Pusztapáti	Rajka
Pápoc	Peth henye	Pusztaberki	Rakaca
Papos	Petneháza	Pusztacsalád	Rakacaszend
Páprád	Pet fibánya	Pusztacsó	Rákócziabánya
Parád	Pet fiszállás	Pusztadobos	Rákócziújfalú

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Ráksi	Rum	Sárpilis	Somogybabod
Ramocsa	Ruzsa	Sárrétudvari	Somogybükkösd
Ramocsaháza	Ságújfalu	Sarród	Somogycsicsó
Rápolt	Ságvár	Sárszentágota	Somogydöröcske
Raposka	Sajóecseg	Sárszentl rinc	Somogyegres
Rásonysápberencs	Sajógalgóc	Sárszentmihály	Somogyfajsz
Rátka	Sajóhídvég	Sarud	Somogygeszti
Rátót	Sajóivánka	Sáska	Somogyhárságy
Ravazd	Sajókápolna	Sáta	Somogyhatvan
Recsk	Sajókaza	Sátorhely	Somogyjád
Réde	Sajókeresztúr	Sávoly	Somogymeggyes
Rédics	Sajólád	Sé	Somogysámson
Regéc	Sajólászlófalva	Segesd	Somogysárd
Regenye	Sajómercse	Selyeb	Somogysimonyi
Regöly	Sajónémeti	Semjén	Somogyszentpál
Rém	Sajóörös	Semjénháza	Somogyszil
Répáshuta	Sajópálfala	Sénye	Somogyszob
Répceszemere	Sajópetri	Sény	Somogytúr
Répceszentgyörgy	Sajópüspöki	Seregélyes	Somogyudvarhely
Répcevis	Sajósenye	Serényfalva	Somogyvamos
Resznek	Sajószöged	Sérseksz l s	Somogyvár
Rétalap	Sajóvamos	Sikátor	Somogyviszló
Rétközberencs	Sajóvelezd	Siklósbodony	Somogyzsitfa
Révfülp	Sajtoskál	Siklósnagyfalu	Somosk újfalu
Révleányvár	Salföld	Sima	Sonkád
Rezi	Salköveskút	Simaság	Soponya
Ricse	Salomvár	Simonfa	Sopronhorpács
Rigács	Sály	Sióagárd	Sopronkövesd
Rigyác	Sámod	Siójut	Sopronnémeti
Rimóc	Sámsonháza	Sirok	Sorkifalud
Rinyabeseny	Sand	Sitke	Sorkikápolna
Rinyakovácsi	Sántos	Sobor	Sormás
Rinyaszentkirály	Sáp	Sokorópátka	Sorokpolány
Rinyaújlak	Sáránd	Soltszentimre	Sóshartyán
Rinyaújnép	Sárazsádány	Sóly	Sóstófalva
Rohod	Sáregres	Som	Sósvertike
Románd	Sárfimizdó	Somberek	Sótony
Romhány	Sárhida	Somlójen	Söjtör
Romonya	Sárisáp	Somlós l s	Söpte
Rózsa	Sarkadkeresztúr	Somlóvásárhely	Söréd
Rózsály	Sárkeresztes	Somlóvecse	Sukoró
Rózsaszentmárton	Sárkeresztúr	Somodor	Sumony
Röjtökmuzsaj	Sárkeszi	Somogyacsa	Súr
Rönök	Sármellék	Somogyapáti	Surd
Röszke	Sárok	Somogyaracs	Sükösd
Rudolftelep	Sárosd	Somogyaszaló	Sümegecsehi

: only peripheries of settlements are eligible

Sümeprága	Szany	Szentdénés	Szin
Sütt	Szápár	Szentdomonkos	Szinpetri
Szabadbattyán	Szaporca	Szente	Szirák
Szabadegyháza	Szár	Szenteagát	Szirmabeseny
Szabadhídvég	Szárász	Szentgál	Szokolya
Szabadi	Szárazd	Szentgáloskér	Szólád
Szabadkígyós	Szárföld	Szentgyörgyvár	Szomód
Szabadszentkirály	Szárliget	Szentgyörgyvölgy	Szomolya
Szabás	Szarvasgede	Szentimrefalva	Szomor
Szabolcs	Szarvaskend	Szentistván	Szorgalmatos
Szabolcsbáka	Szarvask	Szentistvánbaksa	Szorosad
Szabolcsveresmart	Szászberek	Szentjakabfa	Sz c
Szágy	Szászfa	Szentkatalin	Sz ce
Szajk	Szászvár	Szentkirály	Szögliget
Szajla	Szatmárcseke	Szentkirályszabadja	Sz ke
Szajol	Szátok	Szentkozmadombja	Sz kéd
Szakácsi	Szatta	Szentlászló	Sz kedencs
Szakadát	Szatymaz	Szentliszló	Sz l sardó
Szakáld	Szava	Szentl rinckáta	Sz l sgyörök
Szakály	Szebény	Szentmargitfalva	Szörény
Szakcs	Szécsénke	Szentmártonkáta	Szúcs
Szadmár	Szécsényfelfalu	Szentpéterfa	Szuha
Szaknyér	Szécsisziget	Szentpéterfölde	Szuhaf
Szakoly	Szederkény	Szentpéterszeg	Szuhakálló
Szakony	Szedres	Szentpéterúr	Szuhogy
Szakonyfalu	Szegerd	Szenyér	Szulimán
Szákszend	Szegi	Szepetnek	Szulok
Szalaf	Szegilong	Szerecseny	Szurdokpuspöki
Szalánta	Szegvár	Szeremle	Sz csi
Szalapa	Székely	Szerep	Szügy
Szalaszend	Székelyszabar	Szergény	Sz r
Szalatnak	Székkutas	Szigetbecse	Tabajd
Szálla	Szeleste	Szigetcsép	Tabdi
Szalkszentmárton	Szelevény	Szigetszentmárton	Táborfalva
Szalmatercs	Szell	Szigetújfalu	Tác
Szalonna	Szemely	Szigliget	Tagyon
Szamosangyalos	Szemenye	Szihalom	Takácsi
Szamosbecs	Szemere	Szijártóháza	Tákos
Szamoskér	Szendehely	Szil	Taktabáj
Szamosályi	Szendr lád	Szilág	Taktaharkány
Szamosatárfalva	Szenna	Szilasogony	Taktakenéz
Szamosújlak	Szenta	Szilsárkány	Taktaszada
Szamoszeg	Szentantalfa	Szilvág	Taliándörögd
Szanda	Szentbalázs	Szilvás	Tállya
Szank	Szentbékáll	Szilvásvár	Tanakajd
Szántód	Szentborbás	Szilvásszentmárton	Táp

: only peripheries of settlements are eligible

Tápióbicske	Tépe	Tiszamogyorós	Tornaszentandrás
Tápiógyörgye	Terem	Tiszanagyfalu	Tornaszentjakab
Tápióság	Terény	Tiszanána	Tornyiszentmiklós
Tápiószentmárton	Tereske	Tiszaörs	Tornyosnémeti
Tápiósz l s	Teresztenye	Tiszapalkonya	Tornyospálca
Táplánszentkereszt	Terpes	Tiszapüspöki	Torony
Tapsony	Tés	Tiszarád	Torvaj
Tápszentmiklós	Tésa	Tiszaroff	Tószeg
Tar	Tésenfa	Tiszasas	Tótszentgyörgy
Tarany	Tésény	Tiszasüly	Tótszentmárton
Tarcál	Teskánd	Tiszaszalka	Tótszerdahely
Tard	Tetétlen	Tiszaszentimre	Tótújfalu
Tardona	Tevel	Tiszaszentmárton	Tótvázsony
Tardos	Tibolddaróc	Tiszasziget	Töltéstava
Tarhos	Tiborszállás	Tiszasz l s	Tömörd
Tarján	Tihany	Tiszatardos	Tömörkény
Tarjánpuszta	Tikos	Tiszatarján	Törökkoppány
Tárkány	Tilaj	Tiszatelek	Törtel
Tarnabod	Timár	Tiszateny	Töttös
Tarnalelesz	Tiszaadony	Tiszaug	Trizs
Tarnaméra	Tiszaalpár	Tiszavalk	Tunyogmatolcs
Tarnaörs	Tiszabábolna	Tiszavárkony	Túristvándi
Tarnaszentmária	Tiszabecs	Tiszavid	Túrony
Tarnaszentmiklós	Tiszabercel	Tisztaberek	Túrricse
Tarnaszárd	Tiszabездé	Tivadar	Tuzsér
Tárnokrét	Tiszab	Tóalmás	Türje
Tarpa	Tiszabura	Tófalu	Tüskevár
Tarrós	Tiszacsécse	Tófej	Tyukod
Táska	Tiszacsermely	Tóf	Udvar
Tass	Tiszadada	Tokod	Udvari
Taszár	Tiszaderzs	Tokodaltáró	Ugod
Tataháza	Tiszadob	Tokorcs	Újbarok
Tatárszentgyörgy	Tiszadorogma	Tolcsva	Újcsanános
Tázlár	Tiszaeszlár	Told	Újdombrád
Tekenye	Tiszagyenda	Tolmács	Újhartyán
Tékes	Tiszagyulaháza	Tolnanémedi	Újiráz
Teklafalu	Tiszaigar	Tomajmonostora	Újireg
Telekes	Tiszainoka	Tomor	Újkenéz
Telekgerendás	Tiszajen	Tompaládony	Újkér
Teleki	Tiszakanyár	Tordas	Újlengyel
Telkibánya	Tiszakarád	Tormafölde	Újléta
Tengelic	Tiszakerecseny	Tormás	Újl rincfalva
Tengeri	Tiszakeszi	Tormásliget	Újpetre
Teng d	Tiszakóród	Tornabarakony	Újrónaf
Tenk	Tiszakürt	Tornakápolna	Újsolt
Tény	Tiszaladány	Tornanádaska	Újszalonta

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Újszentiván	Vanyola	Vékény	Vonyarcvashegy
Újszentmargita	Várad	Vekerd	Vöckönd
Újszilvás	Váralja	Velem	Völcséj
Újtelek	Varászló	Velemér	Vönöck
Újtikos	Váraszó	Velény	Vöröstó
Újudvar	Várbalog	Véménd	Vörs
Újvárfalva	Varbó	Vének	Zabar
Ukk	Varbóc	Vereb	Zádor
Und	Várda	Verce	Zádorfalva
Úny	Várdomb	Verpelét	Zagyvarékas
Uppony	Várfölde	Verseg	Zagyvaszántó
Ura	Varga	Versend	Zajk
Uraiújfalu	Várgesztes	Vértesacsa	Zajta
Úrhida	Várkesz	Vértesboglár	Zákány
Úri	Várong	Vérteskethely	Zákányfalu
Úrkút	Városföld	Vértessomló	Zákányszék
Uszka	Városl d	Vértestolna	Zala
Uszód	Varsád	Vértessz l s	Zalaapáti
Uzsa	Varsány	Vése	Zalabaksa
Üllés	Várvölgy	Veszkény	Zalabér
Vácduka	Vasad	Veszprémfajsz	Zalaboldogfa
Vácegres	Vasalja	Veszprémgalsa	Zalacsány
Váchartyán	Vásárosbéc	Veszprémvarsány	Zalacséb
Váckisújfalu	Vásárosdombó	Vezseny	Zalaerd d
Vácszentlászló	Vásárosfalu	Vid	Zalagyömör
Vadna	Vásárosmiske	Vigántpetend	Zalahaláp
Vadosfa	Vasasszonyfa	Villánykövesd	Zalaháshággy
Vág	Vasboldogasszony	Vilmány	Zalaigrice
Vágáshuta	Vasegerszeg	Vilonya	Zalaistvánd
Vajdácska	Vashosszúfalu	Vilyvitány	Zalakomár
Vajszló	Vaskeresztes	Vinár	Zalaköveskút
Vajta	Vaskút	Vindornyafofok	Zalameggyes
Vál	Vasmegyer	Vindornyalak	Zalamerenye
Valkó	Vaspör	Vindornyaszi l s	Zalasárszeg
Valkonya	Vassurány	Visnye	Zalaszabar
Vállaj	Vaszar	Visonta	Zalaszántó
Vállus	Vászoly	Viss	Zalaszegvár
Vámosatya	Vasszécseny	Visz	Zalaszentbalázs
Vámoscsalád	Vasszentmihály	Viszák	Zalaszentgyörgy
Vámosgyörk	Vasszilvagy	Viszló	Zalaszentiván
Vámosmikola	Vát	Visznek	Zalaszentjakab
Vámosoroszi	Vatta	Vitnyéd	Zalaszentlászló
Vámosújfalu	Váznok	Vízvár	Zalaszentl rinc
Vámosszabadi	Vécs	Vizslás	Zalaszentmárton
Váncsod	Végegyháza	Vizsoly	Zalaszentmihály
Vanyarc	Vejeti	Vokány	Zalaszombatfa

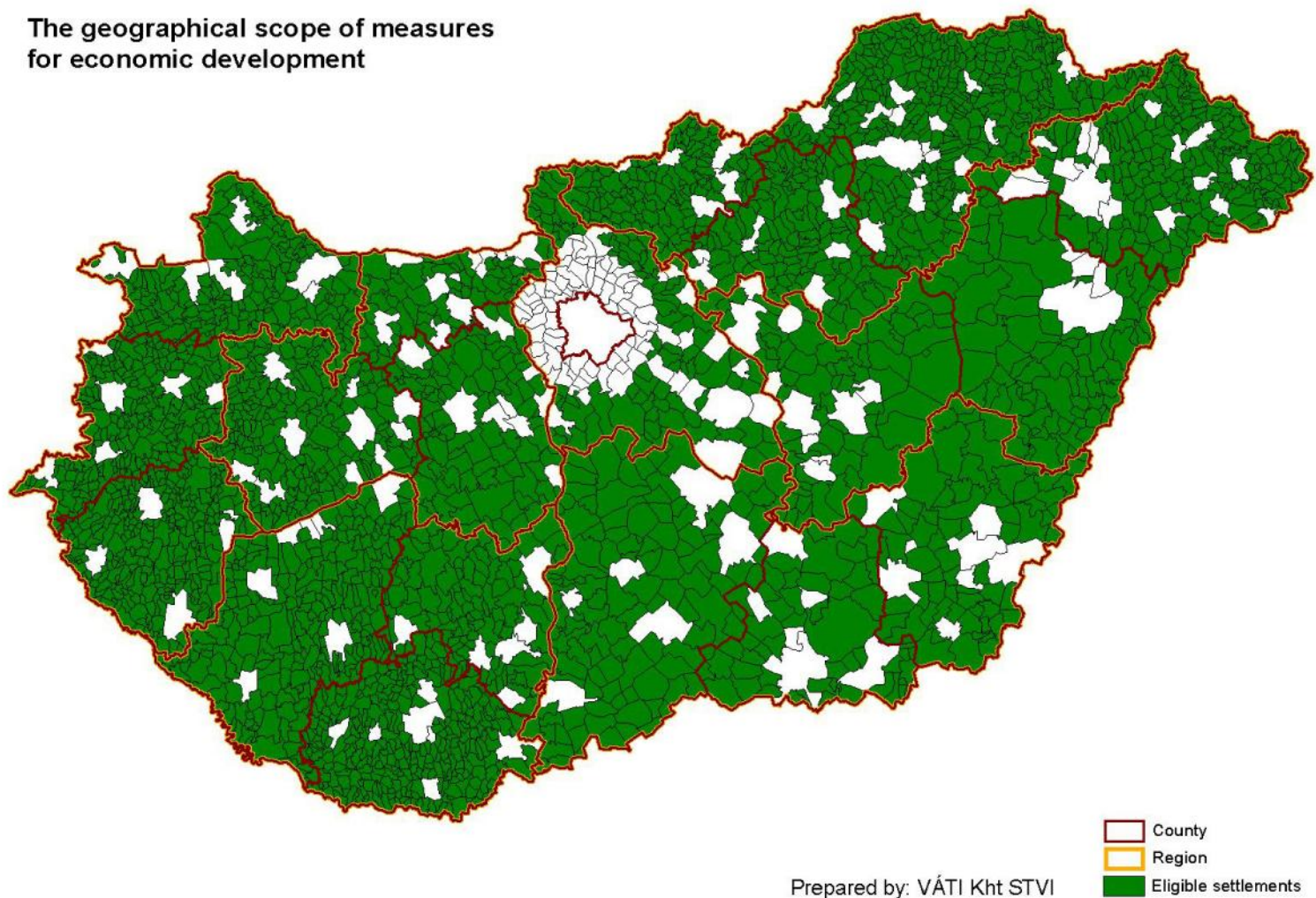
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Zaláta	Zebecke	Zubogy	Zselicszentpál
Zalatárnok	Zebegény	Zsadány	Zsennye
Zalaújlak	Zemplénagárd	Zsáka	Zsira
Zalavár	Zeng várkony	Zsámbok	Zsombó
Zalavég	Zichyújfalu	Zsana	Zsujta
Zalkod	Zics	Zsarolyán	Zsurk
Zámoly	Ziliz	Zsebeháza	
Zánka	Zimány	Zsédeny	
Zaránk	Zók	Zselickisfalud	
Závod	Zomba	Zselickislak	

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## Annex 18: MAP: The geographical scope of the measures for economic development

The geographical scope of measures  
for economic development





## Annex 19: the geographical scope of M312

Abaliget	Alsódobsza	Árpádhalom	Bakonykoppány
Abasár	Alsógagy	Árpás	Bakonykúti
Abaújalpár	Alsómocsolád	Ártánd	Bakonynána
Abaújkér	Alsónána	Ásotthalom	Bakonyoszlop
Abaújlak	Alsónemesapáti	Ásványráró	Bakonypéterd
Abaújszolnok	Alsónyék	Aszaló	Bakonypölöske
Abaújvár	Alsóörs	Ászár	Bakonyság
Abda	Alsópáhok	Aszóf	Bakonysárkány
Abod	Alsópetény	Áta	Bakonyszentiván
Ábrahámhegy	Alsórajk	Átány	Bakonyszentkirály
Acsa	Alsóregmec	Atkár	Bakonyszentlászló
Acsád	Alsószerterzsébet	Attala	Bakonyszombathely
Acsalag	Alsószentiván	Babarc	Bakonyszücs
Ácsteszer	Alsószentmárton	Babarcs l s	Bakonytamási
Adács	Alsószőlők	Babócsa	Baks
Ádánd	Alsószuha	Bábonymegyer	Baksa
Adásztevel	Alsótelekes	Babosdöbréte	Baktakék
Adorjánháza	Alsótold	Babót	Baktüttös
Adorjás	Alsóújlak	Bácsbokod	Balajt
Ág	Alsóvadász	Bácsborsód	Balástya
Ágasegyháza	Ambrózfalva	Bácsszentgyörgy	Balaton
Ágfalva	Anarcs	Bácssz l s	Balatonakali
Aggtelek	Andocs	Badacsonytördemic	Balatonberény
Agyagosszergény	Andornaktálya	Bag	Balatoncsicsó
Ajak	Andrásfa	Bagamér	Balatonederics
Aka	Annavölgy	Baglad	Balatonendréd
Akasztó	Apácatorna	Bagod	Balatonfenyves
Alacska	Apagy	Bágyogszovát	Balatonf kajár
Alap	Apaj	Baj	Balatongyörök
Alattyán	Aparhant	Bajánsenye	Balatonhenye
Alcsútdoboz	Apátfalva	Bajna	Balatonkeresztúr
Aldebr	Apátistvánfalva	Bajót	Balatonmagyaród
Algy	Apátvarasd	Bak	Balatonmáriafürd
Alibánfa	Apc	Bakháza	Balaton szöd
Almamellék	Áporka	Bakóca	Balatonrendes
Almásfüzit	Apostag	Bakonszeg	Balatonszabadi
Almásháza	Aranyosapáti	Bakonya	Balatonszárszó
Almáskamarás	Aranyosgadány	Bakonybánk	Balatonszemes
Almáskeresztúr	Árka	Bakonybél	Balatonszentgyörgy
Álmosd	Arló	Bakonycsernye	Balatonszepezd
Alsóberecki	Arnót	Bakonygyirót	Balatonsz l s
Alsóbogát	Árokt	Bakonyjákó	Balatonudvari

Balatonújlak	Bedegkér	Biharnagybajom	Bonyhádvarasd
Balatonvilágos	Bed	Bihartorda	Bonnya
Balinka	Bejcgertyános	Biharugra	Bordány
Ballószög	Békás	Bikács	Borgáta
Balogunyom	Bekecs	Bikal	Borjád
Balotaszállás	Békéssámson	Biri	Borota
Balsa	Békésszentandrás	Birján	Borsfa
Bálványos	Bekölce	Bisse	Borsodbóta
Bana	Bélavár	Boba	Borsodgeszt
Bánd	Belecska	Bocfölde	Borsodivánka
Bánfa	Beleg	Boconád	Borsodszentgyörgy
Bánhorváti	Belezná	Bócsa	Borsodszirák
Bánk	Bélmegyer	Bocska	Borsosberény
Bánokszentgyörgy	Beloianisz	Bocskai kert	Borszörcsök
Bánréve	Bels sárd	Boda	Borzavár
Bár	Belvárdgyula	Bodmér	Bosta
Barabás	Benk	Bodolyabér	Botpalád
Baracs	Bénye	Bodonyhely	Botykapeterd
Baracska	Bér	Bodony	Bozzai
Báránd	Bérbaltavár	Bodorfa	Bozsok
Baranyahídvég	Bercel	Bodrog	Bózsva
Baranyajen	Beregdaróc	Bodroghalom	B
Baranyaszentgyörgy	Beregsurány	Bodrogkeresztúr	B cs
Barbacs	Berekböszörmény	Bodrogkisfalud	Böde
Bárdudvarnok	Berekfürd	Bodrogolaszi	Bödeháza
Barlahida	Beremend	Bódvalenke	Bögöt
Bárna	Berente	Bódvarákó	Bögöte
Barnag	Beret	Bódvaszilas	Böhönye
Bársonyos	Berkenye	Bogács	Bököny
Basal	Berkesd	Bogád	Bölcske
Baskó	Berkesz	Bogádmindszent	B ny
Báta	Bernecebaráti	Bogdása	Börcs
Bátaapáti	Berzék	Bogyiszló	Börzönce
Baté	Berzence	Bogyoszló	B sárkány
Bátmonostor	Besence	Bojt	B szénfa
Bátor	Beseny d	Bókaháza	Bucsa
Bátorliget	Beseny telek	Bokod	Bucus
Bátya	Besenyszög	Bokor	Búcsúszentlászló
Batyk	Besny	Boldog	Bucsuta
Bázakerettye	Beszterec	Boldogasszonyfa	Bugac
Bazsi	Bezedek	Boldogk újfalu	Bugacpusztaháza
Béb	Bezenye	Boldogk váralja	Bugyi
Becsehely	Bezeréd	Boldva	Buj
Becske	Bezi	Bolhás	Buják
Becskeháza	Bicsérd	Bolhó	Buzsák
Becsvölgye	Bihardancsháza	Boncodfölde	Bükkábrány

Bükkaranyos	Császló	Csincse	Debercsény
Bükkmogyorósd	Csátalja	Csipkerek	Debréte
Bükkösd	Csatár	Csitár	Decs
Bükkszék	Csataszög	Csobád	Dédestapolcsány
Bükkszenterzsébet	Csatka	Csobaj	Dég
Bükkszentkereszt	Csávoly	Csókak	Dejtár
Bükkszentmárton	Csebény	Csokonyavisonta	Demjén
Bükkzsérc	Csécse	Csokvaomány	Dencsháza
Bürös	Csegöld	Csolnok	Dénesfa
Büssü	Csehbánya	Csolyospálos	Derekegyház
Büttös	Csehi	Csorna	Deszk
Cák	Csehimindszent	Csombárd	Detek
Cakóháza	Csém	Csonkahegyhát	Detk
Cece	Csem	Csonkamindszent	Dinnyeberki
Cégénydányád	Csempeszkopács	Csopak	Diósberény
Ceglédbercel	Csengele	Csór	Diósjen
Cered	Csengersima	Csót	Dióskál
Chernelháza	Csengerújfalu	Csöde	Diósviszló
Cibakháza	Csengőd	Csögle	Doba
Cikó	Csénye	Csökm	Doboz
Cirák	Csenyété	Csököly	Dobri
Cún	Csép	Csömend	Dobronhegy
Csabacsőd	Csépa	Csömödér	Dóc
Csabaszabadi	Csér	Csönge	Domaháza
Csabdi	Cserdi	Csörnyeföld	Domaszék
Csabrendek	Cserénfa	Csörötnek	Dombegyház
Csáfordjánosfa	Cserépfalu	Csász	Dombiratos
Csaholc	Cserépváralja	Császár	Domony
Csajág	Cserháthaláp	Csurgónagymarton	Domoszló
Csákány	Cserhátsurány	Dabronc	Dormánd
Csákánydoroszló	Cserhátszentiván	Dabrony	Dorogháza
Csákberény	Cserkeszl	Dad	Dozmat
Csákvár	Cserkút	Dág	Döbörhegy
Csanádalberti	Csernely	Dáka	Döbröce
Csanádapáca	Cserszegtomaj	Dalmand	Döbrököz
Csánig	Csertalakos	Damak	Döbrönte
Csány	Csert	Dámóc	Döge
Csányoszró	Csesznek	Dánszentmiklós	Dömös
Csanytelek	Csesztreg	Dány	Dömsöd
Csapi	Csesztve	Daraboshegy	Dör
Csapod	Csetény	Darány	Dörgicse
Csárdaszállás	Csévharaszt	Darnó	Döröske
Csarnóta	Csibrák	Darnózseli	Dötk
Csaroda	Csikéria	Daruszentmiklós	Dövény
Császár	Csikóstó	Darvas	Drágszél
Császártöltés	Csikvánd	Dávod	Drávacsehi

Drávacsepely	Egerfarmos	Ete	Fels szölnök
Drávafok	Egerlöv	Etes	Fels tárkány
Drávagárdony	Egerszalók	Etyek	Fels telekes
Drávaiványi	Egerszólát	Fábiánháza	Fels told
Drávakeresztúr	Égerszög	Fábiánsebestyén	Fels vadász
Dráwapalkonya	Egervár	Fácánkert	Fényeslitke
Dráwapiski	Egervölgy	Fadd	Feny f
Drávaszabolcs	Egyed	Fáj	Ferencszállás
Drávaszerdahely	Egyek	Fajsz	Fert boz
Drávasztára	Egyházasdengeleg	Fancsal	Fert endréd
Drávatamási	Egyházasfalu	Farád	Fert homok
Drégelypalánk	Egyházasgerge	Farkasgyep	Fert rákos
Dubicsány	Egyházasharaszti	Farkaslyuk	Fert széplak
Dudar	Egyházashetye	Farmos	Fiad
Duka	Egyházashollós	Fazekasboda	Filkeháza
Dunaalmás	Egyházaskesz	Fedémes	Fityeház
Dunaegyháza	Egyházaskozár	Fegyvernek	Fokt
Dunafalva	Egyházasrádóc	Fehértó	Folyás
Dunakiliti	Ellend	Fehérvárcsurgó	Fonó
Dunapataj	El szállás	Feked	Fony
Dunaremete	Encsencs	Feketeerd	Forráskút
Dunaszeg	Endrefalva	Felcsút	Forró
Dunaszekcs	Endr c	Feldebr	Földeák
Dunaszentbenedek	Enese	Felgy	Földes
Dunaszentgyörgy	Eperjes	Felpéc	F nyed
Dunaszentmiklós	Eperjeske	Fels berecki	Fulókércs
Dunaszentpál	Eplény	Fels csatár	Furta
Dunasziget	Epöl	Fels dobsza	Füle
Dunatetőtlen	Erd benye	Fels egerszeg	Fülesd
Dusnok	Erd horváti	Fels gagy	Fülöp
Dúzs	Erd kövesd	Fels jánosfa	Fülöpháza
Eberg c	Erd kürt	Fels kelecseény	Fülöpkajab
Ebes	Erd smárok	Fels lajos	Fülöpszállás
Écs	Erd smecske	Fels marác	Fülpösdaróc
Ecséd	Erd tarcsa	Fels mocsolád	Fürged
Ecseg	Erd telek	Fels nána	Füzér
Ecsefalva	Erk	Fels nyárád	Füzérkajata
Ecseny	Érpatak	Fels nyék	Füzérkomlós
Edde	Érsekcsanád	Fels örs	Füzérradvány
Edve	Érsekhalma	Fels páhok	F zvölgy
Egerág	Érsekvadkert	Fels petény	Gáborján
Egeralja	Értény	Fels rajk	Gáborjánháza
Egeraracsa	Erzsébet	Fels regmec	Gacsály
Egerbakta	Esztár	Fels szenterzsébet	Gadács
Egerbocs	Eszteregnye	Fels szentiván	Gadány
Egercsehi	Esztergályhorváti	Fels szentmárton	Gadna

Gádosros	Gic	Gy rladamér	Hegyeshalom
Gagyapáti	Gige	Gy röcske	Hegyfalu
Gagybátor	Gilvánfa	Gy rság	Hegyháthodász
Gagyvendégi	Girincs	Gy rsövényház	Hegyhátmaróc
Galambok	Gógánfa	Gy rszemere	Hegyhátsál
Galgaguta	Golop	Gy rtelek	Hegyhátszentjakab
Galgagyörk	Gomba	Gy rújfalu	Hegyhátszentmárton
Galgahévíz	Gombosszeg	Gy rvár	Hegyhátszentpéter
Galgamácsa	Gór	Gy rzámoly	Hegy
Gálosfa	Gordisa	Gyugy	Hegymagas
Galvács	Gosztola	Gyulaháza	Hegymeg
Gamás	Gödre	Gyulaj	Hegyszentmárton
Ganna	Gölle	Gyulakeszi	Héhalom
Gánt	Gömörsz l s	Gyúró	Hejce
Gara	Göncruszka	Gyügye	Hej bába
Garáb	Göny	Gyüre	Hej keresztúr
Garabonc	Görbeháza	Gy r s	Hej kürt
Garadna	Görcsöny	Hács	Hej papi
Garbolc	Görcsönydoboka	Hagyárosbörönd	Hej szalonta
Garé	Görgeteg	Hahót	Helesfa
Gasztony	G sfa	Hajdúbagos	Helvécia
Gátér	Grábóc	Hajdúszovát	Hencida
Gávavencsell	Gulács	Hajmás	Hencse
Géberjén	Gutorfölde	Hajmáskér	Hercegkút
Gecse	Gyalóka	Halastó	Hercegszántó
Géderlak	Gyanógeregye	Halászi	Heréd
Gégény	Gyarmat	Halimba	Héreg
Gelej	Gyékenyes	Halmaj	Herencsény
Gelénes	Gyenesdiás	Halmajugra	Heresznye
Gellénháza	Gyepükaján	Halogy	Hermánszeg
Gelse	Gyermely	Hangács	Hernád
Gelsesziget	Gyód	Hangony	Hernádb d
Gemzse	Gyóró	Hantos	Hernádcéce
Gencsapáti	Gyömöre	Harasztifalu	Hernádkak
Gérce	Gyöngyfa	Harc	Hernádkércs
Gerde	Gyöngyösfalu	Harka	Hernádnémeti
Gerendás	Gyöngyöshalász	Harkakötöny	Hernádpetri
Gerényes	Gyöngyösmellék	Háromfa	Hernádszentandrás
Geresdlak	Gyöngyösoroszi	Háromhuta	Hernádszurdok
Gerjen	Gyöngyöspata	Harsány	Hernádvécse
Gersekarát	Gyöngyössolymos	Hárskút	Hernyék
Geszt	Gyöngyöstarján	Harta	Hét
Gesztely	Gy rasszonyfa	Hásságy	Hetefejércse
Geszteréd	Györe	Hédervár	Hetes
Gétye	Györgytarló	Hedrehely	Hetvehely
Gibárt	Györköny	Hegyesd	Hetyef

Hevesaranyos	Iharos	Jánoshida	Kány
Hevesvezekény	Iharosberény	Járdánháza	Kánya
Hévízgyörk	Ikervár	Jármí	Kányavár
Hidas	Ikklad	Jásd	Kapolcs
Hidasnémeti	Iklanberény	Jászágó	Kápolna
Hidegkút	Iklódbörd ce	Jászsós-szentgyörgy	Kápolnásnyék
Hidegség	Ikrény	Jászboldogháza	Kapoly
Hidvégardó	Iliny	Jászdózsa	Kaposf
Himesháza	Ilk	Jászfels s-szentgyörgy	Kaposgyarmat
Himod	Illocska	Jászivány	Kaposhomok
Hirics	Imola	Jászjákóhalma	Kaposkeresztúr
Hobol	Imrehegy	Jászkarajen	Kapósmér
Hodász	Ináncs	Jászladány	Kapospula
Hollád	Inárcs	Jász-szentandrás	Kaposúj-lak
Hollóháza	Inke	Jász-szentlászló	Kaposszekcs
Hollók	Ipacsfa	Jásztelek	Kaposszerdahely
Homokbödöge	Ipolydamásd	Jéke	Káptalanfa
Homokkomárom	Ipolyszög	Jen	Káptalantóti
Homokmégy	Ipolytarnóc	Jobaháza	Kára
Homok-szentgyörgy	Ipolytölgyes	Jobbágyi	Karácsond
Homorúd	Ipolyvece	Jósvaf	Karád
Homrogd	Iregszemcse	Juta	Karakó
Hont	Irota	Kacorlak	Karakószörcsök
Horpács	Ispánk	Kács	Karancsalja
Hort	Istenmezeje	Kacsóta	Karancsberény
Hortobágy	Istvándi	Kajárpéc	Karancs-keszi
Horváthertelend	Iszka-szentgyörgy	Kajászó	Karancslapujt
Horvátlöv	Iszkáz	Kajdacs	Karancsság
Horvátzsidány	Isztimér	Kakasd	Kárász
Hosszúhetény	Ivád	Kákics	Karcsa
Hosszúpályi	Iván	Kakucs	Kardos
Hosszúpereszteg	Ivánbattyán	Kál	Kardoskút
Hosszúvíz	Ivác	Kalaznó	Karmacs
Hosszúvölgy	Iván-cesa	Káld	Károlyháza
Hosztót	Ivándárda	Kálló	Karos
Hottó	Izmény	Kallósd	Kásád
H gyész	Izsófalva	Kállóse-mjén	Kaskantyú
Hövej	Jágónak	Kálmán-cesa	Kastélyosdombó
Hugyag	Ják	Kálmánháza	Kaszaper
Hunya	Jakabszállás	Kálócfa	Kaszó
Hunyadfalva	Jákfa	Káloz	Katádfa
Husztót	Jákfalva	Kám	Katafa
Ibafa	Jákó	Kamond	Kátoly
Iborfia	Jánd	Kamut	Katymár
Igar	Jánkmajtis	Kánó	Káva
Igrici	Jánosháza	Kántorjánosi	Kávás

Kazár	Kerkateskánd	Kisdobsza	Kistótfalu
Kázsmárk	Kérsemjén	Kisdombegyház	Kisunyor
Kazsok	Kerta	Kisdorog	Kisvarsány
Kecskéd	Kertéssziget	Kisecset	Kisvásárhely
Kehidakustány	Keszeg	Kisfalud	Kisvaszar
Kék	Kesznyéten	Kisfüzes	Kisvejke
Kékcse	Kesz hidegkút	Kisgörb	Kiszombor
Kéked	Kesztölc	Kisgyalán	Kiszsídány
Kékesd	Keszü	Kisgy r	Kisszállás
Kékkút	Kétdodony	Kishajmás	Kisszékely
Kelebia	Kétegyháza	Kisharsány	Kisszekeres
Keléd	Kéthely	Kishartyán	Kisszentmárton
Kelemér	Kétpó	Kisherend	Kissziget
Kéleshalom	Kétsoprony	Kishódos	Kissz l s
Kelevíz	Kétújfalu	Kishuta	Klárafalva
Kemence	Kétvölgy	Kisigmánd	Kocs
Kemendollár	Kéty	Kisjakabfalva	Kocsér
Kemenesh gyész	Kevermes	Kiskassa	Kocsola
Kemeneskápolna	Kilimán	Kiskinizs	Kocsord
Kemenesmagasi	Kimle	Kiskorpád	Kóka
Kemenesmihályfa	Kincsesbánya	Kiskunlacháza	Kokad
Kemenespálfa	Királd	Kiskutas	Kolontár
Kemenessömjén	Királyegyháza	Kisláng	Komjáti
Kemenesszentmárton	Királyhegyes	Kisléta	Komlódótótfalu
Kemenesszentpéter	Királysztiván	Kislippó	Komlós
Keménfa	Kisapáti	Kisl d	Komlóska
Kémes	Kisapostag	Kismányok	Komoró
Kemestaródfa	Kisar	Kismarja	Kompolt
Kemse	Kisasszond	Kismaros	Kondó
Kenéz	Kisasszonyfa	Kisnamény	Kondorfa
Kenézl	Kisbabot	Kisnána	Kondoros
Kengyel	Kisbágyon	Kisnémedi	Kóny
Kenyeri	Kisbajcs	Kisnyárad	Konyár
Kercaszomor	Kisbajom	Kispalád	Kópháza
Kercseliget	Kisbárapáti	Kispáli	Koppányszántó
Kerecsend	Kisbárkány	Kispirit	Korlát
Kerecseny	Kisberény	Kisrákos	Koronc
Kerekharaszt	Kisberzseny	Kisrécse	Kórós
Kereki	Kisbeszterce	Kisrosvág	Kosd
Kerékteleki	Kisbodak	Kissikátor	Kóspallag
Keresztéte	Kisbucsa	Kissomlyó	Kótaj
Kerkabarabás	Kisbudmér	Kistamási	Kovácsbida
Kerkafalva	Kiscséc	Kistapolca	Kovácsszénája
Kerkakutas	Kiscsehi	Kistokaj	Kovácsvágás
Kerkáskápolna	Kiscs sz	Kistolmács	Kozárd
Kerkaszentkirály	Kisdér	Kistormás	Kozmadombja

Köblény	Kurd	Lipót	Magyarkeresztúr
Köcsk	Kurityán	Lippó	Magyarkeszi
Kökény	Kustánszeg	Liptód	Magyarlak
K kút	Kutas	Lispesztadorján	Magyarlukafa
Kölcse	Kutasó	Liszó	Magyarmecske
Kölesd	Kübekháza	Litér	Magyarnádalja
Kölked	Küls sárd	Litka	Magyarnándor
Köml	Küls vat	Litke	Magyarpolány
Köml d	Küngös	Lócs	Magyarsarlós
Kömör	Lábod	Lókút	Magyarszecs d
Kömpöc	Lácacséke	Lónya	Magyarszék
Környe	Lad	Lórév	Magyarszentmiklós
Köröm	Ladánybene	Lothárd	Magyarszerdahely
K röshegy	Ládbeseny	Lovas	Magyarszombatfa
Körösnyagharsány	Lajoskomárom	Lovasberény	Magyartelek
Köröstarcsa	Lak	Lovászhetény	Majs
K röstetetlen	Lakhegy	Lovászi	Makád
Körösújfalu	Lakitelek	Lovászipatona	Makkoshotyka
Körösszakál	Lakócsa	L kösháza	Maklár
Körösszegapáti	Lánycsók	Löv	Malomsok
K szárhegy	Lápaf	Löv petri	Mályi
K szegdoroszló	Lapáncsa	Lucfalva	Mályinka
K szegpaty	Laskod	Ludányhalászi	Mánd
K szegszerdahely	Lasztonya	Ludas	Mánfa
Kötcse	Látrány	Lukácsháza	Mány
Kötegyán	Lázi	Lulla	Maráza
K telek	Leányvár	Lúzsok	Marcalgergelyi
K vágóörs	Lébény	Mád	Marcalt
K vágósz l s	Legénd	Madaras	Márfa
K vágótöttös	Legyesbénye	Madocsa	Máriaalom
Köveg	Lén	Maglóca	Máriakálnok
Köveskál	Lénárddaróc	Magosliget	Máriakéménd
Krasznokvajda	Lendvadedes	Magy	Márianosztra
Kulcs	Lendvajakabfa	Magyaralmás	Markaz
Kunadacs	Lengyel	Magyarátád	Márkháza
Kunágota	Lepsény	Magyarbánhegyes	Márkó
Kunbaja	Lesencefalu	Magyarbóly	Markóc
Kunbaracs	Lesenceistvánd	Magyarcsanád	Markotabödöge
Kuncsorba	Lesencetomaj	Magyardombegyház	Maróc
Kunfehértó	Letskés	Magyaregregy	Marócsa
Kunmadaras	Levél	Magyaregres	Márok
Kunpeszér	Levelek	Magyarföld	Márokföld
Kunszállás	Libickozma	Magyargéc	Márokpapi
Kunsziget	Lickóvadas	Magyargencs	Maroslele
Kup	Liget	Magyarhertelend	Mártély
Kupa	Ligetfalva	Magyarhomorog	Martonfa



Martonyi	Mez komárom	Monostorpályi	Nagydobsza
Mátételke	Mez ladány	Monoszló	Nagydorog
Mátraballa	Mez lak	Monyoród	Nagyér
Mátraderecske	Mez nagymihály	Mórág	Nagyesztergár
Mátramindszent	Mez nyárád	Móricgát	Nagyfüged
Mátranovák	Mez örs	Mórichida	Nagygeresd
Mátraszele	Mez peterd	Mosdós	Nagygörb
Mátraszentimre	Mez sas	Mosonszentmiklós	Nagygyimót
Mátrasz l s	Mez szemere	Mosonszolnok	Nagyhajmás
Mátraterenye	Mez szentgyörgy	Mosonudvar	Nagyharsány
Mátraverebély	Mez szilas	Mozsgó	Nagyhegyes
Mátyásdomb	Mez tárkány	M csény	Nagyhódos
Matty	Mez zombor	Mucsfa	Nagyhuta
Mátyus	Miháld	Mucsi	Nagyigmánd
Máza	Mihályfa	Múcsony	Nagyiván
Mecseknádasd	Mihálygerge	Muhi	Nagykamarás
Mecsekpölöske	Mihályháza	Murakeresztúr	Nagykapornak
Mecsér	Mihályi	Murarátka	Nagykarácsony
Medgyesbodzás	Mike	Muraszemenye	Nagykerek
Medina	Mikebuda	Murga	Nagykeresztúr
Megyaszó	Mikekarácsonyfa	Murony	Nagykinizs
Megyhíd	Mikepércs	Nábrád	Nagykónyi
Megyer	Miklósi	Nadap	Nagykorpád
Meggyeskovácsi	Mikófalva	Nádasd	Nagykozár
Méhkerék	Mikóháza	Nádasdladány	Nagykökényes
Méhtelek	Mikosszéplak	Nágocs	Nagykölked
Mekényes	Milejszeg	Nagyacsád	Nagykör
Mencshely	Milota	Nagyalásny	Nagykutas
Mende	Mindszentgodisa	Nagyar	Nagylak
Méra	Mindszentkál	Nagybajcs	Nagylengyel
Merenye	Misefa	Nagybakónak	Nagylóc
Mérges	Miske	Nagybánhegyes	Nagylók
Mérk	Miszla	Nagybaracska	Nagylózs
Mernye	Mocsa	Nagybarca	Nagymágocs
Mersevát	Mogyorósbánya	Nagybárkány	Nagymizdó
Mesterháza	Mogyoróska	Nagyberény	Nagynyárad
Mesteri	Moha	Nagyberki	Nagyoroszi
Mesterszállás	Mohora	Nagybörzsöny	Nagypáli
Meszes	Molnári	Nagybudmér	Nagypall
Meszlen	Molnaszecs d	Nagycenk	Nagypeterd
Mesztegny	Molvány	Nagycsány	Nagypirit
Mez csokonya	Monaj	Nagycsécs	Nagyrábé
Mez d	Monok	Nagycssepely	Nagyrada
Mez falva	Monorierd	Nagycserkesz	Nagyrákos
Mez gyán	Mónosbél	Nagydém	Nagyrécse
Mez hék	Monostorapáti	Nagydobos	Nagyréde

Nagyrev	Nemeskolta	Nyírbéltek	Old
Nagyrosvágy	Nemesládony	Nyírbogát	Ólmod
Nagysáp	Nemesmedves	Nyírbogdány	Oltárc
Nagysimonyi	Nemesnádudvar	Nyírcsaholy	Onga
Nagyszakácsi	Nemesnép	Nyírcsászári	Ónod
Nagyszékely	Nemespátró	Nyínderzs	Ópályi
Nagyszekeres	Nemesrádó	Nyírgelse	Ópusztaszer
Nagyszénás	Nemesrempehollós	Nyírgyulaj	Orbányosfa
Nagyszentjános	Nemessándorháza	Nyíri	Orci
Nagyszokoly	Nemesvamos	Nyíribrony	Ordacsehi
Nagytálya	Nemesvid	Nyírkákó	Ordas
Nagytevel	Nemesvita	Nyírkársz	Orfalu
Nagytilaj	Nemesszalók	Nyírkáta	Orf
Nagytótfalu	Nemesszentandrás	Nyírkércs	Orgovány
Nagyt ke	Németbánya	Nyírlöv	Ormándlak
Nagyút	Németfalu	Nyírmártonfalva	Ormosbánya
Nagyvarsány	Németkér	Nyírmeggyes	Oroszi
Nagyvát	Nemti	Nyírmihálydi	Oroszló
Nagyvázsony	Neszmély	Nyírparasznya	Orosztony
Nagyvejke	Nézsza	Nyírpazony	Ortaháza
Nagyveleg	Nick	Nyírpilis	Osli
Nagyvenyim	Nikla	Nyírtass	Ostffyasszonyfa
Nagyvisnyó	Nógrád	Nyírtét	Ostoros
Nak	Nógrádkövesd	Nyírtura	Oszkó
Napkor	Nógrádmarcál	Nyírvasvári	Oszlár
Nárai	Nógrádmegyer	Nyomár	Osztopán
Narda	Nógrádsáp	Ny gér	Ózdfalu
Naszály	Nógrádsipek	Nyugotszenterzsébet	Ozmánbük
Négyes	Nógrádszakál	Nyúl	Ozora
Nekézseny	Nóráp	Óbánya	Öcs
Nemesapáti	Noszlop	Óbarok	csény
Nemesbikk	Noszvaj	Óbudavár	Öcsöd
Nemesborzova	Nova	Ócsárd	Ökörítőfülpös
Nemesb d	Novaj	Ófalu	Ölb
Nemesbük	Novajdrány	Ófehértó	Ömböly
Nemescsó	N tincs	Óföldrak	r
Nemesdéd	Nyalka	Óhíd	Öregcsert
Nemesgörzsöny	Nyárad	Okány	Öreglak
Nemesgulács	Nyáregyháza	Okorág	rhalom
Nemeshany	Nyárl rinc	Okorvölgy	rimagyarósd
Nemeshetés	Nyársapát	Olasz	Örményes
Nemeske	Nyésta	Olaszfa	Örménykút
Nemeskér	Nyim	Olaszfalu	rtilos
Nemeskeresztúr	Nyírábrány	Olaszliszka	Örvényes
Nemeskislalud	Nyíracád	Olcsva	sagárd
Nemeskocs	Nyirád	Olcsvaapáti	si

Öskü	Patapoklosi	Pincehely	Pusztamonostor
Öttevény	Patca	Pinkaminszent	Pusztaozlaka
Öttömös	Pátka	Pinnye	Pusztaradvány
Ötvöskónyi	Patosfa	Piricse	Pusztaszemes
Pácin	Pátroha	Pirtó	Pusztaszentlászló
Pácsony	Patvarc	Piskó	Pusztaszer
Padár	Pátyod	Pitvaros	Pusztavacs
Páhi	Pázmánd	Pócsa	Pusztavám
Páka	Pázmándfalu	Pocsaj	Püski
Pakod	Pecöl	Pócspetri	Püspökhátvan
Pákoz	Pécsbagota	Pogány	Püspökmolnári
Palé	Pécsdevecser	Pogányszentpéter	Püspökszilágy
Pálfa	Pécsely	Pókaszeptk	Rábacsanak
Pálfiszeg	Pécsudvard	Polány	Rábacsécsény
Páli	Pellérd	Porcsalma	Rábagyarmat
Palkonya	Pély	Pornóapáti	Rábahídvég
Pálmajor	Penc	Poroszló	Rábakecöl
Pálmonostora	Penészlek	Porpác	Rábapatona
Pálosvörösmart	Pénzesgy r	Porrog	Rábapaty
Palotabozsok	Penyige	Porrogszentkirály	Rábapordány
Palotás	Pér	Porrogszentpál	Rábasebes
Paloznak	Pere	Pórszombat	Rábaszentandrás
Pamlény	Perecse	Porva	Rábaszentmihály
Pamuk	Pereked	Pósfa	Rábaszentmiklós
Pánd	Perenye	Potony	Rábatamási
Pankasz	Peresznye	Potyond	Rábatöttös
Pányok	Peresztég	Pölöske	Rábcakapi
Panyola	Perkáta	Pölöskef	Ráckeresztúr
Pap	Perkupa	Pörböly	Rád
Pápadereske	Per csény	Pördefölde	Rádfalva
Pápakovácsi	Peterd	Pötréte	Rádóckölked
Pápasalamon	Péterhida	Prügy	Radostyán
Pápateszér	Péteri	Pula	Ragály
Papkeszi	Pétfürd	Pusztapáti	Rajka
Pápoc	Peth henye	Pusztaberki	Rakaca
Papos	Petneháza	Pusztacsallád	Rakacaszend
Páprád	Pet fibánya	Pusztacsó	Rákóczibánya
Parád	Pet fiszállás	Pusztadobos	Rákócziújfal
Parádsasvár	Pet háza	Pusztaderics	Ráksi
Parasznya	Pet mihályfa	Pusztafalu	Ramocsa
Pári	Petrikeresztúr	Pusztaföldvár	Ramocsaháza
Paszab	Petrivente	Pusztahencse	Rápol
Pásztori	Pettend	Pusztakovácsi	Raposka
Pat	Piliny	Pusztamagyaród	Rásonysápberencs
Patak	Piliscsév	Pusztamérges	Rátka
Patalom	Pilismarót	Pusztamiske	Rátót

Ravazd	Sajókápolna	Sáta	Somogyhatvan
Recsk	Sajókaza	Sátorhely	Somogyjád
Réde	Sajókeresztúr	Sávoly	Somogymeggyes
Rédics	Sajólád	Sé	Somogysámson
Regéc	Sajólászlófalva	Segesd	Somogysárd
Regenye	Sajómercse	Selyeb	Somogysimonyi
Regöly	Sajónémeti	Semjén	Somogyszentpál
Rém	Sajóörös	Semjénháza	Somogyszil
Répáshuta	Sajópálfala	Sénye	Somogyszob
Répceszemere	Sajópetri	Sény	Somogytúr
Répceszentgyörgy	Sajópüspöki	Seregélyes	Somogyudvarhely
Répcevis	Sajósenye	Serényfalva	Somogyvamos
Resznek	Sajószöged	Sérseksz 1 s	Somogyvár
Rétalap	Sajóvamos	Sikátor	Somogyviszló
Rétközberencs	Sajóvelezd	Siklósbodony	Somogyzsitfa
Révfülp	Sajtoskál	Siklósnagyfalu	Somosk újfalu
Révleányvár	Salföld	Sima	Sonkád
Rezi	Salköveskút	Simaság	Soponya
Ricse	Salomvár	Simonfa	Sopronhorpács
Rigács	Sály	Sióagárd	Sopronkövesd
Rigyác	Sámod	Siójut	Sopronnémeti
Rimóc	Sámsonháza	Sirok	Sorkifalud
Rinyabeseny	Sand	Sitke	Sorkikápolna
Rinyakovácsi	Sántos	Sobor	Sormás
Rinyaszentkirály	Sáp	Sokorópátka	Sorokpolány
Rinyaújlak	Sáránd	Soltszentimre	Sóshartyán
Rinyaújnép	Sárazsádány	Sóly	Sóstófalva
Rohod	Sáregres	Som	Sósvertike
Románd	Sárfimizdó	Somberek	Sótony
Romhány	Sárhida	Somlójen	Söjtör
Romonya	Sárisáp	Somlós 1 s	Söpte
Rózsa	Sarkadkeresztúr	Somlónagyfalu	Söréd
Rózsály	Sárkeresztes	Somlóvecse	Sukoró
Rózsaszentmárton	Sárkeresztúr	Somodor	Sumony
Röjtökmuzsaj	Sárkeszi	Somogyacsa	Súr
Rönök	Sármellék	Somogyapáti	Surd
Röszke	Sárok	Somogyaracs	Sükösd
Rudolftelep	Sárosd	Somogyaszaló	Sümegecsehi
Rum	Sárpilis	Somogybabod	Sümegeprága
Ruzsa	Sárrétudvari	Somogybükkösd	Sütt
Ságújfalu	Sarród	Somogyicsicsó	Szabadbattyán
Ságvár	Sárszentágota	Somogydöröcske	Szabadegyháza
Sajóecseg	Sárszentl rinc	Somogyegres	Szabadhídvég
Sajógalgóc	Sárszentmihály	Somogyfajsz	Szabadi
Sajóhídvég	Sarud	Somogygeszti	Szabadkígyós
Sajóivánka	Sáska	Somogyhárság	Szabadszentkirály

Szabás	Szarvasgede	Szentimrefalva	Szomor
Szabolcs	Szarvaskend	Szentistván	Szorgalmatos
Szabolcsbáka	Szarvask	Szentistvánbaksa	Szorosad
Szabolcsveresmart	Szászberek	Szentjakabfa	Sz c
Szágy	Szászfa	Szentkatalin	Sz ce
Szajk	Szászvár	Szentkirály	Szögliget
Szajla	Szatmárcseke	Szentkirályszabadja	Sz ke
Szajol	Szátok	Szentkozmadombja	Sz kéd
Szakácsi	Szatta	Szentlászló	Sz kedencs
Szakadát	Szatymaz	Szentliszló	Sz l sardó
Szakáld	Szava	Szentl rinckáta	Sz l sgyörök
Szakály	Szebény	Szentmargitfalva	Szörény
Szakcs	Szécsénke	Szentmártonkáta	Szúcs
Szakmár	Szécsényfelfalu	Szentpéterfa	Szuha
Szaknyér	Szécsisziget	Szentpéterfölde	Szuhaf
Szakoly	Szederkény	Szentpéterszeg	Szuhakálló
Szakony	Szedres	Szentpéterúr	Szuhogy
Szakonyfalu	Szegerd	Szenyér	Szulimán
Szákszend	Szegi	Szepetnek	Szulok
Szalaf	Szegilong	Szerecseny	Szurdokpüspöki
Szalánta	Szegvár	Szeremle	Sz csi
Szalapa	Székely	Szerep	Szügy
Szalaszend	Székelyszabar	Szergény	Sz r
Szalatnak	Székkutas	Szigetbecse	Tabajd
Szálka	Szeleste	Szigetcsép	Tabdi
Szalkszentmárton	Szelevény	Szigetszentmárton	Táborfalva
Szalmatercs	Szell	Szigetújfalu	Tác
Szalonna	Szemely	Szigliget	Tagyon
Szamosangyalos	Szemenye	Szihalom	Takácsi
Szamosbecs	Szemere	Szijártóháza	Tákos
Szamoskér	Szendehely	Szil	Taktabáj
Szamossályi	Szendr lád	Szilág	Taktaharkány
Szamosatárfalva	Szena	Szilaspogony	Taktakenéz
Szamosújlak	Szenta	Szilsárkány	Taktaszada
Szamoszeg	Szentantalfa	Szilvág	Taliándörög
Szanda	Szentbalázs	Szilvás	Tállya
Szank	Szentbékáll	Szilvásvárad	Tanakajd
Szántód	Szentborbás	Szilvásszentmárton	Táp
Szany	Szentdénes	Szin	Tápióbicske
Szápár	Szentdomonkos	Szinpetri	Tápiógyörgye
Szaporca	Szente	Szirák	Tápióság
Szár	Szente	Szirmabeseny	Tápiószentmárton
Szárász	Szengál	Szokolya	Tápiósz l s
Szárazd	Szentgál	Szólád	Táplánszentkereszt
Szárfa	Szentgyörgyvár	Szomód	Tapsony
Szárliget	Szentgyörgyvölgy	Szomolya	Tápszentmiklós

Tar	Tésenfa	Tiszasas	Tótszentgyörgy
Tarany	Tésény	Tiszasüly	Tótszentmárton
Tarcal	Teskánd	Tiszaszalka	Tótszerdahely
Tard	Tetétlen	Tiszaszentimre	Tótújfalu
Tardona	Tevel	Tiszaszentmárton	Tótvázsony
Tardos	Tibolddaróc	Tiszasziget	Töltéstava
Tarhos	Tiborszállás	Tiszasz l s	Tömörd
Tarján	Tihany	Tiszatardos	Tömörkény
Tarjánpuszta	Tikos	Tiszatarján	Törökkoppány
Tárkány	Tilaj	Tiszatelek	Törtel
Tarnabod	Timár	Tiszateny	Töttös
Tarnalelesz	Tiszaadony	Tiszaug	Trizs
Tarnaméra	Tiszaalpár	Tiszavalk	Tunyogmatolcs
Tarnaörs	Tiszabábolna	Tiszavárkony	Túristvándi
Tarnaszentmária	Tiszabecs	Tiszavid	Túrony
Tarnaszentmiklós	Tiszabercel	Tisztaberek	Túrlicse
Tarnaszárd	Tiszabездéd	Tivadar	Tuzsér
Tárnokrét	Tiszab	Tóalmás	Türje
Tarpa	Tiszabura	Tófalva	Tüskevár
Tarrós	Tiszacsécse	Tófej	Tyukod
Táska	Tiszacsermely	Tóf	Udvar
Tass	Tiszadada	Tokod	Udvari
Taszár	Tiszaderzs	Tokodaltáró	Ugod
Tataháza	Tiszadob	Tokorcs	Újbarok
Tatárszentgyörgy	Tiszadorogma	Tolcsva	Újcsanáros
Tázlár	Tiszaeszlár	Told	Újdombrád
Tekenye	Tiszagyenda	Tolmács	Újhartyán
Tékes	Tiszagyulaháza	Tolnanémedi	Újiráz
Teklafalu	Tiszaigar	Tomajmonostora	Újireg
Telekes	Tiszainoka	Tomor	Újkenéz
Telekgerendás	Tiszajen	Tompaládony	Újkér
Teleki	Tiszakanyár	Tordas	Újlengyel
Telkibánya	Tiszakarád	Tormafölde	Újléta
Tengelic	Tiszakerecseny	Tormás	Újl rincefalva
Tengeri	Tiszakeszi	Tormásliget	Újpetre
Teng d	Tiszakóród	Tornabarakony	Újrónaf
Tenk	Tiszakürt	Tornakápolna	Újsolt
Tény	Tiszaladány	Tornanádaska	Újszalonta
Tépe	Tiszaogyorós	Tornaszentandrás	Újszentiván
Terem	Tiszanagyfalva	Tornaszentjakab	Újszentmargita
Terény	Tiszanána	Tornyiszentmiklós	Újszilvás
Tereske	Tiszaörs	Tornyosnémeti	Újtelek
Teresztenye	Tiszapalkonya	Tornyospálca	Újtikos
Terpes	Tiszapüspöki	Torony	Újudvar
Tés	Tiszarád	Torvaj	Újvárfalva
Tésa	Tiszaroff	Tószeg	Ukk

Und	Várda	Ver ce	Zádorfalva
Úny	Várdomb	Verpelét	Zagyvarékas
Uppony	Várfölde	Verseg	Zagyvaszántó
Ura	Varga	Versend	Zajk
Uraiújfalv	Várgesztes	Vértesacsa	Zajta
Úrhida	Várkesz	Vértesboglár	Zákány
Úri	Várong	Vérteskethely	Zákányfalv
Úrkút	Városföld	Vértessomló	Zákányszék
Uszka	Városl d	Vértestolna	Zala
Uszód	Varsád	Vértessz l s	Zalaapáti
Uzsa	Varsány	Vése	Zalabaksa
Üllés	Várvölgy	Veszkény	Zalabér
Vácduka	Vasad	Veszprémfajsz	Zalaboldogfa
Vácegres	Vasalja	Veszprémgalsa	Zalacsány
Váchartyán	Vásárosbéc	Veszprémvarsány	Zalacséb
Váckisújfalv	Vásárosdombó	Vezseny	Zalaerd d
Vácszentlászló	Vásárosfalv	Vid	Zalagyörmör
Vadna	Vásárosmiske	Vigántpetend	Zalahaláp
Vadosfa	Vasasszonyfa	Villánykövesd	Zalaháshágy
Vág	Vasboldogasszony	Vilmány	Zalaigrice
Vágáshuta	Vasegerszeg	Vilonya	Zalaistvánd
Vajdácsk	Vashosszúfalv	Vilyvitány	Zalakomár
Vajszló	Vaskeresztes	Vinár	Zalaköveskút
Vajta	Vaskút	Vindornyafok	Zalameggyes
Vál	Vasmegyer	Vindornyalak	Zalamerenye
Valkó	Vaspör	Vindornyas z l s	Zalasárszeg
Valkonya	Vassurány	Visnye	Zalaszabar
Vállaj	Vaszar	Visonta	Zalaszántó
Vállus	Vászoly	Viss	Zalaszegvár
Vámosatya	Vasszécseny	Visz	Zalaszentbalázs
Vámoscsalád	Vasszentmihály	Viszák	Zalaszentgyörgy
Vámosgyörk	Vasszilvág	Viszló	Zalaszentiván
Vámosmikola	Vát	Visznek	Zalaszentjakab
Vámosoroszi	Vatta	Vitnyéd	Zalaszentlászló
Vámosújfalv	Váznok	Vízvár	Zalaszentl rinc
Vámosszabadi	Vécs	Vizslás	Zalaszentmárton
Váncsod	Végegyháza	Vizsoly	Zalaszentmihály
Vanyarc	Vejti	Vokány	Zalaszombatfa
Vanyola	Vékény	Vonyarcvashegy	Zaláta
Várad	Vekérd	Vöckönd	Zalatárnok
Váralja	Velem	Völcsej	Zalaújlak
Varászló	Velemér	Vönöck	Zalavár
Váraszó	Velény	Vöröstó	Zalavég
Várbalog	Véménd	Vörs	Zalkod
Varbó	Vének	Zabar	Zámoly
Varbóc	Vereb	Zádor	Zánka

Zaránk	Zics	Zsáka	Zselickislak
Závod	Ziliz	Zsámbok	Zselicszentpál
Zebecke	Zimány	Zsana	Zsennye
Zebegény	Zók	Zsarolyán	Zsira
Zemplénagárd	Zomba	Zsebeháza	Zsombó
Zeng várkony	Zubogy	Zsédeny	Zsujta
Zichyújfalu	Zsadány	Zselickisfalud	Zsurk



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- County
- Region
- Eligible settlements
- Eligible with outskirts

Prepared by: VÁTI Kht STVI

**Annex 21: Settlements that are eligible for support under the measures of Axis III solely on the basis of the population in their outskirts. Only the outskirts of settlements listed are eligible for support.**

Abony	Hajdúsámson	Martonvásár	Sárbogárd
Adony	Harkány	MÁTÉSZALKA	Sárospatak
Albertirsa	Herend	Mez berény	Sásd
Bábolna	Heves	Mez hegyes	Sátoraljaújhely
Bácsalmás	Hódmez vásárhely	Mez kovácsháza	Siklós
Badacsonytomaj	Izsák	Mez túr	Solt
Baja	Jánoshalma	MISKOLC	Soltvadkert
Balatonlelle	Jánossomorja	Mohács	Sülysáp
Balkány	Jászberény	Monor	Sümege
Bátaszék	Jászfényszaru	Mór	Szabadszállás
Békés	Kaba	Mórahalom	Szarvas
Békéscsaba	Kaposvár	Nagyhalász	Szeghalom
BICSKE	Karcag	Nagykálló	Szekszárd
Bonyhád	Kecel	Nagykátá	Szentes
Cegléd	Kecskemét	Nagykörös	Szentlőrinc
Csongrád	Kenderes	Nagymaros	Szigetvár
Dabas	Kerekegyháza	Nyékládháza	Tamási
Debrecen	Keszthely	Nyíradony	Tapolca
Demecser	Kisbér	Nyíregyháza	Tata
Devecser	Kiskörös	Nyírlugos	Tét
Dunaföldvár	Kiskunfélegyháza	Nyírtelek	Tiszacsege
Edelény	Kiskunhalas	Orosháza	Tizakécske
Enying	Kiskunmajsa	OROSZLÁNY	Tompa
Ercsi	Kistelek	Örkény	Túrkeve
Füzesabony	Komádi	Pápa	Újfehértó
Gárdonyi	KOMLÓ	Pécsvár	Vámospercs
Gyomaendrőd	Kozármisleny	Pilis	Vasvár
Gyula	Kunszentmárton	Polgárdi	Zalaegerszeg
Hajdúböszörmény	Kunszentmiklós	Pusztaszabolcs	Zalakaros
Hajdúdorog	Lajosmizse	Ráckeve	Zalalöv
Hajdúnánás	Lengyeltóti	Sándorfalva	

## **Annex 22. Delivery mechanism for Axis III. and IV.**

**NEW  
HUNGARY  
RURAL DEVELOPMENT  
PROGRAMME**



**ÚJ MAGYARORSZÁG  
VIDÉKFEJLESZTÉSI PROGRAM  
2007-2013**

**Delivery mechanism for Axes III and IV**



## LIST OF ABBREVIATIONS AND DEFINITIONS

<b>ARDA:</b>	<p>Agricultural and Rural Development Agency</p> <p>This organisation participates in project selection and in the payment of support, the accredited paying agency.</p>
<b>Decision-Making Committee</b>	Decision-making body of the LEADER Local Action Group.
<b>EEC</b>	<p>Executive and Evaluation Committee</p> <p>Decision-making body of the LRDC (<i>Local Rural Development Community</i>), which has an advisory role in the selection of projects under the Axis III measures.</p>
<b>LAG:</b>	LEADER Local Action Group.
<b>LRDC:</b>	<p>Local Rural Development Community</p> <p>A public-private partnership (PPP as per Council Regulation 1698/2005) which is not selected as a LEADER community.</p>
<b>LRDO:</b>	<p>One organisation or one sole entrepreneur in each micro-region recognised by the Managing Authority (MA) in each micro-region specified by Act CVII of 2007 on the establishment, demarcation and modification procedure applicable to micro-regions. The Local Regional Development Offices take part in the implementation of Axis III and Axis IV measures.</p>
<b>MA:</b>	Managing Authority
<b>NHRDP:</b>	New Hungary Rural Development Programme
<b>RDEAI:</b>	Rural Development Education and Advisory Institute, founded by the Ministry of Agriculture and Rural Development, the Managing Authority of NHRDP.
<b>LRDC settlements:</b>	<p>Eligible settlements of the Axis III measures (except the measures “diversification into non-agricultural activities” and “training and information”) of the NHRDP which are not covered by a</p>

	Local Action Group.
<b>LEADER settlements:</b>	Eligible settlements for the implementation of Axis III and IV measures of the NHRDP (except for the measures “diversification into non-agricultural activities” and training), which are covered by a Local Action Group.
<b>Statistical micro-region:</b>	Sub-regional (NUTS IV) Unit in Hungary. There are 174 statistical micro-regions in Hungary.
<b>Local Community (PPP):</b>	<p>A community based on a Public-Private Partnership including business enterprises, non-governmental organisations, local municipalities and public institutions having a permanent territorial jurisdiction, with no legal personality, aimed at elaborating a territory-based development strategy.</p> <p>The local community covers a geographically and socio-economically coherent and integrated rural area. In those cases where the communities thus formed overlap with one another, the MA resolves this situation.</p>
<b>Registered Local Communities</b>	<p>Local Communities that fulfil the specific, preliminary recognition criteria to form Rural Development Action Groups.</p> <p>These criteria are the following: Private bodies should constitute at least 35% of LRDC membership, however, the recommended upper limit of non-public representation is 60%. The maximum limit of public representation in the decision making body of the Local Community is 40%.</p>
<b>Rural Development Action Groups with preliminary recognition:</b>	A local community selected by the MA, which is given the opportunity to create a development strategy for its territory.
<b>Local Rural Development Strategy (LRDS)</b>	A complex development strategy elaborated by the rural development action group with preliminary recognition. The exact methodology for the elaboration of

	the LRDS will be provided by the MA. The LDS plans to allocate resources to the non-horizontal measures of NHRDP III and the measure of Axis IV. This plan is carried out by LEADER Action Groups for period 2007-2013 and updated annually.
<b>National Rural Development Priorities:</b>	Rural policy guidelines defined by the Managing Authority of the New Hungary Rural Development Programme.
<b>Horizontal measures of Axis III:</b>	<p>Measures of Axis III that are not part of the Local Rural Development Strategy and the LRDPs. The implementation of these measures are independent from the programming process and the implementation procedure carried out by the LAGs or LRDCs. The horizontal measures of Axis III are:</p> <ul style="list-style-type: none"> <li>- Diversification into non-agricultural activities</li> <li>- Basic services for the economy and rural population The development of integrated service areas; the development of micro-regional transport services</li> <li>- Natura 2000 conservation plans</li> </ul>
<b>Eligible settlements for Axis III measures:</b>	<p>Settlements entitled to support under any of the measures of Axis III. (Except for the diversification into non-agricultural activities and training).</p> <p><b>Measures to diversify the rural economy:</b></p> <p>The geographical area affected by these measures includes settlements with a population numbering less than 5000 or having a population density of less than 100 persons per km<sup>2</sup>. Settlements of the Budapest agglomeration are not eligible under the measure.</p> <p><b>Measures to improve the quality of life in rural areas:</b></p> <p>The measures focus on the rural areas where the population of the settlements do</p>

	not exceed 5000 persons or with population density not exceeding 100 persons per km <sup>2</sup> , as well as on the outskirt areas of settlements where more than 2% of the population lives in outskirt areas. The settlements of the Budapest agglomeration, towns and centres of micro-regions are not eligible under the measure.
<b>Eligible settlements for the LEADER</b>	<p>Settlements entitled to support under any of the measures of Axis III and IV. (Except for the diversification into non-agricultural activities and training).</p> <p>The geographical area affected by the LEADER programme includes the settlements with a population numbering less than 10 000, or having a population density of less than 120 persons per km<sup>2</sup>. Settlements of the Budapest agglomeration are not eligible for aid.</p>
<b>The most disadvantaged micro-regions and settlements</b>	<p>Settlements that qualify as the most disadvantaged under the annex of Government Decree 240/2006 (30 November) on the list of regions that are beneficiaries of territorial development. These settlements include the ones in the list of settlements that are underdeveloped from a socio-economic and infrastructural aspect and the ones that suffer from an unemployment level that is significantly higher than the national average. They also include settlements that are disadvantaged or the most disadvantaged under Annex 2 of Government Decree 311/2007 (17 November) on the classification of beneficiary regions.</p>

### **The basic concept**

According to the New Hungary Rural Development Programme (NHRDP), subsidies under Axis III measures provide the possibility to develop the rural economy, improve the quality of life in rural areas and safeguard rural heritage.

Axis III measures also support incentive efforts and trainings for rural actors including rural development action groups with preliminary recognition. The measures of Axis III provide



training for the staff involved in the preparation and implementation of a local rural development strategy, as well as promotional events and leadership training.

In the NHRDP, almost 1 billion EUR is allocated to Axis III and Axis IV in order to fulfil the major development needs of rural territories.

The NHRDP reflects a clear policy decision: giving preference to the improvement of the rural economy in order to increase income-generating capacity and employment in rural areas. This very choice is also reflected by the allocation of resources in the Programme.

To ensure optimal use of the resources available from the European Agricultural Fund for Rural Development between 2007-2013, a new planning procedure and an attending institutional structure will be introduced in Hungary within the framework of the NHRDP for the implementation of Axis III measures. These two initiatives are equally based on partnership, territorial and a bottom-up approach, integrated planning methodology and solutions addressing local needs, emphasis on sustainability, strengthening decision-making abilities and competences on a local level, and moreover, involvement of resources other than those from the NHRDP.

### **AXIS III:development focuses**

Based on the above-mentioned guidelines, the general development priorities planned within the “rural development pillar”, AXIS III of the NHRDP are the following:

<b>1. Measures to diversify the rural economy</b>
<b>2. Measures to improve the quality of life in rural areas</b>
<b>3. Training and information</b>

The development planned in the framework of AXIS III will be realised through the following measures supported with funds earmarked for **the diversification of the rural economy** amounting to approximately 400 million EUR:

<b>1. Measures to diversify the rural economy</b>
▪ Diversification into non-agricultural activities
▪ Support for business creation and development
▪ Encouragement of tourism activities

The objectives of Axis III on the other hand will be realized through funding of measures to improve the quality of life in rural communities, for which the total amount available between 2007-2013 amounts to approximately 220 million EUR.

<b>2. Measures to improve the quality of life in rural areas</b>
▪ Basic services for the economy and rural population

<ul style="list-style-type: none"> <li>▪ Village renewal (regeneration) and development</li> </ul>
<ul style="list-style-type: none"> <li>▪ Conservation and sustainable development of the rural heritage, including the following two sub-measures: <ul style="list-style-type: none"> <li>- Conservation of rural heritage</li> <li>- Preparation of Natura 2000 maintenance/development plans</li> </ul> </li> </ul>

During the course of programme planning it is important to consider the lack or defectiveness of knowledge and capacities that could possibly hinder the preparation of appropriate development plans at the local level and could thus negatively impact the effective utilisation of funds. The following measures aim to counteract those disadvantages:

<b>3. Training and information (human resource and capacity development)</b>
<ul style="list-style-type: none"> <li>▪ Provision of training and information to businesses and entrepreneurs operating in the areas covered by funding from Axis III.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Skills acquisition and stimulating the preparation and implementation of local development strategies.</li> </ul>

The total amount available for the above mentioned measures between 2007 and 2013 will be approximately 70 million EUR.

The main stages of setting up the structures needed for the implementation of the delivery mechanism and the main characteristics of the mechanism.

<b>I THE SELECTION OF LEADER ACTION GROUPS AND LOCAL COMMUNITIES</b>	
<p>Setting up the structures:</p> <p>May 2007 – 10 October 2007</p>	<ol style="list-style-type: none"> <li>1. LRDOs have to be selected at micro-regional level (167 out of 168)</li> <li>2. LRDOs help the local community organising the local communities by providing encouragement and capacity-building to the local partnerships.</li> <li>3. Those legal entities can also be the members of Local Communities which fulfil the criteria for the LEADER concerning the proportion of civil organisations, businesses and municipalities.</li> <li>4. More local communities can be formed in the same geographical area, however the aim is to have one potential local community per territory.</li> <li>5. The MA selects the local rural development communities</li> </ol>

<p>Local communities: Selection:</p> <p>10 October 2007 – January 2008</p>	<p>with preliminary recognition based on the experience and representation of its members.</p> <p>6. In case of overlap between the Local Communities, the MA will decide on the status of “overlapping areas”, that is, which rural development action group with preliminary recognition these areas will belong to after consulting with the local actors. The members of local communities that are not selected but represent the same area will be given an opportunity to join a local rural development action group with preliminary recognition.</p>
<p><b>II LOCAL PLANNING</b></p>	
<p>Local planning:</p> <p>11 January 2008 to September 2008</p> <p>Selection:</p> <p>July – September 2008</p>	<p>7. The horizontal measures of Axis III can only be opened after the selection of local rural development action groups with preliminary recognition.</p> <p>8. The local rural development action groups with preliminary recognition prepare the local rural development strategy for the territory they cover with the help of the LRDO, which provides consulting and capacity-building to the local rural development action groups with preliminary recognition. The MA will inform the local rural development action groups with preliminary recognition of the financial framework broken down for each local community, which is calculated based on objective criteria.</p> <p>9. The MA selects around 50 LEADER Action Groups from the local rural development action groups with preliminary recognition countrywide.</p> <p>10. The members of a rural development action group with preliminary recognition form a non-profit legal entity before they submit their local rural development strategy to the Managing Authority.</p>

	<p>11. The founding members of the non-profit organisation elect the decision-making body of the organisation (the Decision-Making Committee).</p> <p>12. In non-LEADER areas, the rural development action groups with preliminary recognition will continue to operate as local communities and they will execute their rural development plan.</p>
<b>III. IMPLEMENTATION</b>	
	<p>13. The LEADER local action groups take an active part in the implementation. The working organisation of the non-profit entity prepares the applications for evaluation. The ARDA is responsible for the administrative supervision of the evaluation procedure. The working organisation provides ongoing expert consultancy to the final beneficiaries in order to help them in submitting their application.</p> <p>14. The Local Community will make a proposal in the course of the final evaluation procedure. The working organisation provides ongoing expert consultancy to the final beneficiaries in order to help them in submitting their application.</p>

The following table summarises the tasks and responsible authorities for the implementation of the delivery mechanism:

<b>Activities, steps taken</b>	<b>Responsible body</b>	<b>Outcome</b>
Communication	LRDO, Managing Authority	Informed rural actors
Formation of local rural development communities	Rural actors with the support of the LRDO	At least 70 LEADER rural development action groups with preliminary recognition, covering most of the territory of

		Hungary
Elaboration of the local rural development strategies	Rural development action group with preliminary recognition and the LRDO (as a consultant)	At least 70 local rural development strategies
Selection of the LEADER local action groups	Managing Authority	At least 50 LEADER local action groups selected
Elaboration of the local rural development strategy	LRDO, local rural development community	Total coverage of the rural but non-LEADER territories of Hungary by integrated development strategies.
Local general info-point for rural actors	LRDO	Well-informed rural actors
Submission of project proposals for the measures of Axis III	The applications are to be submitted to the Agricultural and Rural Development Agency	One-stop system
Evaluation of project proposals	100% of the applications under the Axis III horizontal measures are evaluated by the ARDA.	
	<p>The applications under Axis III measures in LEADER settlements are evaluated:</p> <ul style="list-style-type: none"> <li>- 100% by the LEADER local action groups.</li> <li>- The ARDA only checks applications from an administrative aspect.</li> </ul>	

	<p>The applications under Axis III measures in non-LEADER settlements are evaluated as follows:</p> <ul style="list-style-type: none"> <li>- The Local Community specifies a proposal regarding the evaluation.</li> <li>- The ARDA makes the final decision.</li> </ul>	
	<p>About Axis IV projects</p> <ul style="list-style-type: none"> <li>- 100% of applications are evaluated by the LEADER local action groups.</li> <li>- The ARDA only checks applications from an administrative aspect.</li> </ul>	

## **Local institutional framework**

A new institutional structure must be set up in order to ensure the proper implementation of the Axis III measures and the LEADER Programme, as well as the establishment of well-functioning local partnerships with satisfactory capacities to create the LEADER strategy. This structure consists of the following main elements:

### **Local Rural Development Office (LRDO):**

Local Rural Development Offices are selected by the Managing Authority. The offices provide services to rural actors (businesses, NGOs and municipalities), preferably located in the eligible settlements of the micro-region. One office has been selected in each micro-region.

The scope of authority of the Local Rural Development Offices covers the total area of the settlements eligible for funding from Axis III and LEADER measures.

LRDOs are legal entities/organisations capable of stimulating rural actors and having the necessary skills and capacities to fulfil the requirements and tasks that are required of them.

The LRDOs are selected through a national open application procedure.

The LRDO performs its tasks following the guidelines given by the MA & MARD Rural Development, Educational and Advisory Institute (MARD-RDEAI). LRDOs also receive professional support from the MA and training from the MARD-RDEAI as of May 2007. The first phase of trainings lasted until early July. One of the prerequisites for an LRDO to start its operations in June 2007 was the successful completion of an exam by the head of the office at the end of the first training course.

The Local Rural Development Offices perform a number of tasks related to organising Local Communities, communication and provision of information, encouragement, capacity-building, preparation support for project development and project quality assurance. They have a key role in setting up the Local Communities.

The tasks of LRDOs are the following:

- LRDOs encourage the formation of Local Communities by providing information and guidance to Local Community members in their respective micro-regions.
- LRDOs maintain ongoing liaison with all rural actors in the statistical micro-regions.
- LRDOs carry out the registration procedure of the members of the Local Communities.
- LRDOs provide technical support to rural development action groups with preliminary recognition in elaborating the Local Rural Development Strategy.
- The LRDOs provide integrated and detailed information services to the Local Communities, to the rural development action groups with preliminary recognition, to the selected LAGs and the LRDCs and to all rural actors within their territory.
- The LRDOs take part in the preparation the Local Rural Development Strategies (LRDS), and with the involvement of the LRDC, rework non-selected LEADER strategies.
- LRDOs collect data and information at the local level and provide information to the MA regularly.
- LRDOs take part in the setting up of the Hungarian National Rural Network planned for 2008.

- LRDOs carry out a number of communication tasks to ensure the smooth implementation of the NHRDP and the LRDS. Their tasks include but are not limited to the preparation of the local NHRDP newsletter, an electronic newsletter, the compilation of a database of local, national, and international contacts and preparation of publications.
- Other relevant tasks as instructed by the MA.

## **Local communities**

In line with Article 59 of Council Regulation (EC) 1698/2005, local community development in Hungary will be based on Public-Private Partnerships (PPPs). These communities will have a territorial scope of the settlements which are eligible for support under the measures of Axis IV.

The members of Local Communities can be the following legal entities:

- non-government organisations,
- churches, other religious legal entities,
- businesses, and
- local governments (municipalities).

The share of the public sector may not exceed 40% in the membership of the local community. The maximum limit of public representation in the decision making body of the Local Community is 40%.

The following rules apply on the determination of the territory covered by the Local Communities:

- The decision of the representative board of the local municipality can give a settlement membership in the rural development action group with preliminary recognition;
- The decision of three non-governmental organisations or business entities (or the mix of them) can give a settlement with more than 500 inhabitants membership in the rural development action group with preliminary recognition.
- The decision of two non-governmental organisations or business entities (or the mix of them) can make a settlement with less than 500 inhabitants membership in the rural development action group with preliminary recognition.

Those Local Communities registered at the LRDO and fulfilling the criteria of the LEADER programme (LEADER principles) are the Registered Local Communities (RLC). These RLCs take part in the pre-selection process, whereby they can obtain the opportunity to elaborate local plans for the territory they cover.



After the pre-selection, the selected Registered Local Communities are called rural development action groups with preliminary recognition. These rural development action groups with preliminary recognition elaborate the potential Local Rural Development Strategy (LRDS) for their territory.

Those rural development action groups with preliminary recognition whose LRDS has been selected by the Managing Authority are called LEADER Local Action Groups.

The Local Rural Development Communities are those potential LEADER Groups which have not been selected as LEADER Local Action Groups.

### **Local planning: Local Rural Development Strategy**

The rural development action group with preliminary recognition develops the Local Rural Development Strategy for its own territory. This development strategy is an integrated development policy document elaborated with the involvement of the rural actors, especially with the members of the rural development action group with preliminary recognition.

The methodology and structure of the Local Rural Development Strategy will be elaborated by the Managing Authority. One of the guiding principles of the elaboration of the document is the integration of the development needs of the territory covered. The scope of development in the LEADER Programme extends to all types of investment- and non-investment projects.

In the Local Rural Development Strategy, weight has to be given to the baseline analysis, to the strategic objectives, to the measures aimed to be opened and to the planned resource allocation. The elaboration of the Local Rural Development Strategy will be supported by the LRDOs, the MARD-READI and the MA.

The MA will provide feedback on the Local Rural Development Strategy. Based on the comments of the MA, a revised version of the Local Rural Development Strategy has to be elaborated. The MA then selects at least 50 of the revised Strategies.

### **The selected Local Rural Development Strategies.**

More time will be available to the LRDCs for the revision of the **Local Rural Development Strategies** which were not selected after the selection of the LAGs. In the process, the Local Rural Development Strategy measures are limited by the measures in Axis III.

**Annex 23: Settlements with a population of less than 10 000 residents, or with a population density of less than 120 inhabitants/km<sup>2</sup> (excluding the settlements in the agglomeration of Budapest, in case of settlements signed with only the peripheries are eligible)**

Aba	Alcsútdoboz	Andrásfa	Babót
Abádszalók	Aldebr	Annavölgy	Bácsalmás
Abaliget	Algy	Apácatorna	Bácsbokod
Abasár	Alibánfa	Apagy	Bácsborsód
Abaújalpár	Almamellék	Apaj	Bácsszentgyörgy
Abaújkér	Almásfüzit	Aparhant	Bácssz 1 s
Abaújlak	Almásháza	Apátfalva	Badacsonytomaj
Abaújszántó	Almáskamarás	Apátistvánfalva	Badacsonytördemic
Abaújszolnok	Almásskeresztúr	Apátvarasd	Bag
Abaújvár	Álmosd	Apc	Bagamér
Abda	Alsóberecki	Áporka	Baglad
Abod	Alsóbogát	Apostag	Bagod
Abony	Alsódobsza	Aranyosapáti	Bágyogszovát
Ábrahámhegy	Alsógagy	Aranyosgadány	Baj
Ács	Alsómocsolád	Arka	Baja
Acsa	Alsónána	Arló	Bajánsenye
Acsád	Alsónemesapáti	Arnót	Bajna
Acsalag	Alsónyék	Árokt	Bajót
Ácsteszer	Alsóörs	Árpádhalom	Bak
Adács	Alsópáhok	Árpás	Bakháza
Ádánd	Alsópetény	Ártánd	Bakóca
Adásztevel	Alsórajk	Ásotthalom	Bakonszeg
Adony	Alsóregmec	Ásványráró	Bakonya
Adorjánháza	Alsószerterzsébet	Aszaló	Bakonybánk
Adorjás	Alsószentiván	Ászár	Bakonybél
Ág	Alsószentmárton	Aszód	Bakonycsernye
Ágasegyháza	Alsószölnök	Aszóf	Bakonygyirót
Ágfalva	Alsószuha	Áta	Bakonyjákó
Aggtelek	Alsótelekes	Átány	Bakonykoppány
Agyagosszergény	Alsótold	Atkár	Bakonykúti
Ajak	Alsóújlak	Attala	Bakonynána
Aka	Alsóvadász	Babarc	Bakonyoszlop
Akasztó	Alsózsolca	Babarcs 1 s	Bakonypéterd
Alacska	Ambrózfalva	Babócsa	Bakonypölöske
Alap	Anarcs	Bábolna	Bakonyság
Alattyán	Andocs	Bábonymegyer	Bakonysárkány
Albertirsa	Andornaktálya	Babosdöbréte	Bakonyszentiván

: only peripheries of settlements are eligible

Bakonyszentkirály	Balogunyom	Bed	Bezenye
Bakonyszentlászló	Balotaszállás	Bejczygyertyános	Bezeréd
Bakonyszombathely	Balsa	Békás	Bezi
Bakonyszücs	Bálványos	Bekecs	Bicsérd
Bakonytamási	Bana	Békés	Bihardancsháza
Baks	Bánd	Békéscsaba	Biharkeresztes
Baksa	Bánfa	Békéssámson	Biharnagybajom
Baktakék	Bánhorváti	Békésszentandrás	Bihartorda
Baktalórántháza	Bánk	Bekölce	Biharugra
Baktüttös	Bánokszentgyörgy	Bélapátfalva	Bikács
Balajt	Bánréve	Bélavár	Bikal
Balástya	Bár	Belecska	Biri
Balaton	Barabás	Beled	Birján
Balatonakali	Baracs	Beleg	Bisse
Balatonalmádi	Baracska	Belezná	Boba
Balatonberény	Báránd	Bélmegyer	Bocfölde
Balatonboglár	Baranyahídvég	Beloianisz	Boconád
Balatoncsicsó	Baranyajen	Bels sárd	Bócsa
Balatonederics	Baranyaszentgyörgy	Belvárdgyula	Bocska
Balatonendréd	Barbacs	Benk	Bocskai kert
Balatonfenyves	Barcs	Bénye	Boda
Balatonf. kajár	Bárdudvarnok	Bér	Bodajk
Balatonföldvár	Barlahida	Bérbaltavár	Bodmér
Balatonf. zf	Bárna	Bercel	Bodolyabér
Balatongyörök	Barnag	Beregdaróc	Bodonhely
Balatonhenye	Bársonyos	Beregsurány	Bodony
Balatonkenese	Basal	Berekböszörmény	Bodorfa
Balatonkeresztúr	Baskó	Berekfürd	Bodrog
Balatonlelle	Báta	Beremend	Bodroghalom
Balatonmagyaród	Bátaapáti	Berente	Bodrogkeresztúr
Balatonmáriafürd	Bátaszék	Beret	Bodrogkisfalud
Balaton szöd	Baté	Berettyóújfalu	Bodrogolaszi
Balatonrendes	Bátmonostor	Berhida	Bódvalenke
Balatonszabadi	Bátor	Berkenye	Bódvarákó
Balatonszárszó	Bátorliget	Berkesd	Bódvaszilás
Balatonszemes	Battonya	Berkesz	Bogács
Balatonszentgyörgy	Bátya	Bernecebaráti	Bogád
Balatonszepezd	Batyk	Berzék	Bogádmindszent
Balatonsz. l s	Bázakerettye	Berzence	Bogdása
Balatonudvari	Bazsi	Besence	Bogyiszló
Balatonújlak	Béb	Beseny d	Bogyoszló
Balatonvilágos	Becsehely	Beseny telek	Bojt
Balinka	Becske	Besenyszög	Bókaháza
Balkány	Becskeháza	Besny	Bokod
Ballószög	Becsvölgye	Beszterec	Bokor
Balmazújváros	Bedegkér	Bezedek	Boldog

: only peripheries of settlements are eligible

Boldogasszonyfa	Búcsúszentlászló	Csanádpalota	Cserkút
Boldogk újfalu	Bucsuta	Csánig	Csernely
Boldogk váralja	Bugac	Csány	Cserszegtomaj
Boldva	Bugacpusztaháza	Csányoszró	Csertalakos
Bolhás	Bugyi	Csanytelek	Csert
Bolhó	Buj	Csapi	Csesznek
Bóly	Buják	Csapod	Csesztreg
Boncodföldre	Buzsák	Csárdaszállás	Csesztve
Bonnya	Bük	Csarnóta	Csetény
Bonyhádvarasd	Bükkábrány	Csaroda	Csévharaszt
Bordány	Bükkaranyos	Császár	Csibrák
Borgáta	Bükkmogyorósd	Császártöltés	Csikéria
Borjád	Bükkösd	Császló	Csikóst t s
Borota	Bükkszék	Csátalja	Csikvánd
Borsfa	Bükkszenterzsébet	Csatár	Csincse
Borsodbóta	Bükkszentkereszt	Csataszög	Csipkerek
Borsodgeszt	Bükkszentmárton	Csatka	Csitár
Borsodivánka	Bükkzsérc	Csávoly	Csobád
Borsodnádasd	Bürüs	Csebény	Csobaj
Borsodszentgyörgy	Büssü	Csécse	Csókak
Borsodszirák	Büttös	Csegöld	Csokonyavisonta
Borsosberény	Cák	Csehbánya	Csokvaomány
Borszörcsök	Cakóháza	Csehi	Csolnok
Borzavár	Cece	Csehimindszent	Csolyospálos
Bosta	Cégénydányád	Csém	Csoma
Botpalád	Cegléd	Csem	Csombárd
Botykapeterd	Ceglédbercel	Csempeszkopács	Csongrád
Bozsok	Cered	Csengele	Csonkahegyhát
Bozzai	Chernelházadamonya	Csenger	Csonkamindszent
Bózsva	Cibakháza	Csengersima	Csopak
B	Cigánd	Csengerújfalu	Csór
B cs	Cikó	Cseng d	Csorna
Böde	Cirák	Csénye	Csorvás
Bödeháza	Csabacs d	Csenyéte	Csót
Bögöt	Csabaszabadi	Csép	Csöde
Bögöte	Csabdi	Csépa	Csögle
Böhönye	Csabrendek	Csepreg	Csök
Bököny	Csáfordjánosfa	Csér	Csökölly
Bölcske	Csaholc	Cserdi	Csömend
B ny	Csajág	Cserénfa	Csömödér
Börcs	Csákány	Cserépfalu	Csönge
Börzönce	Csákánydoroszló	Cserépváralja	Csörnyeföld
B sárkány	Csákberény	Cserháthaláp	Csörötnék
B szénfa	Csákvár	Cserhátsurány	Cs sz
Bucsa	Csanádalberti	Cserhátszentiván	Cs vár
Bucu	Csanádapáca	Cserkesz l	Csurgó

: only peripheries of settlements are eligible

Csurgónagymarton	Dobronhegy	Dunapataj	Egyházasrádóc
Cún	Dóc	Dunaremete	Elek
Dabas	Domaháza	Dunaszeg	Ellend
Dabronc	Domaszék	Dunaszekcs	El szállás
Dabrony	Dombegyház	Dunaszentbenedek	Em d
Dad	Dombiratos	Dunaszentgyörgy	Encs
Dág	Dombrád	Dunaszentmiklós	Encsencs
Dáka	Domony	Dunaszentpál	Endrefalva
Dalmand	Domoszló	Dunasziget	Endr c
Damak	Dormánd	Dunatetétlen	Enese
Dámóc	Dorogháza	Dunavecse	Enying
Dánszentmiklós	Dozmat	Dusnok	Eperjes
Dány	Döbörhegy	Dúzs	Eperjeske
Daraboshegy	Döbröce	Eberg c	Eplény
Darány	Döbrököz	Ebes	Epöl
Darnó	Döbrönte	Écs	Ercsi
Darnózseli	Döge	Ecséd	Erd bénye
Daruszentmiklós	Dömös	Ecseg	Erd horváti
Darvas	Dömsöd	Ecsefalva	Erd kövesd
Dávod	Dör	Ecseny	Erd kürt
Debercsény	Dörgicse	Edde	Erd smárok
Debrecen	Döröske	Edelény	Erd smecske
Debréte	Dötk	Edve	Erd tarcsa
Decs	Dövény	Egerág	Erd telek
Dédestapolcsány	Drágszél	Egeralja	Erk
Dég	Drávacsehi	Egeraracsa	Érpatak
Dejtár	Drávacsepely	Egerbakta	Érsekcsanád
Demecser	Drávafok	Egerbocs	Érsekhalma
Demjén	Drávagárdony	Egercsehi	Érsekvadkert
Dencsháza	Drávaiványi	Egerfarmos	Értény
Dénesfa	Drávakeresztúr	Egerlöv	Erzsébet
Derecske	Dráwapalkonya	Egerszalók	Esztár
Derekegyház	Dráwapiski	Egerszólát	Eszteregnye
Deszk	Drávaszabolcs	Égerszög	Esztergályhorváti
Detek	Drávaszerdahely	Egervár	Ete
Detk	Drávasztára	Egervölgy	Etes
Dévaványa	Drávatamási	Egyed	Etyek
Devecser	Drégelypalánk	Egyek	Fábiánháza
Dinnyeberki	Dubicsány	Egyházasdengeleg	Fábiánsebestyén
Diósberény	Dudar	Egyházasfalu	Fácánkert
Diósjen	Duka	Egyházasgerge	Fadd
Dióskál	Dunaalmás	Egyházasharaszti	Fáj
Diósvizsló	Dunaegyháza	Egyházashetye	Fajsz
Doba	Dunafalva	Egyházashollós	Fancsal
Doboz	Dunaföldvár	Egyházaskesz	Farád
Dobri	Dunakiliti	Egyházaskozár	Farkasgyep

: only peripheries of settlements are eligible

Farkaslyuk	Fert endréd	Galgaguta	Gógánfa
Farmos	Fert homok	Galgagyörk	Golop
Fazekasboda	Fert rákos	Galgahévíz	Gomba
Fedémes	Fert szentmiklós	Galgamácsa	Gombosszeg
Fegyvernek	Fert széplak	Gálosfa	Gór
Fehérgyarmat	Fiad	Galvács	Gordisa
Fehértó	Filkeháza	Gamás	Gosztola
Fehérváracsurgó	Fityeház	Ganna	Gödre
Feked	Fokt	Gánt	Gölle
Feketeerd	Folyás	Gara	Gömörsz l s
Felcsút	Fonó	Garáb	Gönc
Feldebr	Fony	Garabonc	Göncruszka
Felgy	Fonyód	Garadna	Göny
Felpéc	Forráskút	Garbolc	Görbeháza
Fels berecki	Forró	Gárdony	Görcsöny
Fels csatár	Földeák	Garé	Görcsönydoboka
Fels dobsza	Földes	Gasztony	Görgeteg
Fels egerszeg	F nyed	Gátér	G sfa
Fels gagy	Fulókércs	Gávavencsell	Grábóc
Fels jánosfa	Furta	Géberjén	Gulács
Fels kelecseány	Füle	Gecse	Gutorfölde
Fels lajos	Fülesd	Géderlak	Gyalóka
Fels marác	Fülöp	Gégény	Gyanógeregye
Fels mocsolád	Fülöpháza	Gelej	Gyarmat
Fels nána	Fülöpkajab	Gelénes	Gyékényes
Fels nyárad	Fülöpszállás	Gellénháza	Gyenesdiás
Fels nyék	Fülpösdaróc	Gelse	Gyepükaján
Fels örs	Fürged	Gelsesziget	Gyermely
Fels páhok	Füzér	Gemzse	Gyód
Fels petény	Füzérkajata	Gencsapáti	Gyomaendr d
Fels rajk	Füzérkomlós	Gérce	Gyóró
Fels regmec	Füzérradvány	Gerde	Gyömöre
Fels szenterzsébet	Füzesabony	Gerendás	Gyöngyfa
Fels szentiván	Füzesgyarmat	Gerényes	Gyöngyösfalu
Fels szentmárton	F z völgy	Geresdlak	Gyöngyöshalász
Fels szölnök	Gáborján	Gerjen	Gyöngyösmellék
Fels tárkány	Gáborjánháza	Gersekarát	Gyöngyösoroszi
Fels telekes	Gacsály	Geszt	Gyöngyöspata
Fels told	Gadács	Gesztely	Gyöngyössolymos
Fels vadász	Gadány	Geszteréd	Gyöngyöstarján
Fels zsolca	Gadna	Gétye	Gyönk
Fényeslitke	Gádoros	Gibárt	Gy rasszonyfa
Feny f	Gagyapáti	Gic	Györe
Ferencszállás	Gagybátor	Gige	Györgyarló
Fert boz	Gagyvendégi	Gilvánfa	Györköny
Fert d	Galambok	Girincs	Gy rladamér

: only peripheries of settelmes are eligible

Gy röcske	Háromhuta	Hernádszentandrás	Hosztót
Gy rság	Harsány	Hernádszurdok	Hottó
Gy rsövényház	Hárskút	Hernádvécse	H gyész
Gy rszemere	Harta	Hernyék	Hövej
Gy rtelek	Hásságy	Hét	Hugyag
Gy rújbarát	Hédervár	Hetefejércse	Hunya
Gy rújfalu	Hedrehely	Hetes	Hunyadfalva
Gy rvár	Hegyesd	Hetvehely	Husztót
Gy rzámoly	Hegyeshalom	Hetyef	Ibafa
Gyugy	Hegyfalu	Heves	Iborfia
Gyula	Hegyháthodász	Hevesaranyos	Ibrány
Gyulaháza	Hegyhátmaróc	Hevesvezekény	Igal
Gyulaj	Hegyhátsál	Hévíz	Igar
Gyulakeszi	Hegyhátszentjakab	Hévízgyörk	Igrici
Gyúró	Hegyhátszentmárton	Hidas	Iharos
Gyügye	Hegyhátszentpéter	Hidasnémeti	Iharosberény
Gyüre	Hegy	Hidegkút	Ikervár
Gy r s	Hegymagas	Hidegség	Iklad
Hács	Hegymeg	Hidvégardó	Iklanberény
Hagyárosbörönd	Hegyszentmárton	Himesháza	Iklódbörd ce
Hahót	Héhalom	Himod	Ikrény
Hajdúbagos	Hejce	Hirics	Iliny
Hajdúböszörmény	Hej bába	Hobol	Ilk
Hajdúdorog	Hej keresztúr	Hodász	Illocska
Hajdúnánás	Hej kürt	Hódmez vásárhely	Imola
Hajdúsámson	Hej papi	Hollád	Imrehegy
Hajdúszoboszló	Hej szalonta	Hollóháza	Ináncs
Hajdúszovát	Helesfa	Hollók	Inárcs
Hajmás	Helvécia	Homokbödöge	Inke
Hajmáskér	Hencida	Homokkomárom	Ipacsfa
Hajós	Hencse	Homokmégy	Ipolydamásd
Halastó	Hercegekút	Homokszentgyörgy	Ipolyszög
Halászi	Hercegszántó	Homorúd	Ipolytarnóc
Halimba	Heréd	Homrogd	Ipolytölgyes
Halma	Héreg	Hont	Ipolyvece
Halmajugra	Herencsény	Horpács	Iregszemcse
Halogy	Herend	Hort	Irota
Hangács	Heresznye	Hortobágy	Ispánk
Hangony	Hermánszeg	Horváthertelend	Istenmezeje
Hantos	Hernád	Horvátlöv	Istvándi
Harasztifalu	Hernádb d	Horvátzsidány	Iszkaszentgyörgy
Harc	Hernádcéce	Hosszúhetény	Iszkáz
Harka	Hernádkak	Hosszúpályi	Isztimér
Harkakötöny	Hernádkércs	Hosszúperesztég	Ivád
Harkány	Hernádnémeti	Hosszúvíz	Iván
Háromfa	Hernádpetri	Hosszúvölgy	Ivánbattyán

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Ivác	Kacsóta	Karakó	Kemendollár
Iváncsa	Kadarkút	Karakószörcsök	Kemenesh gyész
Ivándárda	Kajárpéc	Karancsalja	Kemeneskápolna
Izmény	Kajászó	Karancsberény	Kemenesmagasi
Izsák	Kajdacs	Karancskeszi	Kemenesmihályfa
Izsófalva	Kakasd	Karancslapujt	Kemenespálfa
Jágónak	Kákics	Karancsság	Kemenessömjén
Ják	Kakucs	Kárász	Kemenesszentmárton
Jakabszállás	Kál	Karcag	Kemenesszentpéter
Jákfa	Kalaznó	Karcsa	Keménfa
Jákfalva	Káld	Kardos	Kémes
Jákó	Kálló	Kardoskút	Kemestaródfa
Jánd	Kallósd	Karmacs	Kemse
Jánkmajtis	Kállósemjén	Károlyháza	Kenderes
Jánoshalma	Kálmánca	Karos	Kenéz
Jánosháza	Kálmánháza	Kartal	Kenézl
Jánoshida	Kálócfa	Kásád	Kengyel
Jánossomorja	Káloz	Kaskantyú	Kenyeri
Járdánháza	Kám	Kastélyosdombó	Kercaszomor
Jármí	Kamond	Kaszaper	Kercseliget
Jásd	Kamut	Kaszó	Kerecsend
Jászágó	Kánó	Katádfa	Kerecseny
Jászsós-szentgyörgy	Kántorjánosi	Katafa	Kerekegyháza
Jászapáti	Kány	Kátoly	Kerekharaszt
Jászárokszállás	Kánya	Katymár	Kereki
Jászboldogháza	Kányavár	Káva	Kerékteleki
Jászdózsa	Kapolcs	Kávás	Keresztéte
Jászfelső-szentgyörgy	Kápolna	Kazár	Kerkabarabás
Jászfényszaru	Kápolnásnyék	Kázmárk	Kerkafalva
Jászivány	Kapoly	Kazsok	Kerkakutas
Jászjókóhalma	Kaposf	Kecel	Kerkáskápolna
Jászkarajen	Kaposgyarmat	Kecskéd	Kerkaszentkirály
Jászkisér	Kaposhomok	Kecskemét	Kerkateskánd
Jászládány	Kaposkeresztúr	Kehidakustány	Kérsemjén
Jászszentandrás	Kaposmér	Kék	Kerta
Jászszentlászló	Kapospula	Kékcse	Kertészsziget
Jásztelek	Kaposszekcs	Kéked	Keszeg
Jéke	Kaposszerdahely	Kékesd	Kesznyéten
Jen	Kaposújlak	Kékkút	Kesz hidegkút
Jobaháza	Kaposvár	Kelebia	Keszthely
Jobbágyi	Káptalanfa	Keléd	Kesztölc
Jósvaf	Káptalantóti	Kelemér	Keszü
Juta	Kapuvár	Kéleshalom	Kétdobony
Kaba	Kára	Kelevíz	Kétegyháza
Kacorlak	Karácsond	Kemecse	Kéthely
Kács	Karád	Kemence	Kétpó

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Kétsoprony	Kisherend	Kistótfalu	Kökény
Kétújfalu	Kishódos	Kisújszállás	K kút
Kétvölgy	Kishuta	Kisunyor	Kölcse
Kéty	Kisigmánd	Kisvarsány	Kölesd
Kevermes	Kisjakabfalva	Kisvásárhely	Kölked
Kilimán	Kiskassa	Kisvaszar	Köml
Kimle	Kiskinizs	Kisvejke	Köml d
Kincsesbánya	Kiskorpád	Kiszombor	Kömör
Királd	Kisköre	Kiszsídány	Kömpöc
Királyegyháza	Kiskörös	Klárafalva	Környe
Királyhegyes	Kiskunfélegyháza	Kocs	Köröm
Királyszentistván	Kiskunhalas	Kocsér	Köröshegy
Kisapáti	Kiskunlacháza	Kocsola	Körösüladány
Kisapostag	Kiskunmajsa	Kocsord	Körösnyárharsány
Kisar	Kiskutas	Kóka	Köröstarcsa
Kisasszond	Kisláng	Kokad	K röstetetlen
Kisasszonyfa	Kisléta	Kolontár	Körösújfalva
Kisbábot	Kislippó	Komádi	Körösszakál
Kisbágyon	Kisl d	Komjáti	Körösszegapáti
Kisbajcs	Kismányok	Komló	K szárhegy
Kisbajom	Kismarja	Komlódtótfalu	K szegdoroszló
Kisbárapáti	Kismaros	Komlósd	K szegpaty
Kisbárhány	Kisnamény	Komlóska	K szegszerdahely
Kisbér	Kisnána	Komoró	Kötcse
Kisberény	Kisnémedi	Kompolt	Kötegyán
Kisberzseny	Kisnyárad	Kondó	K telek
Kisbeszterce	Kispalád	Kondorfa	K vágóörs
Kisbodak	Kispáli	Kondoros	K vágósz l s
Kisbucsa	Kispirit	Kóny	K vágótöttös
Kisbudmér	Kisrákos	Konyár	Köveg
Kiscséc	Kisrécse	Kópháza	Köveskál
Kiscsehi	Kisrosvágy	Koppányszántó	Krasznokvajda
Kiscs sz	Kissikátor	Korlát	Kulcs
Kisdér	Kissomlyó	Koronc	Kunadacs
Kisdobsza	Kisszállás	Körös	Kunágota
Kisdombegyház	Kisszékely	Kosd	Kunbaja
Kisdorog	Kisszekeres	Kóspallag	Kunbaracs
Kisecset	Kisszentmárton	Kótaj	Kuncsorba
Kisfalud	Kissziget	Kovácsida	Kunfehértó
Kisfüzes	Kissz l s	Kovácsszénája	Kunhegyes
Kisgörb	Kistamási	Kovácsvágás	Kunmadaras
Kisgyalán	Kistapolca	Kozárd	Kunpeszér
Kisgy r	Kistelek	Kozármisleny	Kunszállás
Kishajmás	Kistokaj	Kozmadombja	Kunszentmárton
Kisharsány	Kistolmács	Köblény	Kunszentmiklós
Kishartyán	Kistormás	Köcsk	Kunsziget

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Kup	Letenye	Magyarbóly	Máriapócs
Kupa	Letkés	Magyarcsanád	Markaz
Kurd	Levél	Magyardombegyház	Márkháza
Kurityán	Levelek	Magyaregregy	Márkó
Kustánszeg	Libickozma	Magyaregres	Markóc
Kutas	Lickóvadamos	Magyarföld	Markotabödöge
Kutasó	Liget	Magyargéc	Maróc
Kübekháza	Ligetfalva	Magyargencs	Marócsa
Küls sárd	Lipót	Magyarhertelend	Márok
Küls vat	Lippó	Magyarhomorog	Márokföld
Küngös	Liptód	Magyarkeresztúr	Márokpapi
Lábatlan	Lispesztadorján	Magyarkeszi	Maroslele
Lábod	Liszó	Magyarlak	Mártély
Lácacséke	Litér	Magyarlukafa	Martf
Lad	Litka	Magyarmecske	Martonfa
Ladánybene	Litke	Magyarnádalja	Martonvásár
Ládbeseny	Lócs	Magyarnándor	Martonyi
Lajoskomárom	Lókút	Magyarpolány	Mátételke
Lajosmizse	Lónya	Magyarsarlós	Mátraballa
Lak	Lórév	Magyarszecs d	Mátradereske
Lakhegy	Lothárd	Magyarszék	Mátramindszent
Lakitelek	Lovas	Magyarszentmiklós	Mátranovák
Lakócsa	Lovasberény	Magyarszerdahely	Mátraszele
Lánycsók	Lovászhetény	Magyarszombatfa	Mátraszentimre
Lápaf	Lovászi	Magyartelek	Mátrasz l s
Lapáncsa	Lovászpátóna	Majs	Mátraterenye
Laskod	L kösháza	Makád	Mátraverebély
Lasztonya	L rinci	Makkoshotyka	Mátyásdomb
Látrány	Löv	Maklár	Matty
Lázi	Löv petri	Makó	Mátyus
Leányvár	Lucfalva	Malomsok	Máza
Lébény	Ludányhalászi	Mályi	Mecseknádasd
Legénd	Ludas	Mályinka	Mecsekpölöske
Legyesbénye	Lukácsháza	Mánd	Mecsér
Léh	Lulla	Mándok	Medgyesbodzás
Lénárddaróc	Lúzsok	Mánfa	Medgyesegyháza
Lendvadedes	Mád	Mány	Medina
Lendvajakabfa	Madaras	Maráza	Meggyeskovácsi
Lengyel	Madocsa	Marcalgergelyi	Megyaszó
Lengyeltóti	Maglóca	Marcali	Megyehíd
Lenti	Mágocs	Marcalt	Megyer
Lepsény	Magosliget	Márfa	Méhkerék
Lesencefalu	Magy	Máriaalom	Méhtelek
Lesenceistván	Magyaralmás	Máriakálnok	Mekényes
Lesencetomaj	Magyaratád	Máriakéménd	Mélykút
Létavértes	Magyarbánhegyes	Márianosztra	Mencshely

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Mende	Miklósi	Murarátka	Nagyigmánd
Méra	Mikófalva	Muraszemenye	Nagyiván
Merenye	Mikóháza	Murga	Nagykálló
Mérges	Mikosszéplak	Murony	Nagykamarás
Mérk	Milejszeg	Nábrád	Nagykapornak
Mernye	Milota	Nadap	Nagykarácsony
Mersevát	Mindszent	Nádasd	Nagykátá
Mesterháza	Mindszentgodisa	Nádasdladány	Nagykereki
Mesteri	Mindszentkállya	Nádudvar	Nagykeresztúr
Mesterszállás	Misefa	Nágocs	Nagykinizs
Meszes	Miske	Nagyacsád	Nagykónyi
Meszlen	Miszla	Nagyalásny	Nagykorpád
Mesztegy	Mocsa	Nagyar	Nagykozár
Mez berény	Mogyorósbánya	Nagybajcs	Nagykökényes
Mez csát	Mogyoróska	Nagybajom	Nagykölked
Mez csokonya	Moha	Nagybakónak	Nagykörös
Mez d	Mohács	Nagybánhegyes	Nagykör
Mez falva	Mohora	Nagybaracska	Nagykutas
Mez gyán	Molnári	Nagybarca	Nagylak
Mez hegyes	Molnaszecs d	Nagybárkány	Nagylengyel
Mez hék	Molvány	Nagyberény	Nagylóc
Mez keresztes	Monaj	Nagyberki	Nagylók
Mez komárom	Monok	Nagybörzsöny	Nagylózs
Mez kovácsháza	Monor	Nagybudmér	Nagymágocs
Mez ladány	Monorierd	Nagycenk	Nagymányok
Mez lak	Mónosbél	Nagycsány	Nagymaros
Mez nagymihály	Monostorapáti	Nagycsécs	Nagymizdó
Mez nyárád	Monostorpályi	Nagycepey	Nagynyárád
Mez örs	Monoszló	Nagycerkesz	Nagyoroszi
Mez peterd	Monyoród	Nagydém	Nagypáli
Mez sas	Mór	Nagydobos	Nagypall
Mez szemere	Mórág	Nagydobsza	Nagypeterd
Mez szentgyörgy	Mórahalom	Nagydorog	Nagypirit
Mez szilas	Móricgát	Nagyecsed	Nagyrábé
Mez tárkány	Mórichida	Nagyér	Nagyrada
Mez túr	Mosdós	Nagyesztergár	Nagyrákos
Mez zombor	Mosonszentmiklós	Nagyfüged	Nagyrécse
Miháld	Mosonszolnok	Nagygeresd	Nagyréde
Mihályfa	Mosonudvar	Nagygörb	Nagyrev
Mihálygerge	Mozsgó	Nagygyimót	Nagyrosvágy
Mihályháza	M csény	Nagyhajmás	Nagysáp
Mihályi	Mucsfa	Nagyhalász	Nagysimonyi
Mike	Mucsi	Nagyharsány	Nagyszakácsi
Mikebuda	Múcsony	Nagyhegyes	Nagyszékely
Mikekarácsonyfa	Muhi	Nagyhódos	Nagyszekeres
Mikepércs	Murakeresztúr	Nagyhuta	Nagyszénás

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Nagyszentjános	Nemessándorháza	Nyírderzs	Ólmod
Nagyszokoly	Nemesszalók	Nyíregyháza	Oltárc
Nagytálya	Nemesszentandrás	Nyírgelse	Onga
Nagytevel	Nemesvámos	Nyírgyulaj	Ónod
Nagytilaj	Nemesvid	Nyíri	Ópályi
Nagytótfalu	Nemesvita	Nyíribrony	Ópusztaszer
Nagyt ke	Németbánya	Nyírkákó	Orbányosfa
Nagyút	Németfalu	Nyírkarász	Orci
Nagyvarsány	Németkér	Nyírkáta	Ordacsehi
Nagyváty	Nemti	Nyírkércs	Ordas
Nagyvázsony	Neszmély	Nyírlöv	Orfalu
Nagyvejke	Nézsza	Nyírlugos	Orf
Nagyveleg	Nick	Nyírmada	Orgovány
Nagyvenyim	Nikla	Nyírmártonfalva	Ormándlak
Nagyvisnyó	Nógrád	Nyírmeggyes	Ormosbánya
Nak	Nógrádkövesd	Nyírmihálydi	Orosháza
Napkor	Nógrádmarcal	Nyírparasznya	Oroszi
Nárai	Nógrádmegyer	Nyírpazony	Oroszló
Narda	Nógrádsáp	Nyírpilis	Orosztony
Naszály	Nógrádsipek	Nyírtass	Ortaháza
Négyes	Nógrádszakál	Nyírtelek	Osli
Nekézseny	Nóráp	Nyírtét	Ostffyasszonyfa
Nemesapáti	Noszlop	Nyírtura	Ostoros
Nemesbikk	Noszvaj	Nyírvasvári	Oszkó
Nemesborzova	Nova	Nyomár	Oszlár
Nemesb d	Novaj	Ny gér	Osztopán
Nemesbük	Novajdrány	Nyugotszenterzsébet	Ózdfalu
Nemescsó	N tincs	Nyúl	Ozmánbük
Nemesdéd	Nyalka	Óbánya	Ozora
Nemesgörzsöny	Nyárad	Óbarok	Öcs
Nemesgulács	Nyáregyháza	Óbudavár	csény
Nemeshany	Nyárl rinc	Ócsárd	Öcsöd
Nemeshetés	Nyársapát	Ófalu	Ökörítőfülpös
Nemeske	Nyékládháza	Ófehértó	Ölb
Nemeskér	Nyergesújfalú	Óföldrak	Ömböly
Nemeskeresztúr	Nyésta	Óhíd	r
Nemeskisfalud	Nyim	Okány	Öregcsert
Nemeskocs	Nyírábrány	Okorág	Öreglak
Nemeskolta	Nyíracád	Okorvölgy	rhalom
Nemesládony	Nyirád	Olasz	rimagyarósd
Nemesmedves	Nyíradony	Olaszfa	riszentpéter
Nemesnádudvar	Nyírbétek	Olaszfalu	Örkény
Nemesnép	Nyírbogát	Olaszliszka	Örményes
Nemespátró	Nyírbogdány	Olcsva	Örménykút
Nemesrádó	Nyírcsaholy	Olcsvaapáti	rtilos
Nemesrempehollós	Nyírcsászári	Old	Örvényes

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sagárd	Pári	Pet fízallás	Pusztaberki
si	Paszab	Pet háza	Pusztacsálád
Öskü	Pásztó	Pet mihályfa	Pusztacsó
Öttevény	Pásztori	Petrikeresztúr	Pusztadobos
Öttömös	Pat	Petrivente	Pusztaderics
Ötvöskónyi	Patak	Pettend	Pusztafalu
Pácin	Patalom	Piliny	Pusztaföldvár
Pacsa	Patapoklosi	Pilis	Pusztahencse
Pácsony	Patca	Piliscsév	Pusztakovácsi
Padár	Pátka	Pilismarót	Pusztamagyaród
Páhi	Patosfa	Pincehely	Pusztamérges
Páka	Pátroha	Pinkamindszent	Pusztamiske
Pakod	Patvarc	Pinnye	Pusztamonostor
Pákozd	Pátyod	Piricse	Pusztaottlaka
Palé	Pázmánd	Pirtó	Pusztaradvány
Pálfa	Pázmándfalu	Piskó	Pusztaszabolcs
Pálfiszeg	Pecöl	Pitvaros	Pusztaszemes
Pálháza	Pécsbagota	Pócsa	Pusztaszentlászló
Páli	Pécsdevecser	Pocsaj	Pusztaszer
Palkonya	Pécsely	Pócspetri	Pusztavacs
Pálmajor	Pécsudvard	Pogány	Pusztavám
Pálmonostora	Pécsvárad	Pogányszentpéter	Putnok
Pálosvörösmart	Pellérd	Pókaszepetk	Püski
Palotabozsok	Pély	Polány	Püspökhátvan
Palotás	Penc	Polgár	Püspökladány
Paloznak	Penészlek	Polgárdi	Püspökmolnári
Pamlény	Pénzesgy r	Porcsalma	Püspökszilágy
Pamuk	Penyige	Pornóapáti	Rábacsanak
Pánd	Pér	Poroszló	Rábacsécsény
Pankasz	Pere	Porpác	Rábagyarmat
Pannonhalma	Perecse	Porrog	Rábahídvég
Pányok	Pereked	Porrogszentkirály	Rábakecöl
Panyola	Perenye	Porrogszentpál	Rábapatoná
Pap	Peresznye	Pórszombat	Rábapaty
Pápa	Peresztég	Porva	Rábapordány
Pápadereske	Perkáta	Pósfa	Rábasebes
Pápakovácsi	Perkupa	Potony	Rábaszentandrás
Pápasalamon	Per csény	Potyond	Rábaszentmihály
Pápateszér	Peterd	Pölöske	Rábaszentmiklós
Papkeszi	Péterhida	Pölöskef	Rábatamási
Pápoc	Péteri	Pörböly	Rábatöttös
Papos	Pétervására	Pördefölde	Rábcakapi
Páprád	Pétfürd	Pötréte	Rácalmás
Parád	Peth henye	Prügy	Ráckeresztúr
Parádsasvár	Petneháza	Pula	Ráckeve
Parasznya	Pet fibánya	Pusztapaáti	Rád

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Rádfalva	Rinyaújlak	Sándorfalva	Siklósnagyfalu
Rádóckölked	Rinyaújnép	Sántos	Sima
Radostyán	Rohod	Sáp	Simaság
Ragály	Románd	Sáránd	Simonfa
Rajka	Romhány	Sárazsadány	Simontornya
Rakaca	Romonya	Sárbogárd	Sióagárd
Rakacaszend	Rózsafa	Sáregres	Siójut
Rakamaz	Rozsály	Sárfimizdó	Sirok
Rákóczibánya	Rózsaszentmárton	Sárhida	Sitke
Rákóczifalva	Röjtökmuzsaj	Sárisáp	Sobor
Rákócziújfalu	Rönök	Sarkad	Sokorópátka
Ráksi	Röske	Sarkadkeresztúr	Solt
Ramocsa	Rudabánya	Sárkeresztes	Soltszentimre
Ramocsaháza	Rudolftelep	Sárkeresztúr	Soltvadkert
Rápolt	Rum	Sárkeszi	Sóly
Raposka	Ruzsa	Sármellék	Som
Rásonysápberencs	Ságújfalu	Sárok	Somberek
Rátka	Ságvár	Sárosd	Somlójen
Rátót	Sajóbábony	Sárospatak	Somlószt. l. s
Ravazd	Sajóecseg	Sárpilis	Somlónásárhely
Recsk	Sajógalgóc	Sárrétudvari	Somlóvecse
Réde	Sajóhídvég	Sarród	Somodor
Rédics	Sajóivánka	Sárszentágota	Somogyacsa
Regéc	Sajókápolna	Sárszentl. rinc	Somogyapáti
Regenye	Sajókaza	Sárszentmihály	Somogyaracs
Regöly	Sajókeresztúr	Sarud	Somogyaszaló
Rém	Sajólád	Sásd	Somogybabod
Répáshuta	Sajólászlófalva	Sáska	Somogybükkösd
Répcelak	Sajómercse	Sáta	Somogyicsicsó
Répceszemere	Sajónémeti	Sátorajújhely	Somogydöröcske
Répceszentgyörgy	Sajóörös	Sátorhely	Somogyegres
Répcevis	Sajópálfala	Sávoly	Somogyfajsz
Resznek	Sajópetri	Sé	Somogygeszti
Rétalap	Sajópüspöki	Segesd	Somogyhárság
Rétközberencs	Sajósenye	Sellye	Somogyhatvan
Rétság	Sajószöged	Selyeb	Somogyjád
Révfülöp	Sajóvámos	Semjén	Somogymeggyes
Révleányvár	Sajóvelezd	Semjénháza	Somogysámsón
Rezi	Sajtoskál	Sénye	Somogysárd
Ricse	Salföld	Sény	Somogysimonyi
Rigács	Salköveskút	Seregélyes	Somogyszentpál
Rigyác	Salomvár	Serényfalva	Somogyszil
Rimóc	Sály	Sérsekszt. l. s	Somogyszob
Rinyabeseny	Sámod	Sikátor	Somogytúr
Rinyakovácsi	Sámsonháza	Siklós	Somogyudvarhely
Rinyaszentkirály	Sand	Siklósbadony	Somogyvámos

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Somogyvár	Szakadát	Szatta	Szentistvánbaksa
Somogyviszló	Szakáld	Szatymaz	Szentjakabfa
Somogyzsitfa	Szakály	Szava	Szentkatalin
Somosk újfalva	Szakcs	Szebény	Szentkirály
Sonkád	Szakmár	Szécsénke	Szentkirályszabadja
Soponya	Szaknyér	Szécsény	Szentkozmadombja
Sopronhorpács	Szakoly	Szécsényfelfalu	Szentlászló
Sopronkövesd	Szakony	Szécsisziget	Szentliszló
Sopronnémeti	Szakonyfalva	Szederkény	Szentl rinc
Sorkifalud	Szákszend	Szedres	Szentl rincáta
Sorkikápolna	Szalaf	Szegerd	Szentmargitfalva
Sormás	Szalánta	Szeghalom	Szentmártonkáta
Sorokpolány	Szalapa	Szegi	Szentpéterfa
Sóshartyán	Szalaszend	Szegilong	Szentpéterföldre
Sóstófalva	Szalatnak	Szegvár	Szentpéterszeg
Sósvertike	Szálka	Székely	Szentpéterúr
Sótony	Szalkszentmárton	Székelyszabar	Szenyér
Söjtör	Szalmatercs	Székkutas	Szepetnek
Söpte	Szalonna	Szekszárd	Szerecseny
Söréd	Szamosangyalos	Szeleste	Szeremle
Sukoró	Szamosbecs	Szelevény	Szerep
Sumony	Szamoskér	Szell	Szergény
Súr	Szamossályi	Szemely	Szigetbecse
Surd	Szamosszeg	Szemenye	Szigetcsép
Sükösd	Szamostatárfalva	Szemere	Szigetszentmárton
Sülysáp	Szamosújlak	Szendehely	Szigetújfalu
Sümeg	Szanda	Szendr	Szigetvár
Sümegcsehi	Szank	Szendr lád	Szigliget
Sümegprága	Szántód	Szena	Szihalom
Sütt	Szany	Szenta	Szijártóháza
Szabadbattyán	Szápár	Szentantalfa	Szikszo
Szabadegyháza	Szaporca	Szentbalázs	Szil
Szabadhídvég	Szár	Szentbékáll	Szilág
Szabadi	Szárász	Szentborbás	Szilaspogony
Szabadkígyós	Szárazd	Szentdén	Szilsárkány
Szabadszállás	Szárföld	Szentdomonkos	Szilvág
Szabadszentkirály	Szárliget	Szente	Szilvás
Szabás	Szarvas	Szente	Szilvásvár
Szabolcs	Szarvasgede	Szentes	Szilvásszentmárton
Szabolcsbáka	Szarvaskend	Szentgál	Szin
Szabolcsveresmart	Szarvask	Szentgálóskér	Szinpetri
Szágy	Szászberek	Szentgotthárd	Szirák
Szajk	Szászfa	Szentgyörgyvár	Szirmabeseny
Szajla	Szászvár	Szentgyörgyvölgy	Szob
Szajol	Szatmárcseke	Szentimrefalva	Szokolya
Szakácsi	Szátok	Szentistván	Szólád

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Szomód	Tápiószele	Tenk	Tiszakécske
Szomolya	Tápiószentmárton	Tény	Tiszakerecseny
Szomor	Tápiósz l s	Tépe	Tiszakeszi
Szorgalmatos	Táplánszentkereszt	Terem	Tiszakóród
Szorosad	Tapolca	Terény	Tiszakürt
Sz c	Tapsony	Tereske	Tiszaladány
Sz ce	Tápszentmiklós	Teresztenye	Tiszalök
Szögliget	Tar	Terpes	Tiszalúc
Sz ke	Tarany	Tés	Tiszamogyorós
Sz kéd	Tarcal	Tésa	Tiszanagyfalu
Sz kedencs	Tard	Tésenfa	Tiszanána
Sz l sardó	Tardona	Téseny	Tiszaörs
Sz l sgyörök	Tardos	Teskánd	Tiszapalkonya
Szörény	Tarhos	Tét	Tiszapüspöki
Szücs	Tarján	Tetétlen	Tiszarád
Szuha	Tarjánpuszta	Tevel	Tiszaroff
Szuhaf	Tárkány	Tibolddaróc	Tiszasas
Szuhakálló	Tarnabod	Tiborszállás	Tiszasüly
Szuhogy	Tarnalelesz	Tihany	Tiszaszalka
Szulimán	Tarnaméra	Tikos	Tiszaszentimre
Szulok	Tarnaörs	Tilaj	Tiszaszentmárton
Szurdokpüspöki	Tarnaszentmária	Timár	Tiszasziget
Sz csi	Tarnaszentmiklós	Tiszaadony	Tiszasz l s
Szügy	Tarnaszadány	Tiszaalpár	Tiszatarodos
Sz r	Tárnokréti	Tiszabábolna	Tiszatarján
Tab	Tarpa	Tiszabecs	Tiszatelek
Tabajd	Tarrós	Tiszabercel	Tiszateny
Tabdi	Táska	Tiszabezdéd	Tiszaug
Táborfalva	Tass	Tiszab	Tiszavalk
Tác	Taszár	Tiszabura	Tiszavárkony
Tagyon	Tát	Tiszacsécse	Tiszavasvári
Takácsi	Tata	Tiszacsege	Tiszavid
Tákos	Tataháza	Tiszacsermely	Tisztaberek
Taktabáj	Tatárszentgyörgy	Tiszadada	Tivadar
Taktaharkány	Tázlár	Tiszaderzs	Tóalmás
Taktakenéz	Téglás	Tiszadob	Tófalva
Taktaszada	Tekenye	Tiszadorogma	Tófej
Taliándörög	Tékes	Tiszaeszlár	Tóf
Tállya	Teklafalu	Tiszafüred	Tokaj
Tamási	Telekes	Tiszagyenda	Tokod
Tanakajd	Telekgerendás	Tiszagyulaháza	Tokodaltáró
Táp	Teleki	Tiszaigar	Tokorcs
Tápióbicske	Telkibánya	Tiszainoka	Tolcsva
Tápiógyörgye	Tengelic	Tiszajen	Told
Tápióság	Tengeri	Tiszakanyár	Tolmács
Tápiószecs	Teng d	Tiszakarád	Tolnanémedi

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Tomajmonostora	Újbarok	Vágáshuta	Vásárosnamény
Tomor	Újcsanáros	Vaja	Vasasszonyfa
Tompa	Újdombrád	Vajdácska	Vasboldogasszony
Tompaládony	Újfehértó	Vajszló	Vasegerszeg
Tordas	Újhartyán	Vajta	Vashosszúfalu
Tormafölde	Újiráz	Vál	Vaskeresztes
Tormás	Újireg	Valkó	Vaskút
Tormásliget	Újkenéz	Valkonya	Vasmegyer
Tornabarakony	Újkér	Vállaj	Vaspör
Tornakápolna	Újkígyós	Vállus	Vassurány
Tornanádaska	Újlengyel	Vámosatya	Vasszécseny
Tornaszentandrás	Újléta	Vámoscsalád	Vasszentmihály
Tornaszentjakab	Újl rincfalva	Vámosgyörk	Vasszilvagy
Tornyiszentmiklós	Újpetre	Vámosmikola	Vasvár
Tornyosnémeti	Újrónaf	Vámosoroszi	Vaszar
Tornyospálca	Újsolt	Vámospércs	Vászoly
Torony	Újszalonta	Vámosújfal	Vát
Torvaj	Újszász	Vámosszabadi	Vatta
Tószeg	Újszentiván	Váncsod	Vázsnok
Tótkomlós	Újszentmargita	Vanyarc	Vécs
Tótszentgyörgy	Újszilvás	Vanyola	Végegyháza
Tótszentmárton	Újtelek	Várad	Vejt
Tótszerdahely	Újtikos	Váralja	Vékény
Tótújfalu	Újudvar	Varásló	Vekerd
Tótvázsony	Újváfalva	Váraszó	Velem
Töltéstava	Ukk	Várbalog	Velemér
Tömörd	Und	Varbó	Velence
Tömörkény	Úny	Varbóc	Velény
Törökkoppány	Uppony	Várda	Véménd
Törökszentmiklós	Ura	Várdomb	Vének
Törtel	Uraiújfalu	Várfölde	Vép
Töttös	Úrhida	Varga	Vereb
Trizs	Úri	Várgesztes	Ver ce
Tunyogmatolcs	Úrkút	Várkesz	Verpelét
Tura	Uszka	Várong	Verseg
Túristvándi	Uszód	Városföld	Versend
Túrkeve	Uzsa	Városl d	Vértesacsa
Túrony	Üllés	Varsád	Vértesboglár
Túrlicse	Vácduka	Varsány	Vérteskethely
Tuzsér	Vácegres	Várvölgy	Vértessomló
Türje	Váchartyán	Vasad	Vértestolna
Tüskevár	Váckisújfalu	Vasalja	Vértessz l s
Tyukod	Vácszentlászló	Vásárosbéc	Vése
Udvar	Vadna	Vásárosdombó	Veszkény
Udvari	Vadosfa	Vásárosfalu	Veszprémfajsz
Ugod	Vág	Vásárosmiske	Veszprémgalsa

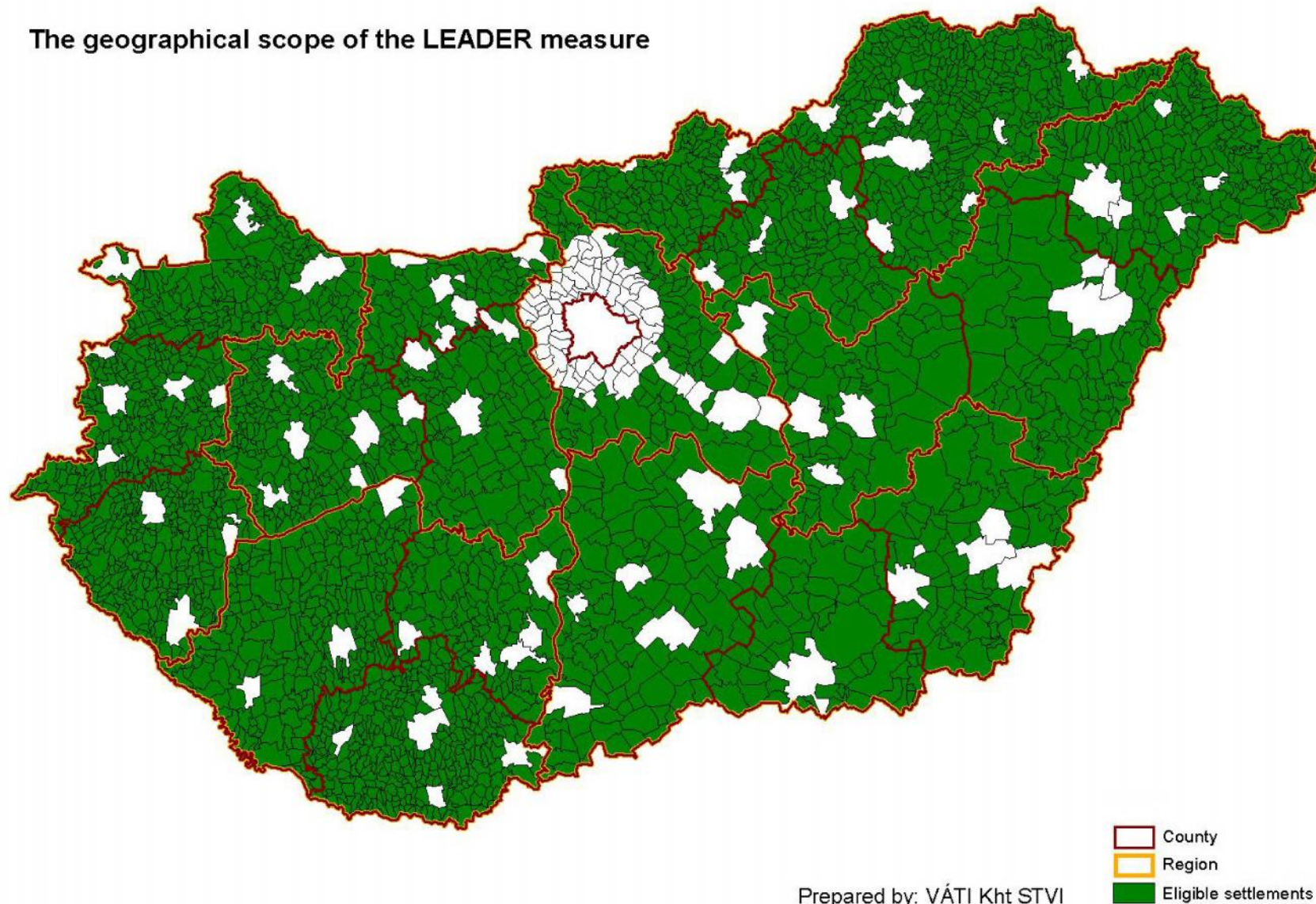
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Veszprémvarsány	Vönöck	Zalakomár	Závod
Vészt	Vöröstó	Zalaköveskút	Zebecke
Vezseny	Vörs	Zalalöv	Zebegegy
Vid	Zabar	Zalameggyes	Zemplénagárd
Vigántpetend	Zádor	Zalamerenye	Zeng várkony
Villány	Zádorfalva	Zalasárszeg	Zichyújfalu
Villánykövesd	Zagyvarékas	Zalaszabar	Zics
Vilmány	Zagyvaszántó	Zalaszántó	Ziliz
Vilonya	Záhony	Zalaszegvár	Zimány
Vilyvitány	Zajk	Zalaszentbalázs	Zirc
Vinár	Zajta	Zalaszentgrót	Zók
Vindornyafo	Zákány	Zalaszentgyörgy	Zomba
Vindornyalak	Zákányfalva	Zalaszentiván	Zsádány
Vindornyaszentlászló	Zákányszék	Zalaszentjakab	Zsáka
Visnye	Zala	Zalaszentlászló	Zsámbok
Visonta	Zalaapáti	Zalaszentlőrinc	Zsana
Viss	Zalabaksa	Zalaszentmárton	Zsarolyán
Visz	Zalabér	Zalaszentmihály	Zsebeháza
Viszák	Zalaboldogfa	Zalaszombatfa	Zsédeny
Viszló	Zalacsány	Zaláta	Zselickisfalud
Visznek	Zalacséb	Zalatárnok	Zselickislak
Vitnyéd	Zalaegerszeg	Zalaújlak	Zselicszentpál
Vízvár	Zalaerdő	Zalavár	Zsennye
Vizslás	Zalagyömör	Zalavég	Zsira
Vizsoly	Zalahaláp	Zalkod	Zsombó
Vokány	Zalaháshágy	Zamárdi	Zsujta
Vonyarcvashegy	Zalaigrice	Zámoly	Zsurk
Vöckönd	Zalaistvánd	Zánka	Zubogy
Völcséj	Zalakaros	Zaránk	

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## Annex 24.: The geographical scope of the LEADER measure

The geographical scope of the LEADER measure



## **Annex 25.: The public consultation of the SEA procedure**

The participants in the social consultation were professional, representative and social organisations involved in the protection of the environment and of nature, other organisations and institutions dealing with agricultural and rural development issues.

### **Opportunities for consultation**

***Expression of general opinion:*** Documents were made available on the website anybody, at any point of time could give their views, via the webpage, to be used by the participants of the assessment.

***Creation of the SEA Forum*** A 20-member group was set up from the representatives of the public administration institutions and civil organisations concerned, and civil members engaged in environmental protection from DARD and ARDOP were also invited to join. The members of the Forum were the environmental authorities, planners of the MARD and representatives of the scientific life and involved civil organisations.

***Public discussions of the SEA environmental assessment – Partnership Conference and rural forums:*** In order to obtain views on the strategic document about environmental assessment, several rural forums and a partnership conference were organised. One month was ensured for reviewing the consultation document.

***Interviews:*** In order to get acquainted in more detail with the views of certain stakeholders, interviews were prepared on the strategic environment assessment document.

***National Council of Environment Protection*** The National Council of Environment Protection discussed the New Hungary Rural Development Programme and the environment assessment document as well.

### **Participation of the stakeholders in the elaboration and review of the environmental assessment**

Due to the fact that the New Hungary Rural Development Strategic Plan and Programme shall be considered a plan of national effect and importance, stakeholders include the professional, representative and social organisations involved in the protection of the environment and of nature, other organisations and institutions dealing with agricultural and rural development issues, other organisations and institutions, and the wide public as well. The documents of the SEA work can be accessed on the **website of MTvSz** ([www.mtvshu/skv](http://www.mtvshu/skv)). On the start of the work with

SEA, MARD published a communication and MTvSz informed potentially interested parties through direct access and mailing lists.

The strategic environment assessment document was reconciled at a **partnership conference**, to which about 100 organisations and institutions were invited,

The SEA Working Group presented the topics and the preliminary results of the assessment on the November 2 session of the **National Council for Environment Protection** (EPC). EPC approved the topics and made certain remarks in the subjects of water management and soil management. Remarks of EPC-members and personal interviews represented an important help to ensure the professional character of the environment assessment in the topics listed above. EPC formulated an official opinion on December 11, 2006 about the draft working paper prepared by SEA and approved it (with the exception of the parts covering water management). On the basis of the EPC conclusions regarding agricultural water management, on December 15, the SEA Working Group held a consultative meeting with experts of water management, where all portions of the working paper concerned were fully reviewed and revised, both in terms of SEA and of the Programme.

A total of 48 specific proposals were received from the contacted authorities, such as the National Council of Environment Protection, the National Supervisory Authority for Environment Protection, Nature Protection and Waters, the Ministry of Education and Culture and the Department for Natural Resources of MARD. Out of the 48 proposals, SEA accepted 46 and used these in the document. Written proposals to the document were received from 8 social organisations, a total of 68 proposals, in addition to that, on the forums and through the website, 13 more organisations made 42 comments. The decisive majority of the proposals was accepted by the SEA working group – out of these 68 written proposals, 57 were utilised fully or partially, and verbal comments were also utilised.

The evaluators recommended that during the period of social consultation, the **competent committees of the Hungarian Academy of Sciences** should also discuss these and could give their opinion on some of the key issues (e.g. criteria for taking climate change into consideration, the life cycle approach to energy plantations, analysis of advantages and disadvantages from the point of view of sustainability, criteria for water management in agriculture). The competent committees of the Hungarian Academy of Sciences, on their joint meeting held on January 18, 2007 – where 63 persons attended – discussed the portions of the environment assessment regarding water management. The respective opinion of the HAS was taken into consideration in full when the final version of SEA was prepared.

Views presented during the Strategic Environment Assessment and the method of their consideration

The group processed the opinions received in respect of the document and made these available through the SEA website. After the closing of the procedure, each reviewer will receive the detailed answer of the group to all questions asked. A total of 116 proposals and 42 observations were received to this document, most of which were accepted and processed by the SEA Group.

Authority proposals received in connection with the environment assessment document and their taking into consideration

A total of 48 specific proposals were received from the contacted authorities, such as the National Council of Environment Protection, the National Supervisory Authority for Environment Protection, Nature Protection and Waters, the Ministry of Education and Culture and the Department for Natural Resources of MARD. Out of the 48 proposals, SEA accepted 46 and used these in the document.

The National Council of Environment Protection dealt with the issue of water management particularly intensively. The opinion given by the Council refined the SEA proposals in connection with irrigation, protection against excess surface waters, soil protection and melioration.

The National Supervisory Authority for Environment Protection, Nature Protection and Waters provided a number of specific suggestions in terms of waste and wastewater management, IPCC and BAT, pesticides and landscape.

Proposals from the public received in connection with the environment assessment document and their taking into consideration

Written proposals to the document were received from 8 social organisations, a total of 68 proposals, in addition to that, on the forums and through the website, 13 more organisations made 42 comments.

The decisive majority of the proposals was accepted by the SEA working group – out of these 68 written proposals, 57 were utilised fully or partially, and verbal comments were also utilised.

The reason for the refusal in many cases was that in the opinion of the working group, the topic did not enter into the scope of competence of SEA. The other part of the proposals left out was connected with methodology issues. The working group, in the closing phase of the SEA process, could no longer amend the methodology, due to the progress already made.

One of the organisations from which the largest number of proposals arrived was the Society for the Living Tisza. Their proposals included an increase in the proportion of agri-environmental and environment-friendly support allocations, emphasis of the contradiction between biomass and large-scale production methods, an increase of the importance of NATURA 2000 and VKI, an enhancement of the environment-friendly character of water management. Some of the proposals on water management contradicted to the opinion of the National Council of Environment Protection. In these cases, the SEA workgroup accepted the opinion of the latter. The examination of

asset allocation between the different Axis was partially accepted by the SEA group: it dealt with the effects of the trends, but did not make a quantifiable proposals regarding a different allocation, due to the methodology limitations of the assessment.

The National Association of Private Forest Owners and FAGOSZ formulated proposals mostly in connection with forests and landscape.

The Hungarian Bioculture Association called the attention to the role of agri-environmental management and the importance of eco-farming.

On the whole, it can be established that MARD took into consideration the proposals of the SEA working group, as much as possible and it demonstrated a constructive, helping behaviour, all throughout the SEA process.

## Annex 26.: The list of indicators

### EU impact indicators

	Indicator	Measurement of the indicator	Unit	Assessment Target value
1	Economic growth	Net additional added value	Million € PPS	0,2
2	Employment creation	Net jobs created	Thousand capita	11,5
3	Labour productivity	Change in GVA per full time equivalent	€AWU	1800
4	Reversing biodiversity decline	Change of population index of wild birds nesting on agricultural area (index 2000=100)	%	112
5	Preserving agricultural and forestry areas with a high natural value	Changes in areas (farmland and forestry) with high natural values	Thousand ha	517
6	Increasing water quality (caused by the reduction of the amount of fertilisers)	Change in nutrient balance (N) in thousand tons	Nitrogen surplus kg/ha	-3,5
			Phosphorous surplus kg/ha	0,4
7	Contribution to fighting climate change	Increasing energy production from renewable energy sources (agriculture/forestry)	kt/ oil equivalent	1600



## Objective related baseline indicators

Indicator	Measurement of the indicator	Unit	Base year	Baseline data	Source/TARGET
Horizontal (Programme level)					
1. Economic development	GDP /capita in p.p.s. (EU-25 = 100, three year average 2000-2002)	PPS/capita	2005	61,4	73.6
2. Employment rate	Employed persons as a share of total population of age class of 15-64 years old	%	2005	56.9	61
3. Unemployment	Rate of unemployment (unemployed persons as a percentage of economically active population )	%	2005	7.2	6.8
<b>Axis I. – Improving the competitiveness of the agricultural and forestry sector</b>					
4. Training and education in agriculture	Percentage of farmers with basic and full education in agriculture	%	2005	4.9/7.5	15/22
5. Age structure in agriculture	Ratio between farmers less than 35 years old and farmers of 55 years old or more	%	2005	15	20
	Farmers less than 35 years old	%	2005	54,7	65
	Farmers of 55 years old or more	%	2005	365,7	330
6. Labour productivity in agriculture	Gross Value Added per annual work unit	Euro/AWU	2005	4820	5970
7. Gross fixed capital formation in agriculture	Gross fixed capital formation in agriculture	Mio Euro	2005	801	1067,8
8. Employment development in the primary sector	Employment in primary sector	Thousand capita	2005	194	179
9. Economic development in the primary sector	Gross Value Added in the primary sector	Million €	2004	2688.5	3500
10. Labour productivity in food industry	Gross Value Added per people employed in food industry	Thousands euro per people employed	2004	13900	20100
11. Gross fixed capital formation in food industry	Gross fixed capital formation in food industry	Million €	2005	508.2	627.1
12. Employment development in food industry	Employment in food industry	Thousand people employed	2005	140.4	142.0

13. Economic development of food industry	Gross value added in the food industry	Million €	2004	1961.6	2661.0
14. Labour productivity in forestry	Gross Value Added per people employed in forestry	Thousands euro per people employed	2004	13000	15000
15. Gross fixed capital formation in forestry	Gross fixed capital formation in forestry	Million €	2004	24.2	26.1
16. Importance of semi-subsistence farming in New MSs	Number of farms smaller than 1 Economic Size Unit in New MS	%	2005	79.6	54.1
<b>Axis II. – Improving the environment and the countryside</b>					
17. Biodiversity: Population of farmland birds	Development of populations of selected bird species / change in numbers	%	2003	108.8	112
18. Biodiversity: high nature value areas farmland and forestry	UAA of High Nature Value farmland	Million ha	2005	1.4	2.3
19. Biodiversity tree species composition	Area of forest and other wooded land classified by number of tree species occurring and by forest type	%	2006	13.0/82.0/5.0	11.0/86/3.0
20. Water quality: gross nutrient balance	Nitrogen surplus	kg /ha	2002-2004 average	20	17.5
	Phosphorous surplus	kg/ha		- 3.7	-3.3
21. Water quality: pollution by nitrates and pesticides	Annual trends in the concentrations	mg/l	2000-2002 average	77.5	73
22. Soil: Areas at risk	Areas at risk of soil erosion	tons/ha/year (estimate)	2004	0,41	0.35
23. Soil: Organic farming	Utilised Agricultural Area under organic farming	thousand ha	2005	128	300
24. Climate change: production of renewable energy from agriculture and forestry	Production of renewable energy sources from agriculture and forestry	Ktoe	2004	777	2377
25. Climate change: UAA devoted to renewable energy	Utilised Agriculture Area devoted to energy and biomass crops	thousand hectares	2003	9,81	250
26. Climate change/air quality: gas emissions from agriculture	Emissions of greenhouse gases, and of ammonia from agriculture	1000 t of CO <sub>2</sub> 1000 t of ammonia	2003	9055/99.8	8200/91
<b>Axis III. – Quality of life in rural areas and diversification of rural economy</b>					

27. Farmers with other gainful activity	Percentage of farmers with other gainful activity than agriculture	%	2005	38.8	47,0
28. Employment development of non-agricultural sector	Employment in secondary and tertiary sectors (in rural regions)	Number of persons in thousand	2005	1436.29	3745
29. Economic development of non-agricultural sector	Gross Value Added in secondary and tertiary sectors (in rural regions)	Million €	2004	19641.64	72200
30. Self-employment development	Number of self-employed persons (in rural regions)	Number of persons in thousand	2004	552,6	549,0
31. Tourism infrastructure in rural areas	Total number of bed places in all forms of tourist accommodation	Thousand pcs.	2005	298,27	582,0
32. Internet take-up in rural areas	Persons having subscribed to DSL internet as percentage of total population	%	2004	5,37	25
33. Development of services sector	GVA in services as percentage of total GVA	%	2004	59,71	72,0
34. Net migration	Annual crude rate of net migration	Rate per 1000 inhabitants	2005	-0,66	-0,67
35. Life-long learning in rural areas	% of adults (25-64 ys. old) participating in education and training	%	2004	4.6	7.5
<b>Axis IV. – LEADER</b>					
36. Development of Local Action Groups	Share of population on the territory where the LAS is active	Number of persons in thousand	2005	1600,0	2350,0

### Additional, objective related baseline indicators:

Indicators	Measurement of the indicator	Unit	Base year	Baseline condition	Target condition
<b>Horizontal indicators</b>					
1. Economic development	Share of agricultural production in the GDP, (%), 2004	%	2004	3,1	2,9
2. Agricultural employment	Ratio of agricultural employees in the total number of employees, (%), 2005	%	2005	4,97	4,1
3. Sustainability of equal opportunities	Ratio of women in the agricultural employees, (%), 2004	%	2004	22,9	23,2
4. Environmental sustainability	Ratio of biomass produced used for energy generation (%)	%	2005	8-10	22,0
5. Sustaining the regional cohesion	The difference among the extreme values of figures of GDP per capita (measured at the level of regions)	%	2003	39,7	43,5
	Difference of migration in the rural areas	capita	2005	-3929	-3500
6. Sustaining the social cohesion	Number of households without active earners in the rural areas	Thousand households	2001	557,58	620,0
<b>Axis 1: Improving the competitiveness of agriculture and forestry</b>					
<i>General objective: Establishment of sustainable and competitive agriculture and food economy</i>					
7. Value added of agriculture	Added value of agriculture	Billion HUF	2004	676,6	976,6
8. Profitability of agriculture	Profitability of agriculture	Billion HUF	2004	1,3	1,6
	Profitability of food industry	Billion HUF	2004	2,6	3,6
	Profitability of forestry	Billion HUF	2004	2,1	2,9
9. Agricultural export	Share of food processing sector of total exports	%	2005	6,1	6,6
<i>Specific objective: Supporting the acquisition of knowledge and the improvement of human resource skills and age structure</i>					
10. Age structure	Ratio of individual farmers below 40 years of age	%	2005	14,3	16,4
	Ratio of individual farmers above 55 years of age	%	2005	51,7	50,7
11. Internet use	Ratio of individual farmers using computer and internet	%	2005	28	48
<i>Specific objective: Motivation production restructuring in the interest of achieving sustainable production structure</i>					
12. Output of agricultural sectors	Distribution of gross output of agriculture in the main sectors (livestock keeping/plant production, of which: horticulture)	%	2004	33,6/56,9/17,2	40/52/19
13. Grain production for energy generation purposes	Ratio of energy generation oriented grain production	%	2004	0,3	9,0
14. Development of animal husbandry	Number of individual farms engaged in livestock keeping	Thousand farms	2005	264,1	201,0
15.	Number of individual farms engaged in horticultural	Thousand	2005	106,1	99

Development of horticulture	production	d farms			
16. Producer groups	Number of producer groups	Number	2004	252	300
	Net revenue of producer groups	Billion HUF	2004	118,0	348,0
	Ratio of revenue of products marketed by producer groups in agricultural revenues	%	2006	6,0	6,0
	Agricultural area covered by producer groups	Thousand ha	2005	550,0	1315,0
17. Diversification of production	Ratio of individual farms engaged in food processing (meat/milk/fruit and vegetable / winemaking, wine bottling)	%	2005	0,8/0,5/1,3/0,6	1,2/0,7/2,0/0,8
<b>Specific objective: Modernisation and development of physical resources, promotion of innovation</b>					
18. Value of agricultural investments	Value of agricultural investments	Billion HUF	2005	197,5	240,6
19. Modernisation of animal husbandry	Number of livestock farms requiring modernisation	Farms	2005	3850,0	1850,0
20. Modernisation of primary processing of agricultural products	Ratio of processing plants with modern technology	%	2006	30	35
	Ratio of investment projects for the complex modernisation of processing and sale (quality monitoring, storage, packaging, inventory maintenance)	%	2006	60	65
21. Development of irrigation	Irrigated area	Thousand ha	2004	62	72
22. Energy use efficiency of agriculture	Energy use of agriculture per unit GDP	Terrajoule / billion HUF	2004	43,5	41,0
<b>Specific objective: Improvement of agricultural production and of the quality of products</b>					
23. Producer organisations	Number of basic material and processing integrations (organisations) (plant production/animal husbandry/horticulture/forestry)	Number.	2004	320 (250+70)	400
24. Production of high quality goods	Number of registered products provided with geographic product marker	Number	2005	11,0	14,0
	Number of products included in the certification system of food products of excellent quality	Number	2005	350,0	400,0
	“Traditions, tastes, regions” collection (under creation)				
	Traditional, special products				
	Ratio of sales revenue from traditional, special goods having geographic products markers in the total sales revenue of food economy	%	2005	0,5	1,0
	Ratio of products of higher quality with higher value added	%	2005	2-3	5,0
<b>Axis II: Development of the environment and of the countryside</b>					
<b>General objective: Development of the agriculture and forestry in an environmentally friendly manner through the progress of land-use adjusted to the agro-ecological endowments of the area, the protection of the natural-landscape resources, the improvement of their condition</b>					
25. Extensive land use	Farmland involved in agriculture and forestry management committed to the requirements of environmental protection and landscape management and adjusted to the agro-ecological conditions	million ha	2005	1,9	3,1
26. Moderation	Arboreal energy plantation	Thousand	2005	0	49,0

of climate change		d ha			
<b>Specific objective: Sustainable use of agricultural land areas, dissemination of environmentally friendly farming methods</b>					
27. Agricultural areas in extensive use	Size of area in controlled organic farming or under transition	Thousand ha	2005	128	300
	Share of area under agro-environmental program, of the total agricultural area	%	2005	25,3	28
28. Sensitive natural area	Size of area subject to contracts on the preservation of various wild species or communities	Thousand ha	2005	119,7	220,0
	Area affecting moderation/prevention of the discharge of pollutants into water bases	Thousand ha	2005	0,8	12,0
29. Improvement of unfavourable soil conditions	Preservation of wetland and water habitats	Thousand ha	2005	35,3	40,0
	Supported organic farming area	Thousand ha	2005	76,0	130,0
	Integrated farming	Thousand ha	2005	297,2	600,0
	Protection of cultivated area jeopardised by soil loss (water and wind erosion)	Thousand ha	2005	0	65,0
	Area affecting reduction of active agents/chemicals applied in the soil, (thousand ha), 2005	Thousand ha	2005	1450,6	2350,0
30. Natura 2000 agricultural areas	NATURA 2000 arable land and grasslands from agricultural areas	%	2005	17,2	17,2
	Supported NATURA 2000 arable land and grassland	Thousand ha	2005	150,0	480,0
<b>Specific objective: Sustaining agricultural activities on less favoured areas</b>					
31. Less favoured area	Less favoured area	Thousand ha	2005	883,6	883,6
	Ratio of subsidised less favoured area from the agricultural area	Thousand ha	2005	218,0	350,0
	Number of farmers operating on less favoured area	Thousand capita	2005	6,6	7,8
32. Abandoning cultivation	Ratio of plough-land left fallow	%	2004	3	3,5
<b>Specific objective: Sustainable use of forestry areas and the increase of forest cover</b>					
33. Forest cover of the country	Forest cover	%	2006	21,5	22,2
34. Afforestation	First afforestation of agricultural land	Thousand ha	2005	17,8	70,0
	Ratio of afforestation using indigenous frondiferous tree species	%	2005	59,0	65,0
35. Forest environment	Area of forests under forest-environment programme	Thousand ha	2006	0	160,0
36. Natura 2000 forest	Natura 2000 forest area	Thousand ha	2005	773,4	773,4
	- of which, private forest	%	2005	26,8	26,8
<b>Specific objective: Payment of animal welfare provisions</b>					
37. Animal welfare	Number of farms receiving animal welfare and hygienic provisions	Number	2005	3 636	5 800
<b>Axis III: Improvement of quality of life in rural areas and promotion of diversification</b>					
<b>General objective: Improvement of quality of life, income and employment conditions of the rural population</b>					
38. Income level	Average per capita domestic income in the rural areas	Thousand HUF	2004	391,28	425

		%		70,28	73
<i>Specific objective: Relief of rural employment tensions, enlarging the income earning possibilities</i>					
39. Number of enterprises	Number of enterprises employing 1-9 persons operating in the rural areas (thousand enterprises), 2004	Thousand enterprises	2004	152,37	215,0
40. Enterprise density	Number of operating enterprises per thousand capita in rural regions (pcs)	Number	2004	52.16	58,0
41. Village accommodations	Number of hosts of village accommodations	Thousand Capita	2005	6.97	8,2
	Number of guests in rural private accommodations (foreign/domestic)	Thousand capita	2005	34.24/108.98	48/140
	Number of guest nights spent in rural private accommodations (foreign/domestic)	Thousand guest nights	2005	166.45/379.42	188/417
<i>Specific objective: Improvement of rural quality of life, through the sustainable, complex utilisation of the cultural and natural values</i>					
42. Heritage protection	Ratio of monuments endangered in the rural areas	%		40	33
43. Presentation of the village (rural) cultural and natural heritage	Descriptive (Based upon the survey made among the rural development micro-regional managers in 2005, such activities are performed in about 16% of the settlements. The description includes the number of rural settlements having display facilities, which present the rural life, traditions, natural values (village museum, regional heritage house, unique landscape etc. presentation of values designated as protected heritage sites) and the number of display facilities.				
44. Infrastructure for the sale of locally made products (local markets)	Descriptive (A small ratio of settlements operate markets for the sale of local products. The description includes the number and location of the local markets having appropriate infrastructure and operated at least with weekly regularity in the rural areas).				
<i>Specific objective: development of basic services provided for the rural population</i>					
45. Access to basic services	Descriptive: Improvement of supply of rural settlements with services supportable by the program (by types of services)				

## Context related baseline indicators

Indicator	Measurement of the indicator	Unit	Base year	Baseline data	Target data
<b>Horizontal (Programme level)</b>					
1. Designation of rural areas	Defining the rural areas NOT according to the OECD methodology (for definition see: Chapter 3.1)	Km2	2005	76831.51	81121
	Number of settlements	Number	2005	2907	2981
	Number of permanent residents	Thousand capita	2005	4568,45	4568,45
2. Importance of rural areas	Territory of rural areas	%	2005	82,59	82,59
	Population in rural areas	%	2005	39.09	44,88
	GVA in rural areas	%	2005	29.26	N.A.
	Employment in the rural areas	%	2005	39.56	51,0
<b>Axis 1: Improving the competitiveness of agriculture and forestry</b>					

3. Agricultural land use	Arable area	%	2005	84,5	80,0
	Permanent grassland/pastures	%	2005	11,0	15,0
	Permanent crops	%	2005	3,9	5,0
4. Farm structure	Number of farms	Number thousand	2005	714,8	499,0
	Cultivated agricultural area	thousand ha	2005	4.266,6	4180,0
	Average farm size	ha	2005	8,6	14,5
	Average proportions of the farms according utilization of the agricultural area (ratio of farms under 5 ha UAA, from 5 to 50 ha UAA, 50 ha and more UAA)	%	2005	88,9/9,4/1,8	83,0/14,0/3,0
	Average farm size and distribution (ratio of farms less than 2 ESU, from 2 ESU to less than 100 ESU, 100 ESU and more)	%	2005	88.3/11.6/0.1	81,1/18,0/1,0
	Labour force	AWU	2005	462740	323000
5. Structure in forestry	Area of forest available for wood supply (FAWS)	thousand ha	2000	1702,0	2028,0
	Ownership (ratio of area of FAWS under "eligible" ownership – public, private)	%	2000	0.5/36.6	0,5/42,0
	Average size of private holding of Forest and other Wooded Land (FOWL)	ha	2005	22,3	25,0
6. Forest productivity	Average net annual volume increment (FAWS)	m <sup>3</sup> /year/ha	2000	5.8	6,0
<b>Axis II: Development of the environment and of the countryside</b>					
7. Land Cover	Ratio of agricultural/forest/natural/artificial areas	%	2000	68,2/20,2/5,9/5,7	63,2/21,9/5,9/6,0
8. LFA	Agricultural land in use – non LFA/other LFA/LFA with specific handicaps	%	2005	84,9/6,7/8,3	84,9/6,7/8,3
9. Areas of extensive agriculture	Used agricultural area for extensive arable crops	thousand ha	2005	1350,0	1860,0
	Used agricultural land for extensive grazing	thousand ha	2005	420,0	690,0
10. Natura 2000	Area of territory under Natura 2000	%	2005	20,6	20,6
	Area of agricultural land on the territory under Natura 2000	%	2005	17,2	17,2
	Forest area under Natura 2000 territory	%	2005	43,6	43,6
11. Biodiversity: protected forests	Area of forests protected to conserve biodiversity, landscape and specific natural elements (MCPFE 4.9, classes 1.1, 1.2, 1.2 and 2)	%	2000-2002	0.2/3.6/0,6/15.7	10,0/6,0/4,0/20,0
12. Development of forest area	Average annual increase of forest and wooded land areas	thousand ha/year	2000-2005	13,8	11
13. Forest ecosystem health	Ratio of trees/conifers/broadleaved in defoliation classes 2-4	%	2004	21,5/24,2/21,0	20,0/24,2/19,0
14. Water quality	Ratio of the territory designated as Nitrate Vulnerable Zone in Hungary	%	2005	53.4	53.4
15. Water use	Rate of irrigated UAA	%	2005	1,5	1.7



16. Protecting forests concerning primarily soil and other ecosystem functions	FOWL area managed primarily for soil and water protection (MCPFE 5.1 class 3.1)	% total forest area	2000-2002	9.6	11,0
<b>Axis III: Improvement of quality of life in rural areas and promotion of diversification</b>					
17. Population density	Population density in the countryside	residents./km <sup>2</sup>	2005	51.78	58
18. Age structure	share of people aged 0-14 years old	%	2005	17.15	16.2
	share of people aged 15-35 / 54-64 years old	%	2005	66.87	63
	share of people aged 64 + years old	%	2005	15.98	20.8
19. Structure of economy	GVA in the primary sector	%	2004	7.56	4,0
	GVA in the secondary sector	%	2004	32.73	29,0
	GVA in the tertiary sector	%	2004	59.71	67,0
20. Structure of employment	Employment in the primary sector	%	2005	6.95	4.4
	Employment in the secondary sector	%	2005	35.33	31.2
	Employment in the tertiary sector	%	2005	57.71	64.4
21. Long-term unemployment	Long-term unemployment	%	2005	6.76	3
22. Educational attainment	Persons with Medium and High educational attainment (of people aged from 25-64 years)	%	2004	76.4	79
23. Internet infrastructure	Primary DSL coverage in Hungary	%	2004	87,4	100

### Additional national context indicators

Indicator	Measurement of the indicator	Unit	Base year	Baseline data	Target data
<b>Axis 1: Improving the competitiveness of agriculture and forestry</b>					
1. Average size of holdings	Average size of holdings (individual farms / farming organisations), (ha), 2005	ha	2005	3,5/486,8	3,9/510
2. Supply of assets	Number of grain harvesters, (1000 pcs), 2005	Thousand pcs	2005	120,5	150,5
	Tractor power capacity per 1000 ha agricultural area, (kW), 2000	Thousand pcs	2005	12,1	14,1
3. machine power density	Tractor capacity per Thousand ha agricultural area	kW	2000	815,0	905,0
4. Tractor density	No. of tractors per 100 ha agricultural area,	pcs	2005	2.1	2.7

5. Density of combine harvesters	No. of combine harvesters per 100 ha agricultural area	Pcs	2005	0,21	0,25
<b>Axis II: Development of the environment and of the countryside</b>					
6. Ratio of nature conservation areas	Ratio of protected areas of national significance	%	2004	8.9	8.9
7. Soil amelioration	Area treated with organic manure	Thousand ha	2004	460,2	500,0
	Active ingredient of fertiliser amount used on areas treated with artificial fertiliser	Kg/ha	2005	133,0	128,0
	Active ingredient of artificial fertiliser sold for agricultural area	Kg/ha	2005	67,0	66,0
8. Use of plant protection chemicals	Chemicals used for plant protection:				
	- herbicide	Thousand ha	2005	1562,1	1410,0
	- insecticide	Thousand ha	2005	733,2	580,0
	- fungicide	Thousand ha	2005	791,1	640,0
	- other plant protection chemicals	Thousand ha	2005	363,1	210,0
<b>Axis III: Improvement of the quality of life in the rural areas and the promotion of diversification</b>					
9. Long-term unemployment	Share of registered long-term unemployed within the registered unemployed in the rural areas	%	2005	48.91	42,5

## Annex 27.: SWOT analysis (with comparable factual data)

Item	Quantification of the characteristics	Unit	Year	Source	Hungary	EU member states	
						EU-15	EU-25
Strengths:							
– A significant portion of the country’s territory has excellent characteristics as a production site (121)	Share of agricultural area from total area	%	2003	CSO, EUROSTAT	63,0	38,8	40,0
	Share of arable land from total area	%	2003	HCSO	48,5	22,4	24,4
	Share of productive area from total area	%	2005	HCSO	83,0		
– Sites for the production of region-specific products with individual quality (123)							
– Variety of landscape elements, rich ecological and natural characteristics (tourism)	Protected area	thousand ha	2005	HCSO	836		
	National park	thousand ha	2005	HCSO	485		
	Landscape protection area	thousand ha	2005	HCSO	324		
	Protected natural area	thousand ha	2005	HCSO	27		
– Expansion of cooperative efforts (142)	Number of producer groups	Number	2006	MARD	208+71		
– Low environmental load (212, 214, 216)	Water quality: gross nutriment balance (nitrogen surplus)	kg /ha	2002-2004 average	MTA-TAKI, EUROSTAT	20,0	89	N.A.

	Annual changes in the nitrate contents of soil and surface waters (1992-1994 = 100%)	mg/l	2000-2002 average	EUROSTAT	77,5	N.A.	N.A.
	Areas at risk of soil erosion	tons/ha/year	2004	EUROSTAT	0,41	1,94	1,64
	Ratio of the territory designated as Nitrate Vulnerable Zone in Hungary	%	2005	CSO, EUROSTAT	53,4	N.A.	N.A.
	Use of artificial fertilisers per one hectare of cultivated land (in active substance)	kg	2002	HCSO	104	174	154
	High nature value areas of farmland	Million ha	2005	MARD	~1,4	26,54	30,78
– High biodiversity (212, 213, 214, 221, 222, 223, 224, 225)	Ratio of protected areas of national significance	%	2004	HCSO	8,9		
	Forestation	%	2005	SFO, EUROSTAT (2000)	19,9	36,4	35,7
	Share of NATURA 2000 forest areas	%	2005	CSO, EUROSTAT	43,6	11,8	N.A.
	Protected forest areas:	%	2000-2002	ÁEESZ, MCPFE, EUROSTAT (EU14 and EU22-23)			
	- preserved without actual intervention				0,2	1,83	1,69
	- preserved with a minimum of intervention				3,6	1,79	1,66
	- preserved with active operations				0,6	3,75	3,71
	- preserved due to the maintenance of the landscape and of natural values				15,7	9,96	10,64
	NATURA 2000 arable land and grasslands from agricultural areas	%	2005	EUROSTAT	17,2	12,1	N.A.
	High nature value areas of farmland	Million ha	2005	MARD	~1,4	26,54	30,78
– Strong entrepreneurial capabilities in some groups of the rural population – increase in	Change in the number of market-oriented farms (2000=100%)	%	2003	HCSO	116,6		
	Change in the area of market-oriented agricultural business (2000=100%)	%	2005	HCSO	128,8		

the share of market-oriented farms (311, 312, 313)	Change in the number of village tourism accommodations (2000=100%)	%	2005	TEIR	133,0		
	Change in the number of guestnights in village tourism (2000=100%)	%	2005	TEIR	110,0		
– Healthy natural and living conditions in rural areas (313, 321, 323)							
Cooperation willingness of local communities	Towns and villages participating in the LEADER programme - number	Number	2006	MARD	960		
	- share	%	2006	MARD	30,6		

Item	Quantification of the characteristics	Unit	Year	Source	Hungary	EU member states	
						EU-15	EU-25
Weaknesses							
– Underdeveloped tertiary sector in rural regions (312, 313, 321)	Share of the service sector in rural regions (national rate = 100%)	%	2004	TEIR	54		
– Deficient rural infrastructure (households, corporations and producers; eg.: carriage, transport, sites) (125, 312, 58 Art.)	Households with access to gas supply network in villages, per 1000 inhabitants	Number	2005	HCSO	246		
	Share of homes with access to utilities in villages	%	2005		89,8		
	Share of homes with access to wastewater utilities in villages	%	2005		34,7		
– Lack of employment possibilities in rural regions (311, 312, 313)	Employment rate (population of 15-64 years’ of age)	%	2005	EUROSTAT	56,9	65,2	63,8
	Unemployment rate	%	2005	EUROSTAT	7,2	7,9	8,2
	Backlog of employment rates of rural regions in a comparison with national average	%	2005	TEIR	-19,0		
	Unemployment rate by the type of towns and villages	%	2005	HCSO			
	- county capitals				7,1		
	- other towns				9,9		
- villages (2-5,000 inhabitants)	12,4						
- villages (500-1,000 inhabitants)	16,0						
	Share of inactive population in towns and villages with less than 1000 inhabitants	%	2000	HCSO	70,0		

	Share of employees commuting daily	%	2005	TEIR	61,0		
	Share of businesses in rural regions (country, total = 100%) within all businesses of the country	%	2005	TEIR	30		
– Unfavourable age mix of agricultural manpower (112, 113.)	Share of agricultural manpower above the age of 40 years	%	2003	HCSO	62,2		
	Average age of individual entrepreneurs - men - women	year	2003	HCSO	53 60		
	Share of older individual entrepreneurs (above 54 years)	%	2005	HCSO	52,0		
	Increase in the number of individual entrepreneurs above the age of 50 years	%	2003/2000	HCSO	110		
– Insufficient skills of the farmers from the point of view of professional, farm management, EU-related, market and marketing skills (111, 114, 132)	Share of farm managers without professional qualifications, with practical experience	%	2005	HCSO	79,8		
	Share of individual farmers with qualifications in agriculture - primary level - secondary level - higher education	%	2005	HCSO	7,4 5,6 1,8		
	Ratio of individual farmers using computer and internet	%	2006	MARD	30		
– Scattered character of land use, of landholding structure (112, 113, 125, /1.2.5.7./)	Average size of farms (as an average of all farms)	ha	2003	EUROSTAT	7,6	20,1	16,1
	Average size of land used by individual farms	ha	2005	HCSO	3,5		
	Land structure of individual farms - below 5 ha	%	2003	CSO, ECOSTAT	89,6	56,6	61,9

	- 5-20 ha				7,2	22,5	23,0
	- 20-50 ha				1,8	11,0	8,3
	- above 50 ha				1,4	9,9	6,8
	Share of the area of individual farms						
	- below 5 ha				19,6		
	- between 5-10 ha	%	2003	HCSO	10,4		
	- 10-50 ha				31,6		
	- above 50 ha				38,2		
– Inappropriate utilisation of low quality cultivation areas, from the point of view of their characteristics – alternative utilisation, forest/bio-diversity – (122, 212, 221.1)	High nature value areas of farmland	Million ha	2005	MARD	~1,4	26,54	30,78
	Distribution of agricultural area						
	- outside LFA				84,9	51,61	44,55
	- mountainside LFA	%	2005	MARD, EUROSTAT	0,0	4,77	16,26
	- other LFAs				6,7	36,45	35,59
	- LFAs with specific hindrances				8,3	5,27	3,23
	Area of forests and other arboreal areas providing primarily soil and water protection (total forest area = 100%)	%	2000-2002	SFO, MCPFE	9,6	5,7 (EU13)	6,8 (EU22)
Agriculture provides a living only to few, as a core business (141, 142, 111)	Share of the population engaged in agricultural production, above the age of 15 years	%	2003	HCSO	15,9		
	Share of full-time agricultural employees:	%	2003	HCSO	9,0	3,9	5,1
		%	2005	HCSO	5,0	3,7	4,9



– Investments postponed due to the lack of funds, obsolete production assets (justification for support to machinery) (121)	Tractor stock per 100 ha of agricultural area	pc/ 100 ha	2000 2005	MGI	1,9 2,1	4,9	
	Combined harvesters per 100 ha of agricultural area	pc/ 100 ha	2000 2005	MGI	0,2 0,2	0,3	
	Share of agricultural investments in total investments	%	2005	HCSO	4,4		
	Average age of machinery and equipment	year	2003	HCSO	~10-12		
	Engine performance per 1 ha of agricultural area	kW	2000 2005	HCSO	2,2 2,1	5,2	
	Area cultivated by one tractor	ha	2003	HCSO	48,7	19,6	
– Insufficient harmony between the size and production capacity of the farms, the technical and technology level of processing is too low (121)							
– Deficiencies in animal accommodation, animal welfare provisions, environmental burden (121, 131, 215) - (target 2)	Accommodation created with high-level breeding technology	LU	2005				
– Obsolete technologies in animal husbandry (121)	Number of animal farms in need of modernisation: large-size pig farm large-size poultry farm small-size animal farm	Number	2005	MARD	299 247 3300		

– Services providing assistance to product paths, underdevelopment of the commercial, logistics systems (123, 124, 125)							
– Weakness of cooperation between the production of basic materials and processing, lack of quality tracking (123, 142)							
– Insufficient product development and quality systems (124 132)							
– String differentiation in the development of the villages, critical situation in the villages of regions on the decline, loss of population (322, 323)	Number of villages with less than 500 inhabitants	Number	2005	HCSO	1046		
	Number of villages with less than 500 inhabitants	%	2005	HCSO	33,2		
– Lack of community spaces (321, 323)							
– Disintegrated rural communities (321,							

34, LEADER)							
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Item	Quantification of the characteristics	Unit	Year	Source	Hungary	EU member states	
						EU-15	EU-25
<b>Opportunities</b>							
– Increasing demand for domestic products with excellent content value (123, 124, 132)							
– Expansion of eco-production efforts (214)	Size of the area involved in ecological farming, controlled or in the process of transition	thousand ha	2005	MARD, EUROSTAT (2003)	128	5099,2	5677,8
	Supported organic farming area	thousand ha	2005	MARD	76,0		
	Size of animal stock, eco-animals	thous. animal units	2005	MARD	16		
– Increasing interest in gastronomy, eco- and recreation, hunting tourism (213, 214, 313)							
– Traditional and special quality products (123, 124, 132)	Share of the production of quality wines in total wine production	%	2004	National Council of Wine Communities	58,7		
	Number of products included in the certification system of food products of excellent quality	Number	2005	MARD	350		
– Potential to increase the capacity utilisation in forestry and wood processing industry (122,	Forestation	%	2005	SFO, EUROSTAT (2000)	19,9	36,4	35,7
	First afforestation of agricultural land	thousand ha	2005	HCSO	17,8		

221, 222, 223, 226, 227)	Share of forest deployment in indigenous, deciduous species of trees	%	2005	HCSO	59,0		
– Increase in demand for renewable energy sources (123)	Arboreal energy plantation	thousand ha	2005	MARD	~0		
– Increase in the share of competitive farms (141)	Change in the number of market-oriented farms (2000=100%)	%	2003	HCSO	116,6		
	Change in the area of market-oriented agricultural business (2000=100%)	%	2003	HCSO	128,8		
– An expansion of the activities of rural population provides a safer living (311)							
– Expansion of extensive graze-based animal breeding (213, 214)	Agricultural area used for extensive grazing	thousand ha	2005	MARD	420,0		
– Use of the manpower supply of rural regions – diversification of activities (311, 312, 313)							
– An expansion of the opportunities to earn a living for the Roma population (312, 321)							

Item	Quantification of the characteristics	Unit	Year	Source	Hungary	EU member states	
						EU-15	EU-25
Threats							
– Increase or no decrease in the lack of professionals with modern and renewed skills (111)	Share of persons with secondary level and higher education qualifications in agriculture	%	2005	HCSO	7,4		12,4
	Number of persons participating in training or re-training in food economy	Number	2006	MARD	16000		
– Outdated knowledge in rural population, low level of adaptability, as a long-term hindrance factor (114, 115, 121)							
– Decrease in the size of areas with outstanding characteristics and their deterioration in quality terms							
– Disproportionate increase in the costs of agriculture							
– (a CAP reform makes production surpluses impossible to be financed, increase in the uncertainty for the producers)							
– Inadequate propagation materials endanger the balance between supply and demand, the quality of products							
– Due to the lack of modern knowledge, the utilisation of the	Share of persons with secondary level and higher education qualifications in agriculture	%	2005	HCSO	7,4		12,4

good characteristics is in danger	Number of agricultural enterprises making use of advisory services	Number	2006	MARD	1500		
– Problems with water management – excess surface waters, irrigation channels	The share of authorised irrigation area within total agricultural area	%	2003	HCSO	3,9	11	
– Global warming (123, 221.1, 221.2, 222, 223)	Production of renewable energy sources from agriculture and forestry	thous. t mineral oil equivalent	2004	EUROSTAT	~0	N.A.	2084,3
	Production of renewable energy from forestry (wood and wood waste)	thous. t mineral oil equivalent	2003	EUROSTAT	777,0	44596	53996
	Issue of greenhouse gases by agriculture	thous. t, CO <sub>2</sub>	2003	EUROSTAT	10130,0	414427,5	467803,3
– Socially backwarded regions with small villages (312, 321,34, LEADER)							

