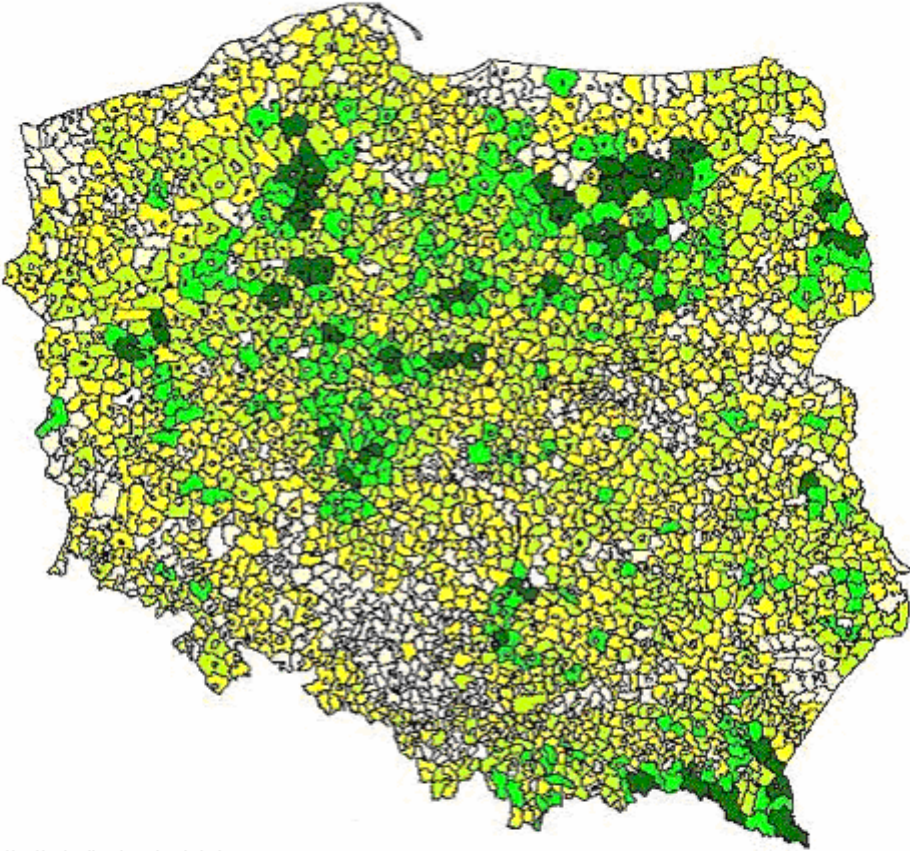


ANNEX A. Preferences and needs of afforestation based on the National Woodland Extension Programme

Preferences and needs increase with points.



synthetic indicator (points)

2 - 10
10.1 - 15
15.1 - 21
21.1 - 30
30.1 - 62

**ANNEX B. Projects implemented by the Polish Ministry of Agriculture
under Phare programme during 1998-2003 period**

No	Project title	Budget breakdown per project (MEUR)		
		Phare	Polish co-financing	Total
Phare 1998				
1.	PL9805.01 Institution Building of the Ministry of Agriculture for the Integrated Administration and Control System	2,3	0,5	2,8
2.	PL9805.02 Reform and strengthening of the veterinary administration	2,657	1,0	3,657
3.	PL9805.03 Implementation of an animals identification and registration system	2,5	2,5	5,0
	Total	7,457	4,0	11,457
Phare 1999				
1	PL9906.01 Phyto-sanitary Administration for future external borders	5,5	2,12	7,62
2	PL9906.02 Veterinary administration at future external borders	8,15	6,95	15,1
3	PL9906.03 Joint Phare/EBRD dairy facility	8,0	8,0	40,0 <i>(including 24 – EBOR)</i>
4	PL9906.04 Preparation for the implementation of the Common Agricultural Policy.	5,9	2,4	8,3
	Total	27,55	19,47	71,02
Phare 2000				
1	PL0006.01: Institution building for rural development	2,0	0,83	2,83
2	PL0006.02: Institution building for agri-environment and afforestation	2,0	0,54	2,54
3	PL0006.03: Institution building for early retirement	2,0	0,6	2,6
4	PL0006.04: Veterinary system for laboratories and disease control	4,0	3,2	7,2
5	PL0006.05: Border Inspection Posts phase II	4,45	2,0	6,45
6	PL0006.06: Phytosanitary administration	4,0	0,92	4,92
7	PL0006.07: Food control administration	4,0	1,0	5,0
8	PL0006.08: CAP Common market organisations	9,55	7,55	17,1

9	PL0006.09: Preparation for selected CAP instruments	9,6	9,45	19,05
10	PL0008.03 Fisheries administration	2,0	0,7	2,7
	Total	43,6	26,79	70,39
Phare 2001				
1.	PL0104.01 Fisheries market organization	3,82	1,69	5,51
2.	PL0104.02 Agricultural advisory system	4,5	0,75	5,25
3.	PL0104.03 Farm standards	2,0	0,5408	2,5408
4.	PL0104.04 Organic farming	2,5	0,6	3,1
5.	PL0104.05 Animal Feeds Control system	7,0	3,0	10,0
6.	PL0104.06 EUROP classification of animal carcasses	2,0	0,671	2,671
7.	PL0104.07 Training for CAP	2,0	1,25	3,25
8.	PL0104.08 IACS and Animal I&R systems control	5,0	4,2	9,2
9.	PL0104.09 Implementation of FADN	2,1	0,7	2,8
10.	PL0104.10 Agricultural Information System	2,0	0,7	2,7
	Total	32,92	14,1018	47,0218
Phare 2002				
1	2002/000-196.04.01 Integrated information system for seed certification and marketing	2,0	0,7	2,7
2	2002/000-580-04-01 TSE control in Poland	8,0	5,99	13,99
3	2002/000-580-04-02 Implementation of milk quota system in Poland	2,1	0,4	2,5
4	2002/000-580-04-03 Preparation AMA as paying agency	2,3	0,56	2,86
5	2002/000-580-04-04 Institutional Building for Financial Instrument for Fisheries Guidance	1,0	0,135	1,135
7	2002/000-605.04.01 National veterinary reference laboratory in Puławy	17,33	5,926	23,256
6	2002/000-605.04.02 Preparation for European Agricultural Guarantee and Guidance Fund programmes implementation	2,0	0,5	2,5
	Total	34,730	14,213	48,943
Phare 2003				

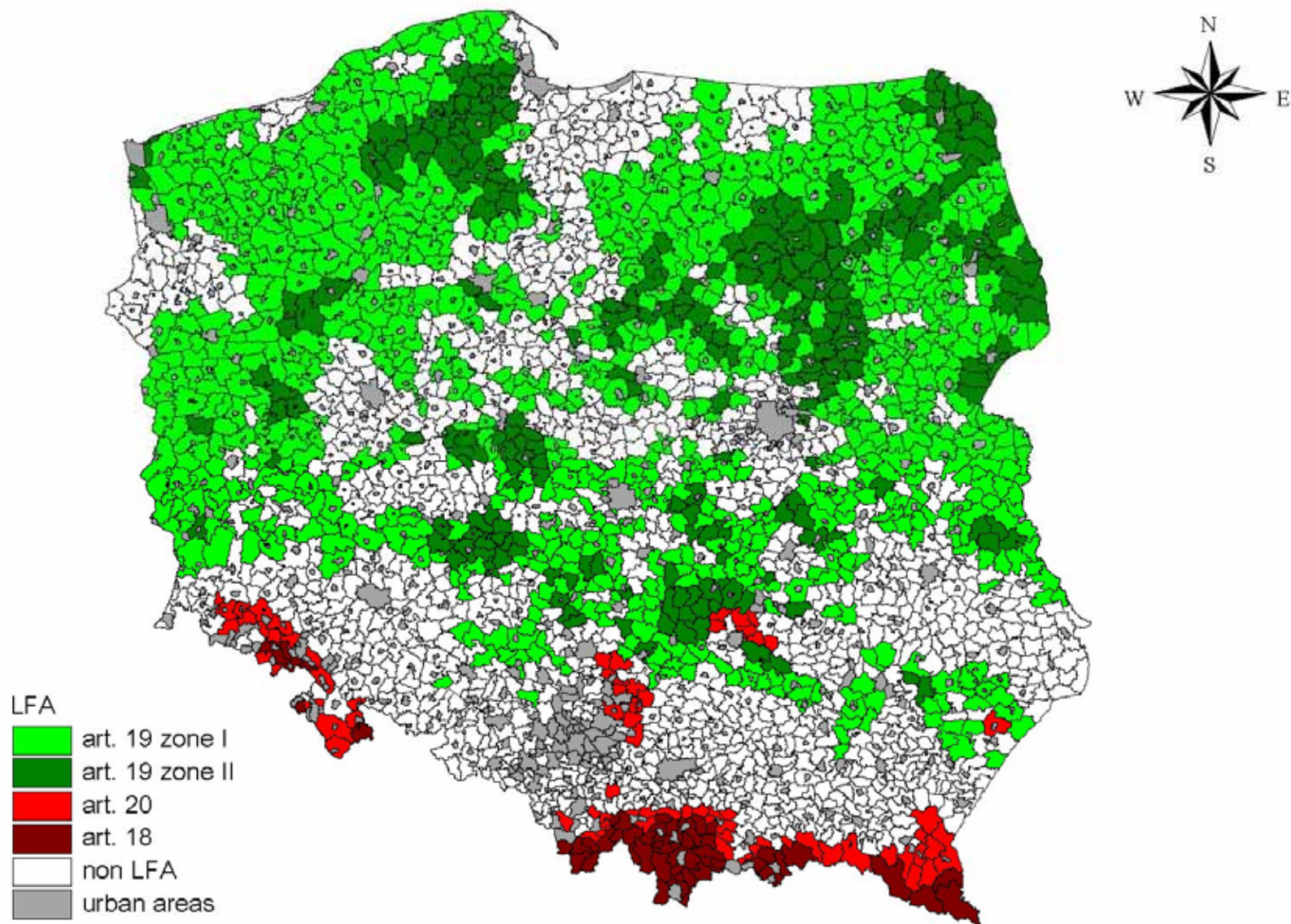
1	Strengthening implementation of Common Fisheries Policy	0,95	0,117	1,067
2	Strengthening Veterinary Administration	2,2	0,4	2,6
3	Improvement LPIS and GIS control methods	13,75	12,55	26,3
4	National Reference Laboratory in Puławy	9,975	3,3	13,275
5	TSE control in Poland – part II	7,675	4,877	12.552
6	Eradication of rabies among wild animals	5,0	3,0	8,0
7	Strengthening EAGGF programmes implementation	2,0	0,3	2,3
8	Phytosanitary and Seed Administration	0,955	0,322	1,277
	Total	42,505	24,866	67,371

Source: MARD

Phare 2003: 1,2 – covered by the 1st part of the Financial Memorandum, signed on 16th July 2003

3,4,5,6,7,8 – presented in the Financial Proposal, covering the 2nd part of Phare 2003 programming, that shall be a subject of the Management Committee meeting in September 2003

ANNEX C. Location of LFA areas



ANNEX D. Justification of delimitation and payment for LFAs

I. Delimitation

1. LFA types

Pursuant to the legal basis laid down by Council Regulation (EC) No. 1257/1999, the LFAs designated have been divided into three categories.

a) On the basis of Article 18 of the abovementioned Regulation, mountain areas have been designated which require increased labour input, means of production and equipment due to their features and are at the same time characterised by a considerable limitation of the possibilities for using the land.

b) On the basis of Article 19 of the Regulation, lowland areas have been designated which are homogeneous from the point of view of natural production conditions, are characterised by unfavourable agricultural production conditions, are in danger of abandonment of land use and where the conservation of the countryside is necessary. The designated area comprises agricultural areas exhibiting all of the following characteristics:

- the presence of land of poor productivity, difficult to cultivate and with limited potential which cannot be increased except at excessive cost, and which is mainly suitable for extensive livestock farming,
- production which results from low productivity of the natural environment which is appreciably lower than the average, with regard to the main indices of economic performance in agriculture,
- a low or dwindling population predominantly dependent on agricultural activity, the accelerated decline of which would jeopardise the viability of the area concerned and its continued habitation;

c) On the basis of art. 20 of the Reg. 1257/99 the areas with specific natural handicaps have been delimited, where the farming activity shall be continued in order to improve the environmental conditions, maintenance of landscape features and tourist potential of these areas.

The characteristics listed above formed the basis for the choice of indicators that enabled the designation of less favoured areas in regions of Poland in a measurable and objective way.

2. Delimitation of mountain areas

2.1. Indicators and boundary conditions applied

The fundamental indicator adopted in order to determine mountain areas is the elevation of farmland above sea level. It has been assumed that gminas within which over 50% of farmland is situated above 500 metres a. s. l. are classified as LFAs.

2.2. Justification

The Alps are the most important and largest European mountain range, which is most often compared to the Carpathians with regard to natural difficulties to agricultural production typical for mountain areas. This is due to geographical closeness, similar structure and types of agricultural production as well as the historical models of support for mountain area development. The Carpathians and the Alps are quite similar in terms of climate and biotic conditions and also with regard to their agrocenoses. The vegetation belts and agricultural crops on mountains situated in countries with warm climates are both very different from those on the Carpathians.

Topography and climate are the main factors that make the Carpathians and the Alps similar in terms of their natural environment.

The typical number of days with an average daily temperature over 5°C during the year, which determines the length of the growing season, causes the growing season to cease at an altitude above 2400 metres a. s. l. in the Alps and above 2250 metres a. s. l. in the Carpathians.

The upper boundary of the high mountain pasture belt within both mountain ranges is found along the 2°C isotherm and the boundary of the dwarf-pine belt coincides with the 0°C isotherm. The -2°C isotherm constitutes the upper limit of forest and the +4°C isotherm is the upper limit of beech and fir forest. There are fewer climatic belts in the Western Carpathians than in the Eastern Alps. The Carpathian massifs are situated farther to the north and there is no warm belt there, nor, is there a very cold belt in the Carpathians either due to the fact that they are lower than the Alps. The data concerning the characteristics of various climatic elements and indicators, which are usually closely related to the average annual temperature and govern the differences between the climatic belts of the Alps and those of the Carpathians, are presented in Table 1.

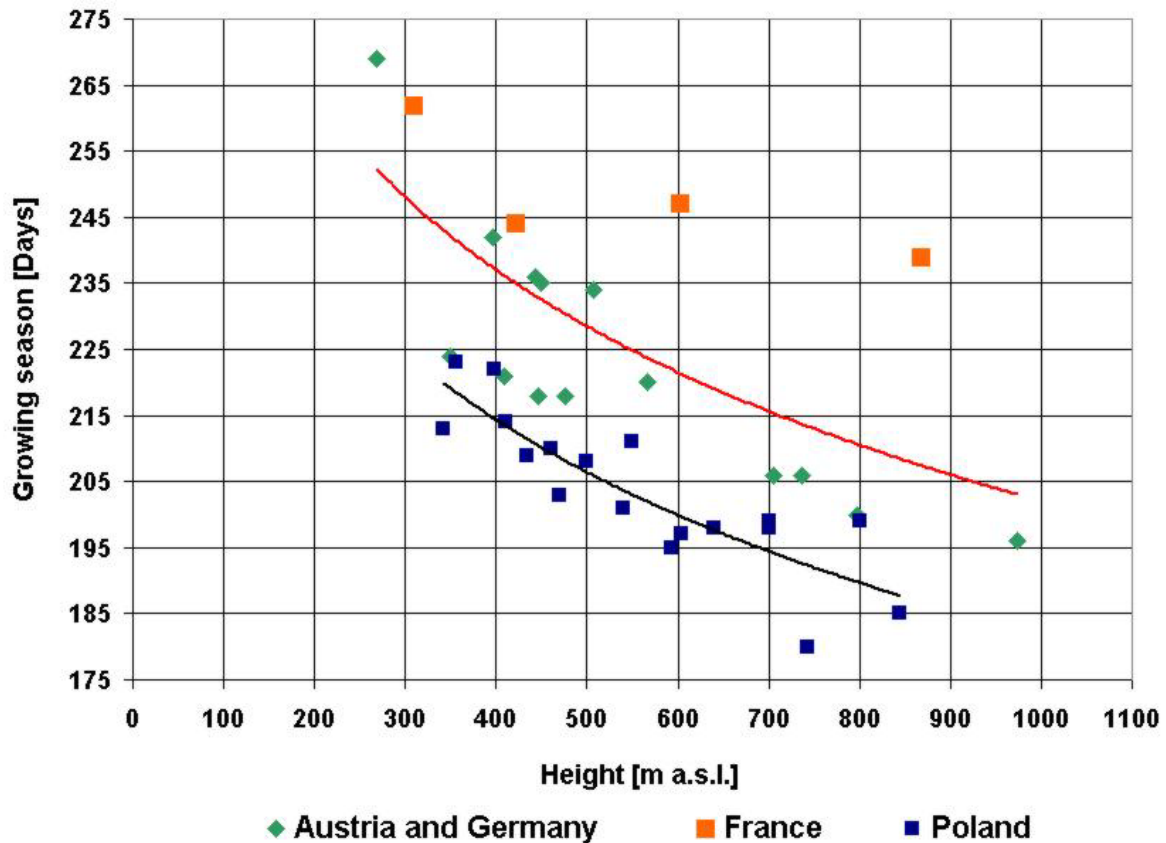
Table 1. Differences in altitudes for economically valuable climatic belts of the Eastern Alps and the Western Carpathians

Climatic belts	Average annual temperature [°C]	Altitude [m a. s. l.] for Eastern Alps	Altitude [m a. s. l.] for Western Carpathians
Very cold	0-2	2050-1730	1850-1450
Cold	2-4	1730-1400	1450-1150
Moderately cold	4-6	1400-920	1150-650
Moderately warm	6-8	920-400	from 650 to foreland
Warm	>8	from 400 to foreland	-

Source: Hess 1968

Within the economically valuable belts: very cold, cold, moderately cold (forming the upper forest boundary), moderately warm and warm, the differences in the altitude of upper boundaries of the belts range from 200 metres in the upper part of the very cold belt to 350 metres in moderately cold belts. Two further belts, warm (not present in the Carpathians) and moderately warm, are the most significant ones for agricultural production. Thus the difference in the altitude of the upper boundary of the moderately warm belt, which reaches 650 metres a. s. l. in the Western Carpathians and 920 metres a. s. l. in the Eastern Alps, amounts to 270 metres. When comparing the economic delimitation of mountain areas in the EU with the delimitation criteria for distinguishing mountain areas in Poland, a correction of 250 metres should be applied. Therefore the adopted average altitude boundary for mountain LFAs, the lower limit for which is 600 metres a. s. l. according to Community criteria (COM (784) 2222), should be adjusted by 250 metres.

Figure 1. Duration of growing season (mean daily temperature above 5°C) as a function of elevation above the sea level. The red curve shows relationship between elevation and length of growing season for France, Germany and Austria, the black curve is for Poland.



It is evident from the above data that the elevation difference in climatic strata in mountainous areas between Poland and countries such as Austria Germany and France is at least 250 m

3. Delimitation of lowland areas

3.1. Indicators applied

3.1.1. Land Quality Index (LQI).

The Land Quality Index (LQI) together with population density and the share of population engaged in agriculture have been used in order to designate lowland LFAs in Poland. This land quality indicator was derived based on a similar concept as the system used in Germany known as *Bodenklimazahl*.

The LQI reflects the environmental potential for agricultural production as controlled by natural conditions. The database was generated at the Institute of Soil Science and Plant Cultivation at Puławy in the 1970s as part of research concerning the methodology for assessing agricultural land quality in Poland. The primary objective of this research was the creation of indicators for the quantitative and spatial assessment of natural factors controlling potential crop productivity at the local (gmina) level for planning purposes. This methodology

was than implemented and respective indicators were calculated for the entire territory of Poland and the database produced for the gmina level is available in an Excel format.

The LQI is an aggregated indicator based on the assessment of the following factors:

- soil quality;
- climate;
- land relief;
- soil soil moisture index.

These factors were ranked by assigning appropriate weights in a way that reflected the relative magnitude of their impact on land productivity, as further described in this annex. A spatial assessment of each of these four parameters was conducted and their weighted mean was calculated for each gmina as the smallest administrative and statistical unit. On average, the mean area of a rural gmina in Poland is about 100 square km. The overall land quality index (LQI) for the gmina level was characterized by one aggregated value which was calculated as a sum of the four indicators mentioned above – soil quality, climate relief and soil moisture conditions. As further explained soil quality is the main denominator of land quality as defined by texture of soil profile and location within the terrain – texture of the soil profile controls a natural fertility and soil physical properties. This land quality indicator is a simple and quantitative measure of natural land productivity and could theoretically range between 19,5 and 120 points (table 2). However in the reality there is no case where all 4 partial indicators constituting LQI take extreme values. In practice for Poland those LQI ranges between 31 and 111.

Table 2. Index ranges

Index	Range
Soil quality	18 – 95
Climate	1 – 15
Relief	0 – 5
Soil moisture conditions	0.5 – 5
LQI	19,5 – 120

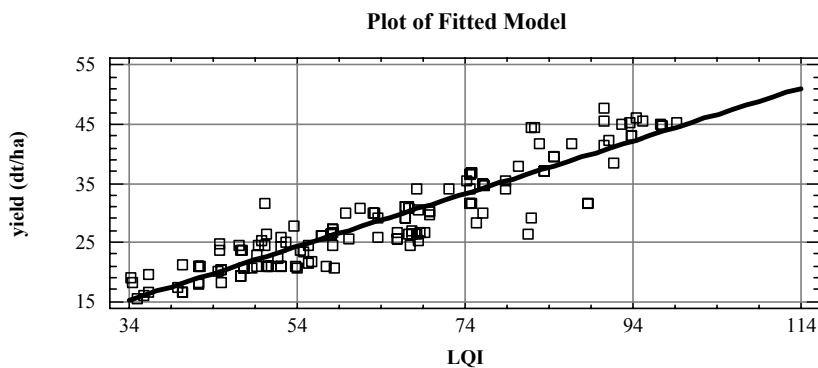
Data layers which are essential to generate this land quality index for a given area (gmina or any other administrative unit) include: soil suitability maps, relief maps, soil profile information and long term climate and yield data. Soil survey and mapping in Poland started in mid sixties and ended in mid eighties and were based on a uniform methodology for the entire country producing full coverage of detailed maps in following scales: 1:5000, 1: 25 000 and 1:100 000. The main mapping unit on a soil map is soil suitability complex delineated as an area containing soils of similar productivity potential due to similar physical and chemical characteristics (texture, fertility, pH, buffering capacity, water retention etc.) and therefore suitable for growing given crops of certain habitat requirements . Each soil complex is ranked by certain number of points reflecting its natural productivity – ranking was established based on long term yield observations. Contemporarily, relief maps are generated from digital terrain models – relief is scored based on slopes and land forms as they relate to agricultural management conditions. Soil moisture conditions are scored based on water retention of a

given mapping unit based on a texture of a unit dominating soil profile as well as its location within a terrain controlling drainage process.

Recently, the LQI ratio was developed for village units which are smaller than gmina (surveying districts). This was done for units that required a more detailed approach since a high degree of natural conditions variability did not allow for a proper assessment of LFA. This was intended to avoid the irregularities and gaps in LFA designation caused by data analysis and aggregation to smaller scales (the work was completed in March 2004). The same criteria and weights were applied to surveying districts as in the case of gminas in order to ensure the methodological consistency of the assessment. Soil, land relief and climate numerical databases as well as GIS (geographical information systems) tools were extensively used for automated delineation of LFA in these units.

Validity and objectiveness of this approach to land quality assessment is evident as up to eighty percent of variability of crop production in Poland observed at gmina level can be explained as a liner function of LQI (Figure 2). The LQI is aggregated to NUTS-5 level, however since it is derived from bio-physical spatial characteristics of soils and climate it has a geographical representation and recognizable physical boundaries drawn on soil agricultural suitability maps. Aggregating land quality index to NUTS-5 level which is a relatively small unit (10000 ha of agricultural land on average) does not introduce a major discrepancy in terms of physical boundaries of LFA.

Figure 2. Simple regression model demonstrating correlation between statistical yields in gminas of Pomorze region and land quality index ($y = 0.032 + 0,448x$, $R^2 = 85.3\%$)



Soil quality index

The data summarised in Table 3 characterise the soil quality index as one of the four elements that constitute the aggregated land quality index. The soil quality index represents the largest contribution to the land quality index.

Table 3. Soil quality index – numerical values for various soil complexes.

Soil suitability complexes	Points
very good wheat (1)	95
good wheat (2)	80
faulty wheat (3)	61
very good rye (4)	70
good rye (5)	52
weak rye (6)	30
very weak rye (7)	18
cereal-fodder strong (8)	64
cereal-fodder weak (9)	33
mountain wheat (10)	75
mountain cereal (11)	61
mountain oat-potato (12)	33
mountain oat-fodder (13)	18
very good and good grasslands (1z)	80
medium quality grasslands (2z)	50
weak and very weak grasslands (3z)	20

The value of this index for arable land ranges from 18 points for the poorest mountain soils to 95 points for the most fertile ones – the so-called very good wheat complex. Each soil complex is clearly defined in terms of location within the terrain and texture. For example, the very good wheat complex includes the best country's soils naturally rich in nutrients, neutral to slightly alkaline pH with an A horizons deeper than 40 cm, rich in organic matter, located in flat but well drained terrain representing texture of a soil profile which enables high water retention - soil profile texture characteristics includes combinations of such texture groups as loam, silt loam, silty clay loam clay loam and clays. On the other end there are the weakest lowland soils soil called weak rye complex formed on coarse sands with low clay content and 20-25 cm deep A horizon, strongly acidic and highly permeable for water with low water retention potential and presently not suitable for agriculture due to negative cost effectiveness – high input do not compensate for natural constrain and would lead to extensive pollution of ground waters. As already mentioned the criteria for the soil complex classification and ranking are based on soil profile properties such as texture, depth of the A horizon, organic matter content and other physical and chemical parameters determining fertility and water availability. Therefore the soil complex can be considered to be a description of soil habitat conditions reflecting natural soil fertility and its suitability for crops with various requirements concerning water and nutrients. The soil survey conducted in

Poland has generated a full coverage of soil maps of various scales: 1:5,000, 1:25,000, 1:100,000. Such soil maps have provided background information for developing soil quality indicators at the gmina level. Calculating soil quality index for gmina level involves a weighted mean derived by multiplying area of each soil complex polygon by respective number of points divided by the total area of agricultural land.

The ranking and numerical values for each soil complex were derived from results obtained from statistical observations and from several hundred agricultural controlled experiments conducted throughout the country. Different crops were grown in a crop rotation, using the same input levels and farming practices at all experimental sites.

This enabled an accurate assessment of the soil suitability complex impact on crop yields while the differentiating influence of farming practices and inputs was minimised. This means that this indicator provides a fair quantitative assessment of soil productivity.

The experimental data were collected in the 1970s and 1980s and therefore a validation of the soil quality index under current conditions was necessary.

As no experiments similar to the ones used to develop the index are currently being conducted, the validation has been based on satellite images of the Normalised Difference Vegetation Index (NDVI)¹. The NDVI is commonly used for yield modelling in Europe as it strongly correlates with actual yields – almost 80% of yield variability can be explained by this parameter. A digital layer of soil suitability complexes for the test area was overlaid on an NDVI map derived from June 2002 Landsat TM images.

A weighted mean for the NDVI was calculated for each soil complex. The NDVI correlated very strongly with the soil quality index, exhibiting a pattern similar to that of the experimental yields. This allows us to state that the soil quality index provides a good representation of soil productivity potential and the original concept and methodology for soil assessment do not need to be amended.

Climate index

Climate indicator for the gmina level was derived on the basis of long term weather parameters (such as temperature, duration of sunshine, and precipitation) recorded for 60 meteorological stations throughout the country for a period of fifty years. This indicator for the gmina level reflects yield potential calculated as a function of weather parameters. This climate indicator is scaled in range between 1 and 15 points. Data presented in Table 4 contains standardized (scaled) climate index and how its value distributes over the range of actual yields observed in Poland. Detailed methodology and characterization of methodology for generating climate indicator was described by Witek and Gorski (1977)². It is important that the validity of these functions and consequently of the climatic index applies to current average yield levels.

¹ G. Genovese, C. Vingnolles, T. Negre, G. Passera, 2001, A methodology for a combined use of normalized difference vegetation index and CORINE land cover data for crop yield monitoring and forecasting.

A case study on Spain

² Witek T., Gorski T. (1977) Evaluation of the natural capability of agricultural areas in Poland, Wydawnictwa Geologiczne, Warsaw, pp 20.

Table 4. Distribution of climate index within a range of observed crop yields expressed in cereal units (yields of all crops converted into cereal units).

Standardised (scaled) climate index	1	3	5	7	9	11	13	15
Yields (cereal units)	28	29	30	31	32	33	34	35

To relate the quality of climate in Poland to other EU15 countries net primary productivity (NPP) models were used. Miami model calculating net primary productivity based on precipitation and temperature data is one of well accepted approaches for regional scale comparative purposes. Data from the IPCC (Intergovernmental Panel on Climate Change) database concerning average monthly temperature and rainfall in the years 1961-1990 were used to construct a numerical map presenting differences in potential productivity (Figure 3, 4 and 5). According to this model, central Poland is one of the most constrained European regions with regard to climate conditions influencing agricultural production. Even in the case of Belarus and the Baltic States the potential productivity is higher.

Figure 3. Length of the termic vegetation period (acc.to. IPCC 2003)

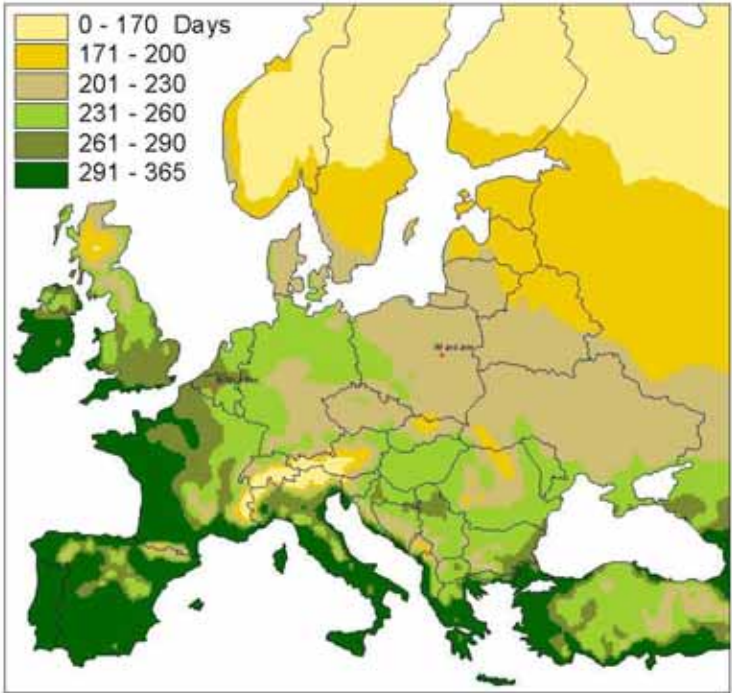


Figure 4. Annual sum of rainfall (acc. to IPCC, 2003)

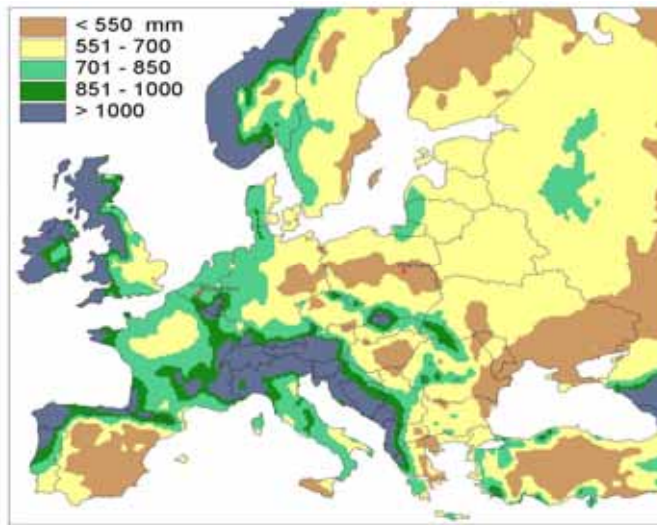
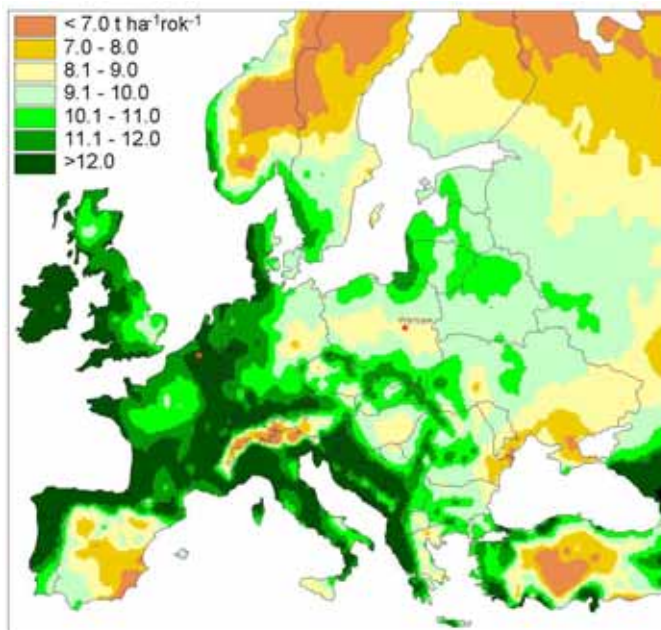


Figure 5. Net primary productivity (Miami model, Lieth 1972) (calculated based on IPCC data 2003)



Land relief index

Land relief (terrain) conditions were evaluated based on topography, altitude differences and slopes ranked according to land form type: flat, undulating, rolling, moderately steep, low mountains, mountains and high mountains. Relief was evaluated using a scale from 0 to 5 (Table 5). Calculation of the land relief index, as for other indicators, is based on the weighted mean principle – area of each class of a relief type (defined in Table 5) is measured on a relief map covering the territory of interest (gmina or any other smaller of larger unit administrative or natural unit). Then an area of each relief class found within analyzed boundaries is multiplied by number of points associated with a given relief type and divided by the total area of a unit. Such assessment is done for agricultural land only and does not include a forest land or other land use types.

Table 5. Relief index classification

Parameter	F*	GU	U	R	MS	LM	M	HM
Denivelation (m)	0-3 (5)	3-7 (5-10)	7-20 (10-25)	20-40 (25-50)	40-75 (50-100)	75-200 (100-250)	200-400 (250-500)	>400 (500)
Dominating slope range	0-1	1-5	5-8	8-15	15-20	20-30	>30	>30
Sediment parent rock material	4-5***	3.5-4	2.5-3.5	1-2.5	0.5-1	0,25-0,5	0-0,25	0
Limestone and loess parent rock material	3.5-4	3-3.5	2.5-3.5	0.5 - 1	0.25-0.5	0.0-0.25	0	0

* Relief typology F – Flat relief; GU – gently undulating, U – undulating, R – rolling; MS – moderately steep; LM – low mountains; M – mountains; HM – high mountains.

** For typical flat terrain; the values in brackets refer to flat terrain intersected by deep valleys.

*** Soils formed from all parent rocks except loess and limestone; values for loess and limestone soils are given in brackets.

Soil moisture index

Similarly to climate and relief, soil water availability was also partially accounted for when developing soil suitability complexes because their definition took into account those soil profile properties that control water retention and are dependent on relief and general lithology – the two factors influencing the destination and movement of water within the landscape. Soil moisture index is scaled from 0.5 to 5 (Table 6). The soil moisture index was calculated for each gmina as a weighted mean of the values assigned to polygons characterising soil water availability categories delineated on soil suitability maps. Each mapping unit on a soil map contains characteristics of a soil profile texture including depths of horizons. It is well accepted that each texture class represents certain water retention potential which along with the location within a terrain controls a general trend of soil moisture conditions. There are 20 textural classes, defined on a similar criteria to that of FAO, used for soil mapping in Poland which can be present at different depths of a soil profile – each possible combination of horizons in terms of their texture, location within a relief, related water retention and drainage has been classified by using definitions given in Table 6. To give an example how this index is calculated - complexes of sands in upper locations with deep ground water table are classified as permanently to dry, whereas clays with gleyic properties in poorly drained lower locations are classified as permanently to wet receiving respectively low number of points. On the other end, there are optimal water soil moisture conditions which are typical for soils located in a flat but well drained terrain with 1.5 m deep ground water table formed, for example, from sandy loams with well developed and deep A horizons which are rich in organic matter. Soil moisture index for a unit such as gmina is calculated as a weighted mean by multiplying area of each soil polygon by its texture dependent score and dividing by the total area.

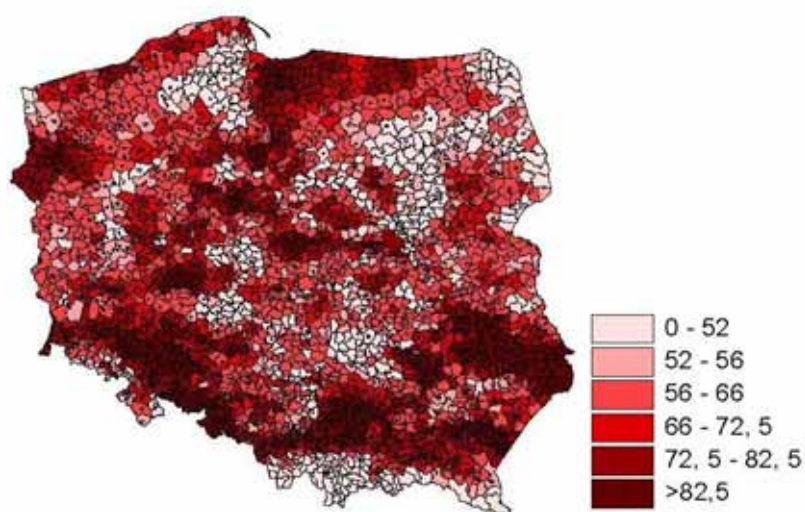
Table 7. Soil moisture index

Soil moisture classes	Points
1. Permanently too wet	1.25
2. Periodically too wet	3
3. Optimum water content	5
4. Periodically too dry	2
5. Permanently too dry	0.5

3.1.2. Spatial distribution of the Land Quality Index (LQI) at gmina level

The spatial distribution and ranges for the ratio at gmina level are shown in Figure 5. The ranking and ranges of partial indicators (soil, climate, relief, soil moisture index) and the aggregated land quality indicator are shown in Table 2.

Figure 6. Spatial distribution of the land quality indicator at the gmina level



The LQI gives a good estimate of a productivity potential. Existing empirical models and spatial data describing various factors influencing land productivity provide quantitative tools that can be used to designate LFAs in Poland in a reliable way, reflecting natural limits to agricultural production. In order to avoid irregularities and gaps in the designation of LFAs caused by discrepancies between administrative and natural boundaries, a land quality indicator has been also developed for areas smaller than gmina. It was developed using the same criteria as in the case of the gmina level to ensure that the output data are comparable.

3.1.3. Using the LQI for the designation of LFAs in areas smaller than a gmina

The LQI was developed for administrative units at the gmina level, i. e. with an area of about 100 square km. However, most administrative boundaries do not coincide with physiogeographic region boundaries and therefore the potential for agricultural production may not be uniform within a given gmina as natural conditions may exhibit certain spatial variability. For instance, in some gminas which have predominantly good quality land and therefore are not eligible for LFA payments, there may be small areas of territory (villages) meeting the LFA threshold. However, they cannot be distinguished since the value of the land

quality indicator for the entire gmina is above the set threshold. Our preliminary assessment indicates that the share of such patches in gminas which are not eligible for LFA payments does not usually exceed 5% of their area. It should be emphasised that a failure to distinguish patches of poor quality land within gminas exhibiting generally high productivity potential may result in serious conflicts. This is particularly true for areas where such patches lie close to gminas receiving LFA payments.

Due to the fact that Art. 19 of Council Regulation (EC) No. 1257/1999 states that agricultural areas classified as LFAs must be homogeneous from the point of view of natural conditions, an urgent need arose to develop a methodology and databases which would enable the rapid designation of LFAs within smaller units such as villages (surveying district), using the same criteria and disaggregating them to the required resolution. Retaining the same quantitative criteria is crucial for the transparency of the system, which would otherwise be unacceptable both socially and politically.

This methodology will use GIS databases and tools. The principles are the same as for the gmina level.

Rapid assessment of land quality will be possible as all necessary digital data layers have been prepared, including digital soil maps and a terrain model (40x40m). These two layers along with meteorological data will be instrumental in generating the LQI for any areas smaller than a gmina.

It is considered that such conditions for delimiting lowland areas take into account the comments included in the Auditors' Report concerning the comparability of criteria adopted for delimitation (77.b) between Member States (STAR working document VI7675/98).

3.1.4. Justification for the boundary LQI values adopted

The existing map resources characterising the suitability of soils for growing crops with different soil requirements indicate that only 37.1% of agricultural land in Poland can be used for growing wheat. The remaining majority of soils exhibit coarse texture and low water retention capacity, much below that required for wheat.

The use of the LQI index as a good indicator of land productivity, strongly correlated with yields (as national statistics for gminas show), leads to a similar conclusion. The quality of land and habitat conditions is much worse than in other European countries due to poor soil texture and low annual precipitation. This is reflected by the results of Polish wheat variety trials, which are being conducted in over 100 different locations throughout the country. It should be emphasised that such trials take place on the best quality soils where both fertility and input levels are optimal and the farming practices are based on the best technology available. The plots used in variety trials are very small (typically 20 square metres), which promotes biomass growth due to the lack of competition for light in comparison with a regular field canopy. Even given such favourable conditions, the average yield achieved in variety trials is up to 20% lower than average wheat yields in Germany on regular production farms. These productivity differences can only be attributed to differences in soil and climate quality because in the case of variety trials, the farming practices are comparable if not better. This shows that differences in land productivity between Poland and Germany amount to at least 30%. The discrepancies are even larger in comparison with such countries as the Netherlands, Belgium or France, mainly due to better climatic conditions and the much lower share of light soils in these countries.

Due to the reasons discussed above it has been decided that only those areas where natural conditions prevent the growing of wheat will be eligible for support. In regions with very poor environmental conditions, the abandonment of farmland and agricultural activity is more

frequent, which contributes in large degree to landscape degradation and poses a threat to basic social bonds (Table 18 in the main RDP document).

3.1.5. Demography.

In order to eliminate the areas designated using the LQI which due to their high population density are not threatened with depopulation despite unfavourable natural conditions for agricultural production, an indicator has been introduced that is related to the demographic situation in individual regions.

Moreover, in order to eliminate the areas that have a low share of the population engaged in agriculture despite unfavourable natural conditions and the threat of depopulation, areas with low shares of such population have been excluded.

For these purposes, data collected during the 2002 National Census by the Central Statistical Office were used. Data concerning the number of people actually living in a given area were used for analyses.

Table 7. Number of agricultural and non-agricultural population in LFAs and in other rural areas in 2002 per unit of rural area

Category	Poland total	of which:	
		LFAs	other areas
Total number of agricultural population			
- per 100 ha farmland	39.2	30.7	46.5
- per 1 square km of total area	25.2	19.8	29.9
Non-agricultural population	24.8	-	-
Total rural population	51.0	-	-

Source: Agricultural Statistical Yearbook, Central Statistical Office, Warszawa, 2003.

4. Areas affected by specific natural handicaps (Art. 20)

Agricultural areas situated at altitudes over 350 metres a. s. l. in Poland are limited in their choice of agricultural crops in the conditions prevailing there, e.g. maize cannot be grown for seed at such altitudes, and thus such more demanding crops are successful only 2-3 times per decade. Similarly, due to the early appearance and long duration of snow cover, winter crops (rye and wheat) cannot be grown there. The exception here is provided by the southern slopes where the boundary shifts to 400-450 metres a. s. l., but they are of negligible significance in the Polish Carpathians due to the overwhelming prevalence of northern slopes. The valleys are very narrow, particularly in the Carpathians (as opposed to the southern part of the Slovak Carpathians) and they are usually frost pockets, which determine the local choice of crops and the yields.

These areas exhibit the following characteristics: small average farm size, a large number of plots per each farm, narrow fields, uneven land surface, a large share of grassland and a high share of population engaged in agriculture. Despite the fact that the economic significance of agriculture in the low mountain regions of Poland is decreasing, it plays an increasingly important role in the conservation of the natural environment and the landscape as well as in the preservation of the social fabric. The structural problems of the agricultural sector in such regions limit its adjustment capabilities and incomes from agriculture are currently very low there. This is reflected by the very large share of fallow and idle land in farmland area. The

considerable fragmentation of farms makes the cultivation of farmland more difficult. Taking into account the specific climate of the Polish foothills and mountains, and particularly the Carpathians, a significant part of which is situated far to the north and east and is subject to a strongly continental influence on its climate, as well as the differences in altitude of climatic belts in comparison with the Alps, the boundary delimiting the areas affected by specific handicaps has been set at an altitude of 350 metres a. s. l.

5. Scope of LFA designation in Poland

The share of farmland designated as LFAs in Poland does not differ markedly from that in EU member countries with comparable reference yields and it is much lower than that in Greece, Spain or Portugal.

Table 8. Reference yields in EU countries and Poland and the share of LFAs in farmland

Country/Region	Reference yield/ha	Share of LFAs in farmland in EU (%)
Belgium	6.24	20
Denmark	5.22	0
Germany	5.66	50
Greece	3.39	82
Spain	2.69	74
France	6.02	46
Ireland	6.08	71
Italy	3.9	54
Luxembourg	4.26	100
Netherlands	6.66	6
Portugal	2.9	86
Great Britain	5.83	45
Austria	5.27	69
Sweden	4.02	85
Finland	2.82	51
<i>Source: Commission Regulation No. 2316/99.</i>		
Poland	3.00	54

II. Allowance rates

6. Calculation methodology

The calculation methodology has been based on the actual differences between income from agricultural production in LFAs and outside LFAs. Basing the calculation of allowance rates

on the differences between the expense necessary to achieve production results in LFAs and outside LFAs would lead to overcompensation and constitute an indirect incentive to intensify production and disturb the existing environmental balance.

The difference in agricultural income between reference area farms and LFA farms has been used as a basis to determine allowance rates.

Farmers are adjusting the level and structure of production taking into account the level of income. Therefore in farms situated on LFAs farmers use less intensive methods of production, as well as less intensive crops (rye, oats, potatoes). Cultivation of these crops on poor soils is less risky and ensures more stable base for the farm functioning. As many as 46.9% of farms in LFAs did not use any mineral fertilisers in 2002 (in mountain areas over 63% of farms did not use such fertilisers). Almost half of all farms (48%) did not use any pesticides.

An equalising of difficulties under LFA support is aimed at creation of possibility for farmers to use an existing potential without damaging of present environmental balance. Thanks to the LFA support an increase of use of basic means of production (fertilisers, pesticides) could take place, but still limited to such quantities that stop soil degradation resulting from impoverishment.

It is worth underlining that such a way of production is related to regional traditions and does not lead to an excessive ingerencje into environment.

Therefore, in analyses run in order to calculate payments on LFAs we have resigned from an approach, assuming an equalising of differences in costs that farmers would have to born. The new approach takes into account real differences in incomes achieved from agricultural production, that are the decisive factor in terms of the maintenance of the farming continuity.

Levels of agricultural income have been calculated for 210 model farm types distinguished for analysis purposes. It is estimated that these farms are representative of around 90% of agricultural holdings in Poland and around 90% of total farmland area. Specialist farms (e.g. fruit-growing, poultry-breeding, sheep-breeding farms and greenhouses) as well as farms situated in mountain areas have not been included in the sample.

Calculations have been conducted with utilisation of a linear optimising farm model that includes an option of LFA payment calculation. Models of typical farms have been used, that reflect an actual structure of production and present financial situation of farms according to 2003 data.

The application of production practices conforming to the requirements of usual good farming practice was assumed when designing the models. This conforms to the condition concerning "sustainable farming practices." At the same time, no excessive costs that could be borne by farmers were admitted in the models due to the limited production potential of farms situated in less favoured areas.

The use of excessive inputs by farmers, much higher than the optimum ones in similar natural conditions, in order to achieve yields comparable to non-LFA lands, would jeopardise the natural environment. Moreover, such actions would be unjustified economically.

The parameters used in designing farm models (e.g. unit productivity, prices, inputs, overheads) were differentiated according to farm type and the set of conditions describing the given type (soil quality, production structure, intensity level).

The results of model solutions calculated for each farm type (production structure, inputs and costs as well as agricultural income) were aggregated according to the scale of the agricultural sector in Poland and the reference (non-LFA and LFA) areas.

The aggregation of results proceeded as follows: agricultural income, income components and variables concerning production scale and structure for every farm type were multiplied by the estimated number of farms represented by the individual farm type. This made it possible to sum individual output parameters with regard to the entire agricultural sector and the groups of farms selected in order to compare income levels in regions with different farming conditions.

In order to compare income levels in areas with favourable and unfavourable conditions for agriculture, the structure of farms in those areas had to be estimated. The population of model farms was divided into three groups for this purpose and certain assumptions were made concerning the presence of individual types of farms in the selected areas:

Group 1 – reference group

It was assumed that farms outside areas designated as LFAs formed the reference group. This group included the following shares of the entire population of model farms:

- 95% of intensive farms with good soils;
- 65% of intensive farms with medium soils;
- 85% of extensive farms with good soils;
- 55% of extensive farms with medium soils.

The remaining farms with good soils (5% of intensive farms and 15% of extensive ones) and with medium soils (15% of intensive farms and 45% of extensive ones) were assigned to less favoured areas. It was assumed that even in regions (gminas) where poor soils dominate, there will be farms with better quality soils and they cannot be excluded from LFAs.

Group 2 – LFAs with less severe handicaps to agricultural production (LFA I)

Areas with LQI values of over 52 points (60.9 points on average) were classified as LFA I. It was estimated that from the total population of model farms, the following shares of farms belonged to this group:

- 5% of intensive farms with good soils,
- 35% of intensive farms with medium soils,
- 15% of extensive farms with good soils,
- 40% of extensive farms with medium soils,
- 60% of extensive farms with poor soils.

These farms, situated in 750 gminas, would represent around 37.9% of the total farmland area in Poland.

Group 3 - LFAs with severe handicaps to agricultural production (LFA II)

Only extensive farms with poor soils (40% of such farms) were classified as LFA II (LQI below 52 points – 47.6 points on average); such farms represent about 13.15% of the total farmland area in Poland in around 270 gminas.

7. Calculation results and suggested amounts of LFA allowances

The results of calculations were used as the basis for estimating LFA payments.

Two basic assumptions were made with regard to calculating LFA payment amounts:

- A. The comparison of income levels in areas with favourable and unfavourable conditions for agriculture was conducted according to the estimated structure of individual farm types in the reference area as well as in LFA I and LFA II zones.
- B. The maximum amount of LFA allowance is equal to the amount compensating the differences to the level of zero agricultural income in reference areas (the difference in agricultural incomes minus the agricultural income of reference area farms).

The amount thus calculated does not fully compensate for the differences in opportunities resulting from different farming conditions. However, this method can be justified by pointing out that it does not lead to overcompensation.

The differences in income in individual areas and suggested LFA allowance amounts are shown in Table 9.

Table 9. Differences in average agricultural income assuming certain farm structure in reference and LFA areas and suggested LFA amounts (EUR/ha)

Areas by farming conditions	Agricultural income in EUR/ha of farmland	Difference with regard to reference area
Reference area	7.7	
LFA I	-63.4	-71.1
LFA II	-93.4	-101.1

Maximum LFA allowance rates in Polish conditions should amount to:

- 63.4 EUR/ha in LFA I areas,
- 93.4 EUR/ha in LFA II areas.

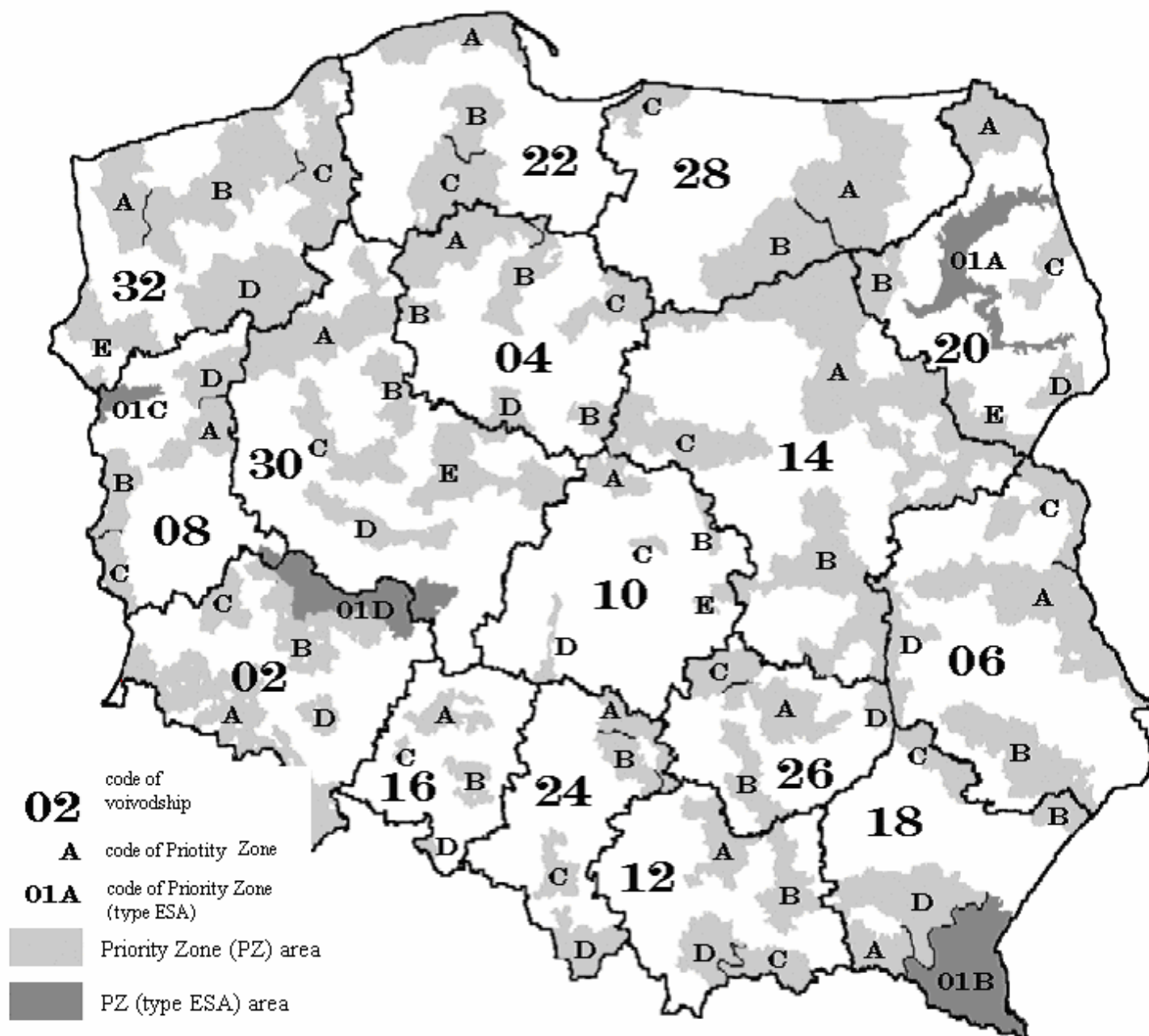
In the case of mountain zones a similar methodology was used while limiting the group of farms to those situated in mountain areas and affected by specific handicaps.

In the case of the mountain zone LFAs, the basic type of farms was assumed to be extensive livestock farms in medium and poor soil areas. Based on this assumption, the calculated difference in income with regard to zero agricultural income level is 113.4 EUR/ha.

In the case of a typical farm structure in areas affected by specific handicaps, the difference in income with regard to a zero agricultural income level is 93.4 EUR/ha. In this case, lower production intensity levels, elimination of certain crops and the need for specific production techniques e.g. due to the necessity of preventing erosion, were assumed.

The rates presented above assume full compensation for the difficulties resulting from natural and soil conditions. Due to limited budget funds and a large area of farmland exhibiting unfavourable conditions in Poland, it is necessary to reduce the suggested rates of LFA compensatory allowances to 60% of the rates that would fully compensate for difficult conditions, which is shown in Table 27 (RDP).

ANNEX E. Location of Priority Zones (PZ)



ANNEX F. Breakdown of areas included to Priority Zones

Voviodship	Name of zone	Gmina In Priority Zones
Dolnośląskie	I. Sudety	Bolków, Bystrzyca Kłodzka, Czarny Bór, Głuszyca, Gryfów Śląski, Janowice Wielkie, Jeżów Sudecki, Kamienna Góra, Kłodzko, Łądek Zdrój, Leśna, Lewin Kłodzki, Lubawka, Lubomierz, Lwówek Śląski, Marciszów, Męcinka, Mieroszów, Międzylesie, Mirsk, Mysłakowice, Nowa Ruda, Olszyna, Paszowice, Platerówka, Podgórzyn, Radków, Siekierczyn, Stara Kamienica, Stare Bogaczowice, Stoszowice, Stronie Śląskie, Sulików, Szczytna, Świerzawa, Walim, Wleń, Zgorzelec, Złoty Stok
	II. Dolina Odry	Brzeg Dolny, Głogów, Malczyce, Miękinia, Pęcław, Prochowice, Prusice, Rudna, Ścinawa, Środa Śląska, Trzebnica, Wołów, Zawonia
	III. Wzniesienia Chocianowskie	Chocianów, Gaworzyce, Gromadka, Przemków, Radwanice
	IV. Masyw Ślęży	Jordanów Śląski, Łagiewniki, Marcinowice, Sobótka
	Obszar Przyrodniczo Wrażliwy „Dolina Baryczy”	Cieszków, Góra, Jemielno, Krośnice, Milicz, Niechlów, Twardogóra, Wąsosz, Wińsko, Żmigród
Kujawsko-Pomorskie	I. Północno-zachodnia (krajeńsko-tucholska)	Cełkyn, Gostycyn, Kęsowo, Lubiewo, Śliwice, Tuchola, Warlubie, Osie, Więcbork, Sośno, Sępólno Krajeńskie, Kamień Krajeński
	II. Centralna (Doliny Wisły i Noteci)	Baruchowo, Chełmno, Dąbrowa Chełmińska, Dragacz, Kijewo Królewskie, Kowal, Nakło, Nowe, Sadki, Stolno, Unisław, Włocławek, Zławieś Wielka
	III. Północno-wschodnia (Dolina Drwęcy i Brodnica)	Brodnica, Brzozie, Ciechocin, Golub Dobrzyń, Górzno, Grażawy, Osiek, Świedziebna, Wąpielsk, Zbiczno
	IV. Południowo (nadgoplańska)	Jeziora Wielkie, Kruszwica, Piotrków Kujawski

Lubelskie	I. Strefa Polesia Zachodniego, Wołyńskiego i Dolnego Wieprza	Baranów, Chełm, Czemierniki, Dębowa Kłoda, Dorohusk, Dubienka, Firlej, Hańsk, Horodło, Jaziorzany, Kamień, Kock, Ludwin, Michów, Ostrów Lubelski, Ostrówek, Parczew, Ruda-Huta, Sawin, Siemień, Sosnowica, Stary Brus, Ułęż, Urszulin, Uścimów, Włodawa, Wola Uhruska, Wryki, Żmudź
	II. Strefa Roztocze	Adamów, Aleksandrów, Batorz, Bełzec, Chrzanów, Dzwola (survey districts: <i>Kocudza II, Kocudza I, Kocudza Górna, Dzwola, Konstanyń, Krzemień II, Zofianka Dolna, Krzemień I, Branewka Kol., Branewka, Branew</i>), Frampol, Godziszów, Goraj, Józefów, Krasnobród, Lubycza Królewska (survey districts: <i>Żurawce, PGR Ruda Żurawiecka, Żyłki, Zatyle, Lubycza Królewska, Teniatyska, Mosty, Małe Kornie, Hrebenne, Siedliska, Potoki, Huta Lubycka, Dęby, Kniazie, RSP Łazowa, Brzeziny</i>), Łukowa, Modliborzyce (survey districts: <i>Pasieka, Wierzchowiska Drugie, Antolin, Węgliska, Wierzchowiska Pierwsze, Bilsko, Wolica Kolonia, Wolica Pierwsza, Wolica Druga, Zamek Kol., Lute, Michałówka</i>), Radecznica, Sułów, Susiec, Szastarka, Szczepietyn, Tarnawatka, Terespol, Tomaszów Lubelski, Turobin (survey districts: <i>Kol. Tarnawa, Tarnawa Duża, Tarnawa Mała, Tokary, Huta Turobińska, Olszanka, Zagroble, Załawcze, Rokitów, Żurawie, Gaj Czernięciński, Wólka Czernięcińska, Grudki II, Grudki I</i>), Zakrzew (survey districts: <i>Wólka Ponikiewska, Ponikwy, Targowisko, Kol. Zakrzew, Zakrzew, Baraki, Nikodemów</i>), Zwierzyniec
	III. Strefa Środkowego Bugu i Dolnej Krzny	Biała Podlaska (survey districts: <i>Husinka, Woskrzenice Duże, Hola, Perkowice, Czosnówka, Ogrodniki, Ortel Książęcy II, Ortel Książęcy I, Dokudów I, Dokudów II, Wólka Plebańska, Lisy, Michałówka, Młyniec, Janówka, Jazwiny, Styrzyniec, Porosiuki, Sławacinek Nowy, Surmacze, Sycyna, Woroniec – southern part</i>), Drelów, Hanna, Janów Podlaski, Kodeń, Komarówka Podlaska (survey districts: <i>Kolembrody, Żelazna</i>), Konstantynów, Łomazy (survey districts: <i>Wólka Korczowska, Korczówka, Burwin</i>), Międzyrzec Podlaski (survey districts: <i>Rogoźniczka, Rogoźnica Kol., Puchacze, Sitno, Rudniki, Wysokie, Utrówka</i>), Rokitno, Sławatycze, Terespol, Wohyń (survey districts: <i>Ostrówki</i>), Zalesie
	VI. Strefa Nadwiślańska	Annopol, Dęblin, Janowiec, Józefów, Kazimierz Dolny, Łaziska, Nałęczów, Puławy, Stężyca, Wąwolnica, Wilków
Lubuskie	I. Międzyrzecka	Międzyrzecz, Pszczew, Trzciel, Przytoczna, Łagów, Lubrza
	II. Krzesińska	Gubin, Cybinka, Maszewo,

	III. Mużakowska	Brody, Tuplice, Trzebiel, Przewóz
	IV. Santocka	Skwierzyna, Stare Kurowo, Santok, Drezdenko, Zwierzyn
	Obszar Przyrodniczo Wrażliwy „Ujście Warty”	Bogdaniec (survey districts: <i>Chwałowice, Gostkowice, Jasiniec, Jeże, Jeżyki, Roszkowice, Wieprzyce</i>), Górzycza (localities: <i>Czarnów, Górzycza, Pamięcin, Żabice</i>), Kostrzyn (survey districts: <i>Kostrzyn 1, Kostrzyn 4, Kostrzyn 5, Kostrzyn 6, Kostrzyn 7, Kostrzyn 8</i>), Krzeszyce (survey districts: <i>Brzozowa, Czartów, Dębokierz, Dzierżązna, Graby, Karkoszków, Kołczyn, Krasnołęg, Krępiny, Krzemów, Krzeszyce, Łąkow, Łukomin, Malta, Piskorzno, Przemysław, Rudnica, Studzionka, Świętojańsk, Zaszczytowo</i>), Słońsk (survey districts: <i>Budzigniew, Czaplin, Jamno, Przyborów, Słońsk</i>), Witnica (survey districts: <i>Bialczyk, Boguszyniec, Dąbroszyn, Kamień Mały, Kłopotowo, Krześniczka, Mościczki, Nowiny Wlk, Oksza, Pyrzany, Świerkocin, Witnica</i>)
	Obszar Przyrodniczo Wrażliwy „Dolina Baryczy”	Szlichtyngowa
Łódzkie	I. Zlewnia rzeki Ochni	Bedlno, Krośniewice, Krzyżanów, Kutno, Nowe Ostrowy, Strzelca
	II. Bolimowski Park Krajobrazowy	Głuchów, Łyszkowice, Słupia, Bolimów, Nieborów, Nowy Kawęczyn, Rawa Mazowiecka, Skierniewice
	III. Park Krajobrazowy Wzniesień Łódzkich	Brzeziny, Dmosin, Nowosolna, Rogów, Stryków, Zgierz

	IV. Dolina Warty i Widawki	Burzenin (survey districts: <i>Burzenin, Jarocice, Majaczewice, Szczawno, Niechmirów, Kol. Niechmirów, Waszkowskie, Redzeń I, Redzeń II, Prażmów, Wolnica Niechmirowska, Biadaczew, Antonina, Kopanina, Strumiany, Witów, Ligota, Tyczyn</i>), Działoszyn (survey districts: <i>Bobrowniki, Draby, Szczepany, Kol. Lisowice, Lisowice, Niżankowice, Raciszyn, Szczyty</i>), Konopnica (survey districts: <i>Konopnica, Rychłocice, Szynkielów, Kamyk, Piaski, Mała Wieś, Bębnów, Wrońsko, Strobin</i>), Osjaków (survey district: <i>Drobnice</i>), Ostrówek (survey districts: <i>Wielgie, Dymek</i>), Pątnów (survey districts: <i>Pątnów, Bieniec, Dzierżniki, Grabowa, Kluski, Kałuże, Załęcze Małe, Załęcze Wielkie</i>), Rusiec (survey districts: <i>Prądzew, Zakurowie</i>), Sędziejowice (survey districts: <i>Grabica, Wola Wężykowa, Grabno, Zamość, Kozuby, Podule</i>), Siemkowice (survey district: <i>Mokre</i>), Sieradz (survey districts: <i>Chojne, Chałupki, Stoczki, Bobrowniki, Okopy</i>), Widawa (survey districts: <i>Widawa, Rogóżno, Podgórze, Górki Grabińskie, Korzeń, Wielka Wieś, Izydorów, Zabłocie, Zborów, Ochle, Kol. Ochle, Ligota, Witoldów, Dębina, Kol. Zawady, Grabowie, Ruda, Brzyków, Osieczno, Dąbrowa Widawska, Świerczów, Wola Kleszczowa, Chrusty, Kąty, Kocina, Siemiechów</i>), Wierzchlas (survey districts: <i>Broników, Jajczaki, Strugi, Kamion, Kochlew, Krzczów, Łaszew AB, Łaszew Rządowy, Mierzyce, Przywóz, Toporów, Przycłapy, Kraszkowice</i>), Zapolice (survey districts: <i>Zapolice, Strońsko, Jeziorko, Woźniki, Pstrokonie, Rembieszów, Kalinowa, Beleń</i>), Zduńska Wola (survey district: <i>Piaski</i>)
	V. Spalski Park Krajobrazowy	Poświętne, Rzeczyca, Tomaszów Mazowiecki
Małopolskie	I. Północna	Bochnia, Drwinia, Igołomia-Wawrzeńczyce, Klaj, Koniusza, Koszyce, Miechów, Niepołomnice, Nowe Brzesko, Pałecznicza, Proszowice, Raclawice, Radziemice, Słaboszów, Wieliczka
	II. Doliny Dunajca	Ciężkowice, Czchów, Gręboszów, Gromnik, Gródek nad Dunajem, Korzenna, Pleśna, Radłów, Rzepiennik Strzyżewski, Tarnów, Tuchów, Wierzchoławice, Wietrzychowice, Wojnicz, Zakliczyn, Żabno
	III. Popradzka	Czorsztyn, Krościenko nad Dunajcem, Krynica, Łabowa, Łącko, Muszyna, Nawojowa, Piwniczna, Rytro, Stary Sącz, Szczawica
	IV. Gorczańska	Dobra, Kamienica, Łapsze Niżne, Mszana Dolna, Niedźwiedź, Nowy Targ, Ochotnica Dolna, Rabka, Słupnice

Mazowieckie	I. Bugu, Narwi i Liwca	Andrzejewo, Baranowo, Boguty-Pianki, Brańszczyk, Brok, Ceranów, Chorzele, Czarnia, Dąbrówka, Długosiodło, Domanice, Dzierzgowo, Goworowo, Grębków, Jabłonna Lacka, Jednorozec, Kadzidło, Korczew, Korytnica, Kosów Lacki, Kotuń, Krasnosielc, Krzynowłoga Mała, Kuczbork Osada, Lelis, Lipowiec Kościelny, Liw, Lubowidz, Łochów, Łyse, Małkinia Górna, Mława, Młynarze, Mokobody, Mordy, Myszyniec, Nur, Obryte, Olszewo-Borki, Platerów, Przesmyki, Repki, Różan, Rząśnik, Rzekuń, Rzewnie, Sadowne, Sarnaki, Somianka, Sterdyń, Suchożebry, Sypniewo, Szelków, Szulborze Wielkie, Wieczfnia Kościelna, Wiśniew, Wodynie, Wyszków, Zabrodzie, Zaręby Kościelne, Zatory, Zbuczyn Poduchowny
	II. Wisły i Pilicy	Białobrzegi, Chotcza, Garbatka Letnisko, Głowaczów, Gniewoszów, Góra Kalwaria, Grabów nad Pilicą, Ilża, Karczew, Kazanów, Konstancin Jeziorna, Kozienice, Magnuszew, Maciejowice, Mogielnica, Nowe Miasto nad Pilicą, Odrzywół, Osieck, Policzna, Promna, Przyłek, Sieciechów, Sobienie Jeziory, Solec nad Wisłą, Celestynów, Stromiec, Tczów, Warka, Wierzbica, Wilga, Wyśmierzyce, Zwolen
	III. Środkowej Wisły i Pojezierza Gostynińsko - Płockiego	Bodzanów, Brochów, Brudzeń Duży, Czerwińsk nad Wisłą, Czosnów, Gąbin, Gostynin, Hów, Leoncin, Łąck, Mała Wieś, Młodzieszyn, Nowy Duninów, Nowy Dwór Mazowiecki, Słubice, Słupno, Stara Biała, Wyszogród, Zakroczym
Opolskie	I. Dolny Stobrawy	Domaszowice (survey districts: <i>Nowa Wieś, Zofijówka</i>), Kluczbork (survey districts: <i>Bogacica, Krasków, St. Czaple, Szklarnia</i>), Lasowice Wielkie (survey districts: <i>Laskowice, Lasowice W., Oś, Szumirad, Trzebiszyn, Tuły</i>), Lewin Brzeski (survey districts: <i>Chróścina, Mikolin, Różyna, Wronów</i>), Lubsza (survey districts: <i>Czepielowice, Kościerzycy, Nowe Kolnie</i>), Lubniany (o survey districts: <i>Grabie, Jelowa, Kobyłno</i>), Murów (survey districts: <i>Dębiniec, Grabczok, Kały, Murów, Nowe Budk., Okoły, St. Budkowice, Zagwiździe</i>), Pokój (survey districts: <i>Domaradz, Domaradzka Kuźnia, Falkowice, Kopalina, Krogulna, Krzywa Góra, Lubnów, Ładza, Pokój, Siedlice, Zawieść, Zieleniec</i>), Popielów (survey districts: <i>Kaniów, Karłowice, Kolonia Pop., Kurznie, Kuźnica Kat., Lubienie, N.Siołkowice, Popielów, Rybna, Stare Kolnie, St. Siołkowice, Stobrawa</i>), Skarbimierz (survey district: <i>Kopanie, Prędocin</i>), Świerczów (survey districts: <i>Bielice, Dąbrowa, Kuźnica Dąb., Miejsce, Osiek Duży, Pieczyńska, Starościna, Zbica</i>), Wolczyn (survey districts: <i>Brynica, Szum, Wąsice, Wierzchy</i>)

	II. Dolina Odry, Trias Opolski i Góra Św. Anny	Gogolin (survey districts: <i>Chorula, Górazdze, Kamień Śl., Kamionek</i>), Izbicko (survey districts: <i>Grabów, Izbicko, Ligota Cz., Otmice, Poznowice, Siedlec, Sprzęcice, Suchodaniec</i>), Krapkowice (survey districts: <i>Pietnia, Żużela, Żywocice</i>), Leśnica (survey districts: <i>Czarnocin, Góra św.Anny, Krasowa, Leśnica, Lichynia, Łaki Kozielskie, Poreba, Raszowa, Wysoka, Zalesie</i>), Prószków (survey districts: <i>Boguszyce, Chrzęszczyce, Chrzowice, Folwark, Górki, Nowa Kuźnia, Winów, Zimnice M., Zimnice W., Złotniki, Żlinice</i>), Reńska Wieś (survey districts: <i>Kamionka, Mechnice, Poborszów</i>), Strzelce Opolskie (survey districts: <i>Grodzisko, Kalinów, Ligota D., Ligota G., Niwki, Rozmierz, Sucha, Szymiszów</i>), Tarnów Opolski (survey districts: <i>Katy Op., Kosorowice, Miedziana, Nakło, Przywory, Raszowa, Tarnów Op., Walidrog</i>), Walce (survey districts: <i>Stradunia</i>), Zdzieszowice (survey districts: <i>Januszkowice, Jasiona, Kępna, Oleszka, Rozwadza,, Żyrowa</i>)
	III. Dolina Nysy Kłodzkiej	Grodków (survey districts: <i>Głębocko, Kopice, Osiek Grod., Więcmierzyce</i>), Niemodlin (survey districts: <i>Krasna Góra, Radoszowice, Sarny W., Tlustoręby</i>), Olszanka (survey districts: <i>Michałów</i>)
	IV. Góry Opawskie	Branice (survey districts: <i>Bliszczyce, Lewice</i>), Głubczyce (survey districts: <i>Braciszów, Chomiąza, Ciermęcice, Dobieszów, Krasne Pole, Lenarcice, Mokre W., Opawica, Pielgrzymów, Pietrowice, Radynia, Równe, Zopowa, Zubrzyce</i>)
Podkarpackie	I. Beskid Niski	Dębowiec, Dukla, Iwonicz, Krempna, Nowy Żmigród, Osiek Jasielski, Rymanów
	II. Roztocze Południowe	Cieszanów, Horyniec Zdrój, Narol
	III. Lasy Janowskie	Harasiuki, Jarocin, Krzeszów, Pysznicza, Radomyśl nad Sanem, Ulanów, Zaklików
	IV. Obszar „Pogórze”	Besko, Błażowa, Brzostek, Brzozów, Brzyska, Bukowsko, Chmielnik, Czudec, Domaradz, Dubiecko, Dydnia, Dynów, Frysztak, Haczów, Hyżne, Jasienica Rosielna, Jawornik Polski, Kołaczyce, Krzywczka, Lubenia, Niebylec, Nozdrzec, Strzyżów, Tyczyn, Wielopole Skrzyńskie, Wiśniowa, Zarszyn
	Obszar Przyrodniczo Wrażliwy Wschodniokarpacki	Baligród, Bircza, Cisna, Czarna Górna, Fredropol, Komańcza, Krasieczyn, Lesko, Lutowiska, Olszanica, Sanok, Solina, Tyrawa Wołoska, Ustrzyki Dolne, Zagórz

Podlaskie	I. Strefa pojezierna	Bakalarzewo, Filipów, Giby (survey districts: <i>Sarnetki, Studziany Las, Wysoki Most</i>), Jeleniewo, Krasnopol, Nowinka (survey districts: <i>Ateny, Bryzgiel, Krusznik</i>), Przerośl, Puńsk, Raczki, Rutka Tartak, Sejny, Suwałki, Szypliszki, Wiżajny
	II. Strefa zachodnia	Kolno, Mały Płock, Miastkowo, Nowogród, Turośl, Zbójna
	III. Strefa wschodnia	Kuźnica, Sokółka, Supraśl, Wasilków
	IV. Strefa hajnowska	Dubicze Cerkiewne, Hajnówka, Kleszczele
	V. Strefa południowa (Dolina Bugu)	Ciechanowiec, Drohiczyn, Mielnik, Perlejewo, Siemiatycze

	<p>Obszar Przyrodniczo Wrażliwy Biebrzańsko - Narwiański</p>	<p>Augustów (survey districts: <i>Białobrzegi, Gliniski, Gabowe Grądy, Netta Druga, Netta Folwark, Netta Pierwsza, Świderek, Żarnowo Pierwsze</i>), Bargłów Kościelny (survey districts: <i>Bargłowska, Pieńki, Tajenko, Tajno Podjeziorne, Wólka Karwowska</i>), Bielsk Podlaski (survey districts: <i>Chraboby, Deniski, Husaki, Jacewicze, Kozyño, Ploski, Plutycze, Rajsk, Stupniki</i>), Choroszcz (survey districts: <i>Babino, Gajownik, Izbiszcz, Kolonia Zacierlany, Konowały, Kościuki, Kruszewo, Pańki, Rogowo, Rogowo Majątek, Rogówek, Ruszczany, Zacierlany, Złotki, Żółtki</i>), Dąbrowa Białostocka (survey districts: <i>Grabowo, Hamulka, Harasimowicze, Jaczno, Kropiwno, Kuderewiczyszna, Małowista, Nowa Kamienna, Ostrowie, Stara Kamienna, Szuszałewo, Trzyrzeczki</i>), Dobrzyniewo Kościelne (survey districts: <i>Borsukówka, Dobrzyniewo Duże, Jaworówka, Nowosiółki, Pogorzalki, Rybaki</i>), Goniądz, Grajewo (survey districts: <i>Białogrądy, Białaszewo, Brzozowa, Brzozowa Wólka, Ciemnoszyje, Gackie, Godlewo, Grozimy, Kapice, Lipińskie, Łojki, Modzele, Okół, Pieniążki, Przechody, Sienickie, Sojczyn Borowy, Sojczyn, Zaborowo</i>), Jaświly (survey districts: <i>Dolistowo Nowe, Dolistowo Stare, Zabiele</i>), Jedwabne (survey districts: <i>Biodry, Brzostowo, Burzyn, Chyliń, Mocarze, Pluty, Szostaki</i>), Juchnowiec Kościelny (survey districts: <i>Czerewki, Wojszki</i>), Kobylin Borzymy (survey districts: <i>Kurowo Kolonia, Kurowo SNS, Pszczółczyn</i>), Krypno (survey districts: <i>Bajki Zalesie, Białobrzesk, Długoleka, Góra, Kruszyn, Krypno Kościelne, Krypno Wielkie, Kulesze Chobotki, Morusy, Rekle, Ruda, Zygmunt</i>), Lipsk (survey districts: <i>Dulkowszczyzna, Jaczniki, Jałowo, Kurianka, Lipsk, Nowy Rogożyn, Rogożynek, Rygalówka, Stary Rogożyn</i>), Lapy (survey districts: <i>Bokiny, Danilowo Duże, Danilowo Małe, Lapy Dębowa, Lapy Dębowa, Lapy Pluśniaki, Lapy Szolajdy, Lupianka Stara, miasto Lapy, Płonka Kościelna, Płonka Strumianka, Uhowo, Wólka Waniewska</i>), Łomża (survey districts: <i>Gać, Koty, Lutostań, Nowe Wyrzyki, Pniewo, Pogórze, Puchały, Siemień Nadrzeczny, Siemień Rowy, Stara Łomża n/Rzeką, Stara Łomża p/Szosie, Zosin</i>), Michałow (survey districts: <i>Bachury, Bagniuiki, Barszczewo, Bindziuga, Botryki, Bondary, Brzezina, Budy, Cisówka, Ciwoniuki, Garbary, Juszkowy Gród, Lewsze, Nowosady, Odnoga, Planty, Rudnia, Rybaki, Supryny Kołośno, Suszcza, Szymki, Tajnica Dolna, Zaleszany</i>), Mońki (survey district: <i>Kulesze</i>), Narew (survey districts: <i>Cimochy, Doratynka, Goródczyno, Hajdukowszczyzna, Iwanki, Janowo, Kaczy, Kotłówka, Koźliki, Krzywiec, Łapuchówka, Makówka, Narew, Odrynki, Ogrodniki, Puchły, Rohozy, Rybaki, Skaryszewo, Trzęścianka, Tyniewiczze, Waniewo, Waški</i>), Narewka (survey districts: <i>Eliaszki, Grodzisk, Kapitańszczyzna, Lewkowo Nowe, Łuka, Minkówka, Ochrymy, Planta, Porosle, Siemanówka, Stare Lewkowo, Stoczek, Suszczy Borek, Tarnopol, Zablóczyszna</i>), Nowy Dwór (survey districts: <i>Chilmony, Choruzowce, Jaginty, Koniuszki, Ponarlnica, Sieruciowce - Bobra Wielka</i>), Piątynica (survey districts: <i>Drozdowo, Kalinowo, Kossaki, Krzewo, Niewodowo, Piątynica Włościańska, Rakowo-Boginie, Rakowo-Czachy</i>), Poświętne (survey district: <i>Pietkowo</i>), Radzilów (survey districts: <i>Brychy, Czachy, Karwowo, Kieljany, Klimaszewnica, Kownatki, Łoje Awissa, Mścichy, Mścichy Łąki, Okrasin, Racibory, Sośnia</i>), Rajgród (survey districts: <i>Belda, Ciszewo, Danowo, Kosiby, Kozłówka, Kuligi, Łazarze, Miecze, Pieńczykowo, Pieńczyków, Solki, Stoczek, Turczyn, Woźnawieś</i>), Rutki (survey districts: <i>Grądy Woniecko, Kalinowka Basie, Kalinówka Bystry, Kalinówka Wielobory, Konopki Leśne, Kossaki Falki, Kossaki Nadbielne, Ożarki Olszanka, Ożary Wielkie, Pruski Wielkie</i>), Sokoły (survey districts: <i>Chomice, Jeńki, Kowalewiczyszna, Kowalewiczyszna Folwark, Mojsiki, Mojsiki Borzyska, Waniewo</i>), Suchowola (survey districts: <i>Ciemne, Domuraty, Głębovczyna, Gryniaczki, Horodniana, Karpowicze, miasto Suchowola, Ostrówek, Podhorodniana, Podostrówek, Rutkowszczyzna</i>), Suraż (survey districts: <i>Doktorce, Koncowizna, Lesznia, miasto Suraż, Zawyki, Zawyki Ferma</i>), Sztabin (survey districts: <i>Budziski, Chomaszewo, Cisów, Czarniewo, Czarny Las, Dębowo, Długie, Dłużański Las, Hruskie, Huta, Jagłowo, Jasionowo, Jasionowo k/Krasnegoboru, Jastrzębna Druga, Jastrzębna Majątek, Jastrzębna Pierwsza, Jaziewo, Komaszówka, Kopiec, Kopytkowo, Krasnoborki, Krasnybór, Kunicha, Lebedzin, Lipowo, Motulka, Mogielnice, Ostrowie, Polkowo, Sosnowo, Sztabin, Wolne</i>), Trzcianne, Turośń Kościelna (survey districts: <i>Bociuty, Bojary, Borowskie Żaki, Topilec, Turośń Dolna, Zawady</i>), Tykocin (survey districts: <i>Dobki, Hermany, Kiernusy, Kiślaki, Kolonia Łazy Małe, Lipniki, Łaziuki, Łazy Duże, Łopuchowo, Niecie, Pajewo, Piaski, Popowlany, Radule, Rzędziany, Siekierki, Słomianka Sepiki, Szafranki, Tatary, Tykocin</i>), Wąsosz (survey districts: <i>Sulewo-Kownaty, Sulewo-Prusy, Zalesie</i>), Wizna (survey districts: <i>Bronowo, Niwkowo, Ruś, Rutkowskie, Sambory, Sieburczyn, Sulin Strumilowo, Wierciszewo, Wizna, Włochówka</i>), Wyszki (survey districts: <i>Falki Filipy, Falki Stare, Godzieby, Łapcie, Mulawicze, Samulki Duże i Małe, Strabla - Lyse</i>), Zabludów (survey districts: <i>Cieluszki, Kaniuki, Ryboły</i>), Zawady (survey districts: <i>Cibory Galeckie, Góra Strękowa, Kurpiki, Łoś Toczyłowo, Maliszewo Lynki, Maliszewo Perkusy, Nowe Chebotki, Rudniki, Strękowa Góra, Targonie Wielkie, Targonie Wity</i>)</p>
<p>Pomorskie</p>	<p>I. Strefa pobraża Słowińskiego i Gdańskiego</p> <p>II. Strefa centralna pojezierna</p>	<p>Choczewo, Główny, Gniewino, Kosakowo, Krokowa, Łeba, Puck, Smołdzino, Wicko, Władysławowo</p> <p>Chmielno, Kartuzy, Kościerzyna, Nowa Karczma, Sierakowice, Somonino, Stężycza</p>

	III. Strefa Borów Tucholskich i Równiny Charzykowskiej	Brusy, Chojnice, Czersk, Czarna Woda, Dziemiany, Kaliska, Karsin, Lipusz, Osieczna, Osiek, Stara Kiszewa
Śląskie	I. Dolina Warty i Pilicy oraz ich dopływów	Dąbrowa Zielona, Kłomnice, Koniecpol, Kruszyna, Mstów, Przyrów, Szczekociny, Żarnowiec
	II. Jura Krakowsko – Częstochowska	Janów, Kroczyce, Niegowa, Olsztyn, Pilica, Włodowice, Żarki.
	III. Obszar Górnej Wisły	Chybie, Czechowice Dziedzice, Goczalkowice, Ornontowice, Mikołów, Orzesze, Pszczyna, Strumień, Suszec
	IV. Beskid Śląski i Żywiecki	Brenna, Istebna, Jeleśnia, Jaworze, Koszarawa, Lipowa, Milówka, Radziechowy–Wieprz, Rajcza, Świnna, Ujsoly, Węgierska Górka, Wisła
Świętokrzyskie	I. Świętokrzyska	Bańkowiec (survey districts: <i>Głoszyce, Nieskurzów Stary, Olszownica, Piotrków, Piotrków Kolonia</i>), Bieliny, Bodzentyn, Daleszyce (survey districts: <i>Borków, Cisów, Daleszyce, Danków-Wójtostwo, Komórki, Marzysz, Niwy, Sieraków, Słopiec, Smyków, Szczecno, Trzemosna, Widelki</i>), Górno (survey districts: <i>Górno, Górno Parcele, Krajno I, Krajno II, Krajno Parcele, Krajno Zagórze, Skorzeszycem, Wola Jachowa</i>), Łagów (survey districts: <i>Czyżów, Duraczów, Gęsice, Lechówek, Łagów, Małacentów, Nowy Staw, Piotrków, Plucki, Sadków, Sędek, Wiśniowa, Wola Łagowska, Zamkowa Wola, Zbelutka Nowa, Zbelutka Stara, Złota Woda</i>), Łączna, Masłów (survey district: <i>Ciekoty</i>), Mniów (survey districts: <i>Borki, Cierchy, Grzymalków, Mniów, Pepice, Rogowice, Serbinów, Skoki, Węgrzynów, Wólka Klucka</i>), Nowa Słupia, Pawłów, Sadowie (survey districts: <i>Biskupice, Bukowiany, Łężyce, Michałów, Niemieniece, Truskolasy</i>), Strawczyn (survey districts: <i>Chelmcze, Hucisko, Kuźnianki, Niedźwiedź, Oblęgor, Oblęgorek, Ruda Strawczyńska, Strawczyn, Strawczynek</i>), Suchedniów (survey districts: <i>Michniów, Ostojów</i>), Zagnańsk (survey districts: <i>Bartków, Belno, Chrusty, Długojów, Jasiów, Jaworze, Kaniów, Kołomań, Samsonów, Szalas, Tumlin, Umer, Zachelmie, Zagnańsk</i>)

	II. Nidziańska	Chęciny (survey districts: <i>Bolnin, Chęciny, Gościńiec, Korzecko, Lipowica, Miedzianka, Mosty, Podpolichno, Polichno, Radkowice, Siedlce, Skiby, Starochećiny, Tokarnia, Wojkowiec, Wolica</i>), Imielno (survey districts: <i>Belk, Borszowice, Imielnica, Motkowice, Sobowice, Stawy</i>), Kije (survey districts: <i>Czechów, Gartatowice, Hajdaszek, Janów, Kliszów, Lipnik, Rębów, Samostrzałów, Stawiany, Umianowice, Żydówek</i>), Michałów (survey districts: <i>Góry, Kolków, Michałów, Pawłowice, Polichno, Przeclawka, Sadkówka, Tomaszów, Tur Dolny</i>), Nowy Korczyn (survey districts: <i>Czarkowy, Grotniki Duże, Łęka, Nowy Korczyn, Podraje, Sepichów, Stary Korczyn, Strożyska, Winiary Dolne i Wiślickie, Zukowice</i>), Opatowiec (survey district: <i>Kocina</i>), Pińczów , Sobków (survey districts: <i>Bizoręda, Brzegi, Brzeźno, Choiny, Korytnica, Mokrsko Dolne, Mokrsko Górne, Nowe Kotlice, Sobków, Sokolów Dolny, Sokolów Górny, Staniowice, Stare Kotlice, Szczepanów, Wólka Kawęcka, Żerniki</i>), Wiślica , Złota (survey districts: <i>Biskupice, Chroberz, Kostrzeszyn, Niegosławice, Nieprowice, Pelczyska, Proboławice, Rudawa, Wojślawice, Wola Chrobberska, Złota, Żurawniki</i>)
	III. Konecka	Końskie (survey districts: <i>Baczyna, Brody, Gatniki, Górny Młyn, Izabelów, Koczwarą, Małachów, Niebo, Nowy Dziebaltów, Nowy Kazanów, Paruchy, Pomyków, Sielpia, Stadnicka Wola, Star Kuźnica, Stary Dziebaltów, Stary Sokolów, Wąsasz, Wincentów</i>), Radoszyce (survey districts: <i>Górniki, Grodzisko, Jacentów, Jakimowice, Mościska, Plenna, Podlesie, Radoska, Radoszyce, Wiosna, Wisy, Zychy</i>), Ruda Maleniecka , Ślupia Konecka , Smyków , Stąporków (survey districts: <i>Adamek, Bień, Błotnica, Czarna, Czarniecka Góra, Duraczów, Gosań, Grzybów, Gustawów, Hucisko, Janów, Kamienna Wola, Komorów, Krasna, Luta, Modrzewina, Mokra, Włochów</i>)
	IV. Nadwiślańska	Ożarów, Tarłów, Zawichost
	Warmińsko - Mazurskie	I. Wielkich Jeziora Mazurskie wraz z Mazurskim Parkiem Krajobrazowym	Giżycko, Kruklanki, Mikołajki, Miłki, Mrągowo, Orzysz, Piecki, Pisz, Pozezdrze, Ruciane Nida, Ryn, Sorkwity, Srokowo, Węgorzewo, Wydminy
	II. Szczytno i Nidzica	Dźwierzuty, Janowiec Kościelny, Janowo, Jedwabno, Kozłowo, Nidzica, Pasym, Rozogi, Szczytno, Świętajno, Wielbark
	III. Park Krajobrazowy Wysoczyzny Elbląskiej	Braniewo, Frombork, Milejewo, Tolkmicko

Wielkopolskie	I. Strefa Notecka	Białośliwie, Chodzież, Czarnków, Drawsko, Kaczory, Krzyż Wielkopolski, Miasteczko Krajeńskie, Szamocin, Trzcianka, Ujście, Wieleń, Wyrzysk, Wysoka, Złotów
	II. Strefa Poznańska	Dopiewo, Kaźmierz, Kleszczewo, Komorniki, Kostrzyn, Kórnik, Mosina, Obrzycko, Puszczykowo, Szamotuły, Środa Wielkopolska, Tarnowo Podgórne
	III. Strefa Dorzecza Wełny i Małej Wełny	Kiszkowo, Klecko, Łubowo, Mieścisko, Wągrowiec
	IV Strefa Południowo – Wielkopolska	Borek Wielkopolski, Dobrzyca, Dolsk, Kościan, Koźmin Wielkopolski, Krzywiń, Piaski, Pleszew, Pogorzela
	V. Strefa Pojezierza Gnieźnieńskiego i Doliny Środkowej Warty	Dąbie, Golina, Grzegorzew, Koło, Kościelec, Krzymów, Łądek, Olszówka , Orchowo, Osiek Mały, Ostrowite, Powidz, Pyzdry, Rzgów, Skulsk, Słupca, Stare Miasto, Strzałkowo, Wilczyn, Witkowo, Zagórów, Żerków
	Obszar Przyrodniczo Wrażliwy „Dolina Baryczy”	Odolanów, Przygodzice, Sośnie
Zachodnio-pomorskie	I. Pobrzeże Zalewu Szczecińskiego i Równina Goleniowska	Goleniów, Kamień Pomorski, Przybiernów, Stepnica, Wolin
	II. Równina Białogardzka i Nowogrodzka oraz Wysoczyzna Łobeska	Białogard, Biesiekierz, Dygowo, Gościno, Karlino, Łobez, Marianowo, Maszewo, Nowogard, Osina, Radowo Małe, Rąbino, Resko, Sławoborze, Stara Dąbrowa, Świdwin, Świeszyno, Tychowo
	III. Wybrzeże Słowińskie i Pojezierze Szczecińskie	Będzino, Biały Bór, Bobolice, Borne Sulinowo, Darłowo, Grzmiąca, Malechowo, Polanów, Postomino, Szczecinek

	IV. Pojezierze Choszczeńskie i Wałeckie i Równina Drawska	Bierzwnik, Choszczno, Człopa, Drawno, Kalisz Pomorski, Krzęcin, Mirosławiec, Recz, Tuczno, Walcz, Wierzchowo
	V. Dolina Dolnej Odry i Pojezierze Myśliborskie	Boleszkowice, Chojna, Lipiany, Myślibórz, Nowogródek, Trzcińsko Zdrój, Widuchowa

ANNEX G. Description of Priority Zones

Code	Name	Zones area [ha]	Description of a zone
DOLNOŚLĄSKIE Voivodship			
02A	SUDETY	430 889	The zone covers a mountainous and foothill areas which are characterized by diverse landscape and high biodiversity. There is a threat of abandonment of pastures and meadows and as the result of this process decrease in natural value. Arable lands are threatened by erosion.
02B	VALLEY BARYCZY and ODRY	215 528	Within this zone, on flood prone areas, Important Bird Area is located. The high natural values are threatened with degradation due to the abandonment, as well as intensification. Some communities (gminas) suffer from flood risk.
02C	WZNIESIENIA CHOCIANOWSKIE	75 227	Unique forest area mixed with waste meadows, pastures and arable land. Utilised agriculture land are located on poor soils, therefore abandonment of agriculture land is a growing problem. It has a negative impact on biodiversity.
02D	MASYW ŚLĘŻY	37 836	Area of highly attractive landscape dominated by arable land. Landscape features are threatened due to agriculture transformation.
KUJAWSKO-POMORSKIE Voivodship			
04A	PÓLNOCNO-ZACHODNIA (KRAJEŃSKO-TUCHOLSKA)	224528	Centre of the zone cover Brda valley – river basin of this river should be protected because of abstraction of drinking water. The main environmental problems are water pollution caused by agricultural sources and insufficient crop rotation..
04B	CENTRALNA (Valley WISŁY I NOTECI)	164510	The zone is situated along river valleys of Vistula and Noteć. Surface water are highly polluted due to e.g nutrients leaching from fields and lack of facilities for manure and slurry storage.
04C	PÓLNOCNO-WSCHODNIA (VALLEY DRWĘCY I POJEZIERZA BRODNICKIEGO)	112452	The river basin supply water for abstraction drinking water. Hence waters should be protected, mainly against pollution from intensively cultivated agricultural land.

04D	POŁUDNIOWA (NADGOPLAŃSKA)	58845	Areas close to Goplo lake are characterized by shortage of precipitation. The zone cover the area of groundwater preservation, therefore the activities aiming at water protection against pollution from agricultural sources are needed.
LUBELSKIE Voivodship			
06A	POLESIE ZACHODNIE, WOŁYŃSKIE I DOLNEGO WIEPRZA	403117	The hard core of priority zone is International Biosphere Reserve “Polesie Zachodnie”. This rich in grasslands, wetlands and lakes area requires action scheme protecting against pollutions from agriculture.
06B	ROZTOCZE	250939	Include mainly upland area with valuable nature and landscape. One of the most important problem of agriculture is highly fragmented composition of fields which cause low profitability of farm production.
06C	ŚRODKOWY BUG I DOLNEJ KRZNY	148265	Rich in meadows and pastures valley of Bug River preserved its nature and biodiversity. The main problem of agriculture is abandonment of extensive meadows and grazing practices.
06D	STREFA NADWIŚLAŃSKA	106642	Zone is characterized by high landscape values of gorge of Vistula River and specific composition of fields. The beauty of landscape is in danger because of plant succession and chaotic urbanization on agriculture area.
LUBUSKIE Voivodship			
08A	MIĘDZYRZECKA	116358	A zone covers rivers valleys where there is an abundance of high natural value meadows and wetlands. High fluctuations of water level cause obstacle in agricultural land use. Natural values decrease due to abandonment of traditional grazing and mowing..
08B	KRZESIŃSKA	86769	Within a zone there is a lot of natural valuable grasslands located in Odra Valley and Nysa Valley. Meadows and pastures are in danger due to transformation of grassland management.
08C	MUŻAKOWSKA	65116	A zone is located on the world biggest frontal moraine. Grasslands are common and therefore a rational grazing and moving is needed.
08D	SANTOCKA	98674	A zone covers marshy Noteć Valley which is an important bird area. An abandonment of extensive grassland has a negative impact on bird population has.

10A	ZLEWNIA RZEKI OCHNI	60405	The area consist of basin of Ochnia river dominated by utilized agriculture land, mainly arable land. The river is polluted due to improper fertilizing.
LÓDZKIE Voivodship			
10B	BOLIMOWSKI LANDSCAPE PARK	24995	The Zone is located in area natural and landscape valuable. Preserving of numerous meadows, extensive pastures, reedbeds and tall herbs depend on maintenance of extensive farm management..
10C	LANDSCAPE PARK OF WZNIESIEŃ ŁÓDZKICH	28360	The area represents landscape of interesting relief with large number of source area. To preserve features of landscape mostly accurate is conservation of present relatively extensive land use management.
10D	VALLEY WARTY I WIDAWKI	48946	The area with distinctive nature and landscape. One of main aim of introducing of agri-environmental measures is preserving and reconstructing environmental and cultural significant landscape features.
10E	SPALSKI LANDSCAPE PARK	18267	The area characterized by highly divers landscape. The agriculture lands present high degree of naturalness connected with extensive farm management and currently are treated due to changes in farm practice.
MAŁOPOLSKIE Voivodship			
12A	PÓLNOCNA	123644	Soils are very fertile and arable land ratio is very high. Intensification of agriculture is/to be risky in terms of protection of groundwater quality
12B	VALLEY DUNAJCA	131009	Preservation of high quality water of Dunajec River requires urgent actions. This directions shall be implemented e.g. due to promotion of sustainable farming.
12C	POPRAZKA	97007	A feature of a zone is high ratio of natural valuable grassland, which are notified to the Natura 2000 network. Main environmental problems are grassland abandonment and erosion.
12D	KOSTRZYŃSKO-GORCZAŃSKA	106991	Area of high natural value where soils are poor and ratio of grasslands is high. Due to less favourable farming condition a lot of agriculture area is abandonment and as a consequence biodiversity is reduced.
MAZOWIECKIE Voivodship			

14A	STREFA BUGU, LIWCA, NARWI I OMULWI	906495	Extensive agriculture and high ratio of grasslands contribute to high natural value of this zone. Currently there are many fallows on weak soils and other fields are in danger of abandoned.
14B	STREFA WISŁY I PILICY	397114	One of main orchard region in Poland with high landscape value. At present time many less productive ground are abandoned and others are on the way of excessive intensifying of orchard management.
14C	STREFA ŚRODKOWEJ WISŁY I POJEZIERZA GOSTYŃSKO-PŁOCKIEGO	233316	The highly nature valuable river valley endangered by farm intensification and simplification of crops.
OPOLSKIE Voivodship			
16A	STROBRAWA VALLEY	59875	A zone cover an area of river valley of natural character, where there is abundance of grassland and of high nature value. Significant plant communities typical for meadows and swards are a consequence of human activity and their maintenance depend on suitable farming practices.
16B	DOLINA ODRY, TRIAS OPOLSKI I GÓRA ŚW. ANNY	45401	An area is diversified from geomorphologic point of view, and as well there is abundance of boundary strips, field coppices/scattered tree cover, swards, neglected lands. These landscape elements comprise mosaics of habitats and support biodiversity. Nature value need to be preserved and shallow poorly isolated groundwater need to be protected.
16C	DOLINA NYSY KŁODZKIEJ	7539	The zone covers a river valley. The river basin supply drinking water for abstraction. Nature value and quality of water to be protected by agrienviromental activities.
16D	GÓRY OPAWSKIE W POWIECIE GŁUBCZYCKIM	12471	The most important features of this zone are: diversified surface features and high nature value. Open landscape on slope of mountains characterises high fall of the land and therefore are prone to water erosion.
PODKARPACKIE Voivodship			
18A	BESKID NISKI	97504	The area includes typical landscape of low and middle mountains landscape characterized by high forest ratio. The mosaic of forests

			small holder's agriculture is favorable to landscape attractiveness and high biodiversity. Protections of that values require preservation of extensive management.
18B	ROZTOCZE POŁUDNIOWE	59822	Lands of mixed agricultural-forest structure, low density of inhabitants and high natural value. The conditions to develop sustainable farming are optimal.
18C	LASY JANOWSKIE	43258	The mosaic of forests and open and high natural value open landscape. Conservation of valuable open habitats depend on regular apply of mowing, grazing and protecting against forest succession.
18D	OBSZAR „POGÓRZE”	238171	The area of extensive agriculture with good soil and climate conditions for cultivating very requiring crops. That land is highly vulnerable to water erosion and require antierosion measures.
PODLASKIE Voivodship			
20A	STREFA POJEZIERNIA	195711	A lakeland zone is characterised by abundance of nature resources and landscape beauty and diversity. Implementation of agri-environmental measures to protect nature value, to prevent from erosion and to protect water quality.
20B	STREFA ZACHODNIA	102221	Eastern edge of Kurpiowska Lowland is distinguished due to poor soils and high nature value. Protection of high nature value needs to carry out the extensive management of those areas.
20C	STREFA WSCHODNIA	76216	Within the zone Sokolskie Hills are located. It is characterized by slanting slopes and diversified land feature and valuable landscape. Region high vulnerable to erosion and anti-erosion actions should be implemented.
20D	STREFA HAJNOWSKA	58696	The zone is located close to Białowieża National Park and within the area there is abundance of nature reserves. Landscape of high nature value due to mosaics of meadow, arable land and forest need to be protected by continuation of extensive farming.
20E	STREFA POŁUDNIOWA – DOLINY BUGU	97537	Bug River remains natural, primeval character and forms floodplains and ox-bows. Area on Bug River –side are of high nature value and in

			order to be conserved there is a need of keeping extensive farming.
POMORSKIE Voivodship			
22A	STREFA POBRZEŻY SŁOWIŃSKIEGO i GDAŃSKIEGO	171497	The zone include International Biosphere Reserve “Słowiński Park Narodowy”. It is an area of outstanding natural and landscape values, which protections require extensive farming.
22B	STREFA CENTRALNA POJEZIERNIA	104010	The Region of Kaszuby Lakeland is characterized by high amount of area without flow and attractive mosaic of woodlands, farmlands and lakes. Conservation of water clearness and picturesque of landscape necessitate implementing of agri-environmental measures.
22C	STREFA BORÓW TUCHOLSKICH i RÓWNINY CHARZYKOWSKIEJ	210047	The area of very divers landscape where waste lowlands are alternated with hills, deep river valleys and numerous lakes. Very poor quality soils are the reason of abandonment of agricultural utilization.
ŚLĄSKIE Voivodship			
24A	DOLINY RZEK WARTY, PILICY I ICH DOPLYWÓW	94949	An area of valuable, diversified agriculture landscape where coppices, field strips, meadows are abundant. The agrienvironmental goals for designation of this zone are: maintenance of ecosystems of high flora value and prevention from conversion of semi-natural pastures into arable land.
24B	JURA KRAKOWSKO-CZĘSTOCHOWSKA	76935	Diverse geological structure and carst processes have contributed to unique feature of this area. Abandonment of pastures has led to plant succession on the grass and decline of nature and landscape value
24C	OBSZAR GÓRNEJ WISŁY	63164	Water supply protection zone for abstraction of drinking water for Katowice agglomeration covers some ponds of high nature value. It is of great importance to decrease in water pollution caused by nutrients.
24D	BESKID ŚLĄSKI I ŻYWIECKI	109305	An area of high nature value pastures and . Nevertheless decline of nature value is observed due to abandonment of sheep and cattle grazing.
ŚWIĘTOKRZYSKIE Voivodship			
26A	STREFA ŚWIĘTOKRZYSKA	113835	The Świętokrzyskie mountains because of diversity of geological structure are abound in numerous, diverse habitats and reach outstanding values of nature and scenery. Picturesque compositions of

			long and narrow fields are endangered due to changes in agriculture.
26B	STREFA NIDZIAŃSKA	76810	Nida river retained on the significant part it's natural character. Both it's valley and surrounding hills are rich in very important for wildlife open countries. High natural values are in danger as a result of meadows reclamation and also intensification and chemicalization of agriculture.
26C	STREFA KONECKA	53670	Almost half of acreages is covered by large, close woodland which created mosaic with meadows, peat lands and arable lands. Countryside and nature values are endangered due to abandoned of farming on poor quality soils.
26D	STREFA NADWIŚLAŃSKA	36821	Hardly converted Vistula valley is rich in valuable plant communities and also numerous ox-bow lakes, pools and wetlands. One of the problems is water erosion of soils located on slopes.
WARMIŃSKO-MAZURSKIE Voivodship			
28A	OBSZAR WIELKICH JEZIOR MAZURSKICH Z MAZURSKIM LANDSCAPE PARK	425312	An characteristic feature of an area is abundance of lakes. The biggest national lake - Śniardwy lake lie on those area. Surface water and aquifers that are not naturally isolated are vulnerable to pollution from agriculture sources.
28B	SZCZYTNO AND NIDZICA ZONE	289450	An area of high landscape and nature value where surface and groundwater are vulnerable to pollution. An pilot agrienvironmental action was conducted on this area and positives outputs encourage to continuation of such measures.
28C	LANDSCAPE PARK WYSOCZYZNY ELBLĄSKIEJ	76596	Elbląska Upland is the source area of several rivers. The area is targeted at maintenance of landscape value and protection of water of Wiślany Lagoon .
WIELKOPOLSKIE Voivodship			
30A	STREFA NOTECKA	285040	The area of great natural importance. It is characterized by high ratio of grasslands and significant part is proposed to Nature 2000.
30B	STREFA DORZECZA WELNY I MAŁEJ WELNY	86100	The land of intensive agriculture, low precipitation and considerable insolation. These factors are responsible for harms with wind erosion. Implementing of antierosion measures will enable to save soil

			productivity.
30C	ZONE POZNAŃSKA	150410	Intensive pig keeping and related production of enormous quantity of slurry generate a threat of water pollution.
30D	ZONE POŁUDNIOWO-WIELKOPOLSKA	128940	Surface and ground waters are subject to agricultural pollutions. Soils of this area require protection against wind erosion.
30E	ZONE POJEZIERZA GNIEŹNIŃSKIEGO and VALLEY ŚRODKOWEJ WARTY	230260	The zone with highest acreage of grasslands in Wielkopolska. Area sensitive to degradation and pollutions with high ratio of poor soils and very permeable grounds.
ZACHODNIOPOMORSKIE Voivodship			
32A	POBRZEŻE ZALEWU SZCZECIŃSKIEGO I RÓWNINA GOLENIOWSKA	149100	Covers areas situated close to Szczecin Lagoon, has a large share of grasslands and significant number of forest areas. It has a natural landscape, for protection of which a sustainable management is necessary.
32B	RÓWNINA BIAŁOGARDZKA I NOWOGRODZKA ORAZ WYSOCZYNA ŁOBESKA	353800	The upland of high natural value, enriched by hills and marshes. It requires a sustainable agricultural management, and actions aimed at protection of water in clone to sea rivers.
32C	WYBRZEŻE SŁOWIŃSKIE I POJEZIERZE SZCZECIŃSKIE	318400	Zone is situated in the north – east part of voivodship, at the lake area. It is the area of high natural values, and for its protection a promotion of sustainable agriculture.
32D	POJEZIERZE CHOSZCZEŃSKIE I WAŁECKIE I RÓWNINA DRAWSKA	325000	It is a very diversified area in terms of landscape values , consisting of moraine hills and sandr areas. A maintenance of natural and landscape values and protection of water requires an introduction of agri-environmental measures.
32E	VALLEY DOLNEJ ODRY I POJEZIERZE MYŚLIBORSKIE	142600	It has a very diversified post-glacial landscape of high visual and natural values. Rich plant habitats and surface waters are vulnerable for degradation caused by changes in agricultural management.
01A	VALLEY BIEBRZY I NARWI	218302	The biggest area of wetlands and meadows in Poland with great, outstanding natural importance. The valuable flora, fauna and their habitats are endangered as a result of abandon of extensive agriculture.
ENVIRONMENTALLY SENSITIVE AREAS			

01B	WSCHODNIOKARPACKI ENVIRONMENTALLY SENSITIVE AREA	337 865	The natural outstanding mosaic of mountain forests and extensive managed farmlands Small holdings, harsh conditions, natural limitations and unprofitably of farming belongs to main problems of East Carpatian agriculture
01C	VALLEY UJŚCIA WARTY	49351	The area of mouth of Warta river is bird refuge with great importance. Both nesting and migrating birds are concentrated on open country. In a result of low economic profitability, acreage of utilized meadows and pastures is decreasing and require measures supporting their management.
01D	VALLEY BARYCZY	216743	This area is located in south and west Poland, in prevailing part in Dolnośląskie Voivodeship. It include river valley with numerous ponds and plenty natural valuable plant communities of open country.

ANNEX H. Comparison of natural values in priority zones and selected environmental threats for agricultural areas in priority zones

(natural values - low (•), high(••), the highest (•••), threats - weak (•), moderated (••), strong (•••))

		Natural values					Environmental threats				
		National Parsi	Landscape Parks	Natura 2000	Permannt grassland	Biodiversity of agrigenoses	Deficit of minerale in silos	Land abandonment	Excessive intensification of agriculture	Erosion	Simplification of landscape
		1	2	3	4	5	6	7	8	9	10
01A	DOLINY BIEBRZY I NARWI	•••	••	•••	•••	•••	•••	•••	•	•	•
01B	WSCHODNIOKARPACKI OBSZAR PRZYRODNICZO WRAŻLIWY	•••	•••	•••	•••	•••	•	••	••	•••	•
01C	DOLINA UJŚCIA WARTY	•••	•••	•••	•••	•••	••	••	••	•	•
01D	DOLINA BARYCZY	•	•••	•••	•••	•••	•••	••	•	••	••
02A	SUDETY	••	••	••	•••	••	•	••	•••	••	••
02B	DOLINA BARYCZY I ODRY	•	•	•	••	••	••	••	••	••	••
02C	WZNIESIENIA CHOCIANOWSKIE	•	•••	•••	••	••	••	••	•	••	••
02D	MASYW ŚLĘŻY	•	••	••	••	••	•	•••	••	••	••
04A	PÓLNOCNO-ZACHODNIA (KRAJEŃSKO-TUCHOLSKA)	•	•••	•••	••	••	••	•••	•	••	••
04B	CENTRALNA (DOLINY WISŁY I NOTECI)	•	••	••	••	••	••	•	•••	••	••
04C	PÓLNOCNO-WSCHODNIA (DOLINY DRWĘCY I POJEZIERZA)	•	••	••	•	•	••	••	••	••	•••
04D	PÓLUDNIOWA (NADGOPLAŃSKA)	•	••	•••	•	•	•	••	•	••	•••
06A	STREFA POLESIA ZACHODNIEGO, WOŁYŃSKIEGO I DOLNEJ WIEPRZA	••	••	•	••	•••	••	••	••	•	•
06B	STREFA ROZTOCZE	••	••	•••	••	••	•	••	•••	•••	••
06C	STREFA ŚRODKOWEGO BUGU I DOLNEJ KRZNY	•	••	•	••	••	••	••	••	•	••
06D	STREFA NADWIŚLAŃSKA	•	••	•	••	••	••	••	••	••	••
08A	MIĘDZYRZECKA	•	••	•	••	••	••	••	••	••	••
08B	KRZESIŃSKA	•	••	•	••	••	••	•••	•	••	••
08C	MUŻAKOWSKA	•	••	•	••	••	••	••	••	•	••
08D	SANTOCKA	•	•	•••	•••	••	••	••	••	•	••
10A	ZLEWNIA RZEKI OCHNI	•	•	•	•	•	•	••	••	•	•••
10B	BOLIMOWSKI PARK KRAJOBRAZOWY	•	••	••	••	••	••	••	••	•	••
10C	PARK KRAJOBRAZOWY WZNIESIEŃ ŁÓDZKICH	•	•••	•	•	•	••	••	••	••	•••
10D	DOLINA WARTY I WIDAWKI	•	•••	••	••	••	•••	•••	•	•	••
10E	SPALSKI PARK KRAJOBRAZOWY	•	•••	•••	••	••	••	••	•	•	••

		1	2	3	4	5	6	7	8	9	10
12A	PÓLNOČNA	.	.	.	..	..	.	.	...	...	..
12B	DOLINA DUNAJCA	.	..	.	..	..	.	.	...	...	..
12C	POPRADZKA	..	...	...	...	...	.	...	.	...	.
12D	KOSTRZYŃSKO-GORCZAŃSKA	..	.	...	..	..	..	...	.	...	..
14A	STREFA BUGU, LIWCA, NARWI I OMULWI	.	.	..	...	..	...	...	.	.	..
14B	STREFA WISŁY I PILICY	.	.	..	..	..	...	..	..	.	..
14C	STREFA ŚRODKOWEJ WISŁY I POJEZIERZA GOSTYŃSKO-PŁOCKIEGO	..	.	..	..	.	..	..	..	..	...
16A	DOLINA STOBRAWY	.	.	...	..	..	..	.	...	.	..
16B	DOLINA ODRY, TRIAS OPOLSKI I GÓRA ŚW. ANNY	.	..	.	..	..	..	.	...	.	..
16C	DOLINA NYSY KŁODZKIEJ	.	.	..	.	..	.	.	...	.	..
16D	GÓRY OPAWSKIE W POWIECIE GLUBCZYCKIM	.	.	.	..	.	.	.	...	..	...
18A	BESKID NISKI	...	..	...	...	...	.	...	.	...	.
18B	ROZTOCZE POŁUDNIOWE	.	...	...	..	..	.	..	..	..	..
18C	LASY JANOWSKIE	.	..	...	...	..	...	..	..	.	..
18D	OBZAR „POGÓRZE”	.	..	...	..	..	...	..	...	..	..
20A	STREFA POJEZIERNIA	...	.	.	..	..	...	...	.	...	..
20B	STREFA ZACHODNIA	.	.	.	...	...	...	...	.	.	.
20C	STREFA WSCHODNIA	.	...	...	..	...	..	...	.	..	.
20D	STREFA HAJNOWSKA	.	.	...	..	..	..	...	.	.	..
20E	STREFA POŁUDNIOWA – DOLINY BUGU	.	.	..	..	..	..	..	..	.	..
22A	STREFA POBRZEŻY SŁOWIŃSKIEGO I GDAŃSKIEGO	...	.	..	...	..	..	..	..	..	..
22B	STREFA CENTRALNA POJEZIERNIA	.	...	..	..	...	...	...	.	..	.
22C	STREFA BORÓW TUCHOLSKICH I RÓWNINY CHARZYKOWSKIEJ	..	..	...	..	...	...	...	.	..	.
24A	DOLINY RZEK WARTY, PILICY I ICH DOPŁYWÓW	.	.	.	..	..	..	...	.	.	..
24B	JURA KRAKOWSKO-CZĘSTOCHOWSKA	.	...	.	..	...	..	.	...	...	.
24C	OBZAR GÓRNEJ WISŁY	.	.	..	..	..	.	.	...	.	..
24D	BESKID ŚLĄSKI I ŻYWIECKI	.	...	...	...	..	..	...	.	...	..
26A	STREFA ŚWIĘTOKRZYSKA	..	..	..	..	..	.	...	.	...	..
26B	STREFA NIDZIAŃSKA	.	...	...	..	..	..	..	..	..	..
26C	STREFA KONECKA	.	..	.	...	..	..	...	.	..	..
26D	STREFA NADWIŚLAŃSKA	.	.	.	.	..	..	..	..	..	..
28A	OBZAR WIELKICH JEZIOR MAZURSKICH Z MAZURSKIM PARKIEM	.	..	...	...	..	..	..	..	.	..
28B	OBZAR PILOTAŻOWEGO PROGRAMU ROLNOŚRODOWISKOWEGO W	.	.	...	...	..	..	...	.	.	..
28C	PARK KRAJOBRAZOWY WYSOCZYŃNY ELBLĄSKIEJ	.	..	...	..	.	.	..	..	..	...
30A	STREFA NOTECKA	.	.	...	...	..	...	...	.	..	..
30B	STREFA POZNAŃSKA	.	.	.	..	.	..	.	...	...	...
30C	STREFA DORZECZA WELNY I MAŁEJ WELNY	.	.	.	.	.	..	.	...	...	...
30D	STREFA POŁUDNIOWO– WIELKOPOLSKA	..	.	.	.	.	..	.	...	..	...
30E	STREFA POJEZIERZA GNIEŹNIEŃSKIEGO I DOLINY ŚRODKOWEJ WARTY	.	..	...	...	..	...	...	...	..	..

32A	POBRZEŻE ZALEWU SZCZECIŃSKIEGO I RÓWNINA GOLENIOWSKA	.	.	...	..	..	..	..	.	..
32B	RÓWNINA BIAŁOGARDZKA I NOWOGRODZKA ORAZ WYSOCZYŻNA	.	.	.	..	..	.	..	..	..
32C	WYBRZEŻE SŁOWIŃSKIE I POJEZIERZE SZCZECIŃSKIE	.	.	..	..	..	...	..	..	..
32D	POJEZIERZE CHOSZCZEŃSKIE I WAŁECKIE I RÓWNINA DRAWSKA	..	.	..	..	..	..	..	.	..
32E	DOLINA DOLNEJ ODRY I POJEZIERZE MYŚLIBORSKIE	.	..	..	.	..	.	..	..	..

- 1) % share of National Park in the total area: below national average (•), above national average j (••), above 10% (•••).
- 2) % share of Landscape Parks in total area: below national average (•), above national average (••), above 25% (•••).
- 3) % share of areas designated to NATURA 2000 in total area: below national average (•), above national average (••), above 25% (•••).
- 4) % share of permanent grassland in the total area of agricultural land: below 10% (•), above 10% (••), above 33% (•••).
- 5) Valorisation of agricultural landscape for protection of biodiversity: low diversity (•), moderate diversity (••), high diversity (•••).
- 6) Share of the poorest soils (bonitation class VI, VIz): the lowest (•), medium (••), the highest (•••).
- 7) Average value of LQI: soils of low suitability for agriculture 0-55 pkt (•••), soils of medium suitability for agriculture 55.1-70 pkt. (••), soils of low suitability for agriculture 70.1-90 pkt. (•).
- 8) Average value of LQI: soils of low suitability for agriculture 0-55 pkt (•),soils of medium suitability for agriculture 55.1-70 pkt. (••),soils of low suitability for agriculture 70.1-90 pkt. (•••).
- 9) Level of threathening by erosion: the lowest (•), average (••), the highest (•••).
- 10) Valorisation of agricultural landscape for biodiversity: low diversification (•••), moderate diversification (••), high diversification (•).

ANNEX I. Coefficients for various types of livestock into Livestock Units (LU)

A regulation of the Council of Ministries of 24 September 2002,
Journal of Laws No 179 (item 1490) of 29 October 2002

Type of livestock	Age or body weight	LU
Stillion, mares, gelding	Body weight over 500 kg	1.2
Colts	Aged after 2, 1-2, 0.5-1.0, to 0.5 years old	1.00; 0.80; 0.50; 0.30
Young horses	Aged 2-3, 1-2, 0.5-1, up to 0.5 years old	1.00; 0.80; 0.50; 0.30
Bulls	Body weight over 600 kg	1.40
Cows and pregnant heifers	Above the age of 2, body weight about 500 kg	1.00
Heifers and young bulls	Aged 1-2, 0.5-1 years old	0.80; 0.30
Calves	Aged up to 0.5 years old	0.15
Boars and sows	Sows with weaned pigs	0.30
Fattened pigs	Fatteners, beconers	0.25; 0.20
Weaners	Up to 30 kg body weight	0.10
Piglets	Aged up to 2 months old	0.02
Rams	Above the age of 1.5 years old	0.12
Pregnant ewes and feeding ewes	Above the age of 1.5 years old	0.10
Ewe-lambs and ram-lambs	Females, males	0,10; 0,08
Lambs	Aged 6-12 months old	0.05
Foxs		0,04
Minks, polecats		0,025
Ducks, hens		0,004
Geese		0,008
Turkey-cock		0,024
Other animals to 500 kg total weight		1

ANNEX J. „Assessment of economic, environmental and social impacts for the draft of Rural Development Plan 2004-2006” – extract

1. General issues

The prepared draft RDP is in general compliant with the legal solutions in force in the European Union, relating to the support of rural development policy. The Community legal acts are a reflection of this policy, especially the Council Regulation no. 1257/99 of 17 May 1999 concerning the support of rural development by the European Agriculture Guidance and Guarantee Fund (FEOGA) amending and repealing certain regulations (OJ EC no. L-160, of 26 June 1999) and the Commission Regulation no. 817/2004 of 29 April 2004 laying down the detailed principles of application of the Council Regulation No. 1257/1999 concerning the support of rural development by the European Agriculture Guidance and Guarantee Fund (FEOGA) (OJ EC no. L-161 of 26 June 1999). In these provisions, the Community legislator outlined solely the general frames for the functioning of rural policy instruments, leaving to the Member States a relatively wide margin of freedom in setting detailed solutions at a country legislation level. Only the measure concerning the agri-environmental programmes is obligatory. Hence the authors of the draft Plan, within the frames so normatively fixed, specified individual legal instruments, adapting the designed solutions to the reality of Polish agriculture and existing financial possibilities

In relation to these requirements, the assessed draft plan (RDP) contains certain peculiarities, namely:

- 1) in its material scope it contains projects other than those mentioned in article 35 paragraph 1 of the Council Regulation no. 1257/99 i.e.:
 - ◆ support for semi-subsistence holdings, which as assumed is to contribute to accelerate the process of farms' restructuring and generate new workplaces,
 - ◆ adjustment for agricultural holdings to the European Union standards,
 - ◆ support for agricultural producer groups (not covered by market regulations),
 - ◆ technical assistance;
- 2) it covers another time frame of the rural development plan operation, than the one defined in article 42 of the Council Regulation no. 1257/99 i.e. the period 2004-2006.

According to the above mentioned regulation, rural development plans cover 7 year period, starting from January 1st 2000 and according to article 44 of the Council Regulation no. 1257/99 they should be submitted to the European Commission not later, than within 6 months following the entry into force of this Regulation. In relation to the assessed Plan, this provision is not applicable – the Plan shall come into force from the moment of entry into force of the Treaty on Poland's Accession to the European Union until the end of 2006 i.e. for three years.

Inclusion of instruments transcending the binding norm of Community law in the assessed draft Plan was possible thanks to appropriate agreements, contained in the Common Position of the Parties of 10 October 2002, adopted in consequence of completed pre-accession

negotiations, afterwards included to the Accession Treaty³, which determines the principles of Poland's accession to the European Union.

A detailed assessment of compliance of proposed measures and the way of their implementation with the EU regulations requirements and relations to legal solutions binding in this scope in Poland, is presented below.

Early retirements

Carrying out an assessment of the early retirements system contained in the Plan from the viewpoint of its compliance with the Community law, it is worth noting, that the conditions of acquiring the right to early retirements formulated in the draft Plan are concurrent with legally defined conditions, referred to in the provisions of Articles 10-12 of the Council Regulation no. 1257/99. When we confront the proposed solutions concerning the early retirements contained in the programme with the provisions of the Act of 26 April 2001 on Early Retirements (Journal of Laws no. 52, item 539), a general conclusion can be drawn, that they are much more simplified and to a higher degree harmonized with the Community law than the exceptionally rigorous statutory regulation at present binding in Poland. In comparison with the present statutory regulation, a decrease of the lower age criterion authorizing to receive a pension was proposed, irrespectively of sex (55 years), satisfying in this respect the provisions of the Community law from Article 11 Paragraph 1 of the Council Regulation no. 1257/99.

Taking the advantage of the margin of freedom left by the EU legislator in the scope of setting the size of a transferred and newly established agricultural holding, in the draft RDP it is assumed, that a newly established holding should have a suitable „economic viability” which should mean, that it would be a holding exceeding the area of an average holding in a given province, but with its area not lower, than 75% of an average holding in the country. Such a flexible solution is much more adapted to the specificity of Polish agriculture, than the regulations presently binding in this scope, rigidly defining the size of any newly established holding at the level of 15 ha. In the third version of the draft RDP it was accurately specified, what should be considered as the improvement of economic viability of an agricultural holding.

Fully compliant with the provisions of the Community law is also the proposal, included in the projected Plan, enabling a farmer to transfer the holding not only by way of giving over the possession of farmlands, but also through conveyance of lands into the dependent possession, which means, that also a farmer tenanting farmlands can be covered by the system of early retirements. It is a vital issue to the extent, that the presently binding act on early retirements has been based solely on the construction of disposal of property, which *de lege lata* to a considerable degree restricts the subjective scope of its operation. To be accurate, it is only worth adding, that the RDP refers solely to the conveyance of lands in a permanent way i.e. by way of sale and donation, while in fact different legal forms of farmlands' conveyance can be taken into consideration, not only those herein mentioned.

In comparison with the presently binding act, also making possible to convey the farmlands for non-agricultural purposes is a significant *novum*. This is an equivalent of the provision of

³ The Accession Treaty concerning the accession of Cyprus, Czech Republic, Estonia, Lithuania, Latvia, Malta, Poland, Slovakia, Slovenia and Hungary to the European Union, signed in Athens on April 16th 2003.

Article 11 Paragraph 4 of the Council Regulation no. 1257/99. Among the detailed objectives of operation of the „early retirement” measure, the draft RDP does not take into account one of the three objectives envisaged in the Council regulation no. 1257/99 (article 10), namely the separation of farmland blocks for non-agricultural use, where profitable agricultural production is not possible. Moreover, in the chapter *Description of the measure*, heavy restrictions have been introduced, concerning the possible purposes for which a holding is handed over, especially as far as non-agricultural purposes, explicitly specified in the Council Regulation no. 1257/99 (Article 11 Paragraph 4), such as establishment of territorial forms of nature conservation (ecological reserves). At the same time a group of legal and natural persons that can take over holdings and the purposes of such taking over have been groundlessly restricted (afforestation – State Forests, non-agricultural purposes – self-government units, management - Agency of State Agricultural Properties⁴ - AWRSP). The regulation clearly words (article 11 paragraph 4), that any person or institution can take over a holding for non-agricultural use. Also an extremely important provision (Article 11 Paragraph 4) has been skipped in the draft RDP, that non-agricultural activity performed in the area of holdings taken over is to be carried out in a way compliant with the principles of protection and improvement of rural areas quality. Only an provision was introduced, that in the case of conveying in favour of self-government units, it has to take place according to the spatial management plan, which is not sufficient.

Yet for the persons working in the holding being conveyed, no possibility of acquiring the right to early retirements has been envisaged, though such legal bases exist in the provisions of article 11 paragraph 1 of the Council Regulation no. 1257/99. With regard to this category of beneficiaries, the requirement of employment in agriculture has been much more gently formulated at the level of the Community law. Although under the rule of the current Act such solution was not envisaged either, but in the pre-accession period it can be explained by limited budgetary resources of our state, while the lack of an equivalent of such solution in the analysed Plan will limit the extent of such solutions application, which can raise certain doubts, even if the problem of the so-called third persons in Polish family holdings is marginal, considering a very small number of such persons. The following can be involved: hired employees (they exist in 1% of farms, but this phenomenon occurs only in the largest, in terms of area, holdings), concubines and kinfolk (however these will be concerned with the requirement of 55 year and paid ASIF – the Agricultural Social Insurance Fund).

Afforestation of farmlands

The instrument of farmlands afforestation in the proposed shape fully responds to the requirements of the Community law provisions, including especially of the Council Regulation no. 1257/99 and Commission Regulation no. 445/2002. Comparing to the Act of 8 June 2001 on Agricultural Land Intended for Afforestation (Journal of Laws no. 73, Item 764), currently in force in this field, the proposed solutions have been adjusted to a higher degree to the EU law, both regarding the envisaged forms of payment (subventions for afforestation, tending and afforestation bonus) and the conditions of their obtainment.

⁴ It must be noted, that from 16 July this year., pursuant to the provisions of the Act on Shaping the Agricultural Regime, that agency changed its name to: the Agricultural Property Agency.

Agricultural producer groups

Among the analysed projects of the Plan, the support has been taken into account for the establishment and functioning of agricultural producer groups in the sectors, which are not covered by the Community market regulations. Specifically it was proposed to recognise the groups of agricultural producers established under the Act of on Agricultural Producer Groups and on the basis of Community regulations concerning the common tobacco and hops market organisation as beneficiaries of Community assistance.

It should be emphasized, that – pursuant to Article 38 of the Council Regulation no. 1257/99 – a support for the same project under the above mentioned Regulation and on the basis of another system of Community support is not possible. Furthermore in the light of Article 37 Paragraph 3 of the Council Regulation no. 1257/99 no support set by this Act can be granted to the undertakings, which are subject to a system of support within the frame of a common market organization. Meanwhile the draft RDP (Chapter 7.9.5) provides for the coverage by double Community support for agricultural producer groups, i.e. organized pursuant to the Act of September 15th 2000, and in addition to that, the groups of tobacco and hop producers that enjoy the support under relevant market regulations - see the Regulation no. 2075/92 concerning the Common Tobacco Organization (OJ EC L-215, page 70) and the Regulation no. 1969/71 of July 26th 1971 on the Common Organization of the Market in Hops (OJ EC L-175, page 1) amended by the Regulation no. 1554/97 (OJ EC L-210, page 28). However, in point 7.9.2 of the draft RDP this possibility is excluded. Certain inconsistency with the assumed and adopted principles of financing results therefrom, since the support is to concern agricultural producer groups in the sectors not covered by the Community market regulations. Meanwhile both the tobacco market and the hops market are covered by the Community law regulations on the common market organization.

With regard to this project, one more remark should be raised, namely that according to the proposal of the Plan, pursuant to the EU law, the support is to concern only those agricultural producer groups, which will be formally recognized by the voivod (...) „*within the period between the day of Poland's accession to the European Union, and the end of the period covered by the Plan i.e. the end of 2006.*” Such solution does not stimulate the development of those groups, as since about 3 years they may set themselves up and enjoy (also before Poland obtains the EU membership) the support from the domestic budget.

The measures concerning the support for agricultural producer groups and their unions, do not in principle require new legal solutions. In this respect our legislation has appropriate legal regulations at its disposal. These are: the Act of 15 September 2000 on Agricultural Producer Groups and their Associations and Amendment of Certain Acts (Journal of Laws no. 88, Item 983); the Act of 29 November 2000 on the Organization of the Fruit and Vegetables Market, Hops Market, Tobacco Market and Dried Fodder Market (Journal of Laws 2001 no. 3, Item 19). The last Act is utterly compliant with the Community legislation, and in addition its scope is excluded from the RDP operation.

A barrier, which can still impede the implementation of the measures proposed in the Plan, is the hitherto existing legal solution contained in the quoted Act of 15 September 2000 on Agricultural Producer Groups. Rather strict conditions for setting up these groups can form a serious obstacle in their establishing, the proof being a minor number of groups that so far applied for financial assistance to the Agency for the Restructuring and Modernisation of Agriculture (ARMA).

Against a background of past application of the Act on Agricultural Producer Groups and their Associations, already problems of both organizational and procedural nature, as well as economic problems appeared. According to Article 3 Paragraph 1 of the Act of 15 September 2000 on Agricultural Producer Groups and their Associations, a group has the status of an entrepreneur acting as a legal person. Therefore it must be entered in the National Judicial Register as an entrepreneur. In addition to that, the statutory required attribute of legal personality limits the choice of legal form for agricultural producer groups. Therefore it is easy to find, that our legislation places above all the following at the disposal of farmers, intending to organize a group: the legal form of a co-operative, joint-stock company and limited liability company. And it is here that the first barriers appeared. Co-operatives are not a legal form readily accepted by farmers, considering bad associations with collective farms in the past. In turn, commercial partnerships also do not enjoy popularity among farmers, considering farmers' difficult financial situation (rather high initial capital is required in partnerships).

Furthermore problems of procedural nature appeared in registration courts, related to the „conversion” of the already existing informal agricultural producers groups into entrepreneurs provided with legal personality. Also the entry itself in the judicial register takes a long time, which often does not permit to take up further actions connected with the registration of a group in the register kept by the voivod, and thereby commence the activity by the group.

In practice, also there appeared some problems related to meeting the subjective requirements set in article 2 of the Act on agricultural producer groups. It states, that natural persons running an agricultural holding in the meaning of regulations on agricultural tax and natural persons carrying out agricultural activity in the scope of special branches of agricultural production may organize themselves into agricultural producer groups. Meanwhile the practice point out a number of real restrictions. For example, when a young farmer wanted to become member of a group, and formally the person running the farm and paying the agricultural tax has been his father, registration of the group in the voivod's register unfortunately appeared to be impossible. The fulfilment of formal requirements, related to the management of a holding by the young farmer was connected with a time-consuming procedure deferring the group registration.

Also the statutory requirement to specify the detailed principle of such group's functioning in the foundation act has a bearing on farmers' tardiness in self-organization into agricultural producer groups. According to these principles, there exists for example a requirement of selling through it the totality of products, for which it was established. It is difficult for a farmer to accept this, as for years he used to decide alone about the amount of sale of agricultural products produced by him, and all the more not to reveal his income, not inform other persons about the prices obtained at the sale of these products. It is worth considering, whether it is necessary that the group sell 100% of the production of a specific farmer who joined that group (and not e.g. 90%).

At organizing an agricultural producer group, in the foundation act, pursuant to the regulations, sanctions (mostly financial ones) must be determined against a group member that does not fulfil the duties imposed on him. This requirement also does not encourage farmers to participate popularly in the establishment of agricultural producer groups.

These are only some problems revealed in the course of application of the provisions of the Act quoted herein – so to take advantage of the chances, which can be offered by co-operation

within the frame of producer groups, farmers will have to overcome many of their past habits and learn to meet the above mentioned requirements for organizing into groups. The Act guarantees a specific financial assistance to agricultural producer groups and their associations, above all the assistance from public funds earmarked for the establishment and support of their activity in a period of the first five years. The law also provides for preferential investment credits, subventions to the interests on credits contracted for working purposes, exemption from the real estate tax for five years following the group registration. The actual use of funds from this assistance by the groups makes a separate issue. It must be added, that financial assistance for the establishment and support of the group's administrative activity is due only after one year of its activity, so according to the RDP assumptions, the registration of a group by the voivod, will enable it to take advantage of the funds from the Community support only after one year of activity. However, the barriers laid down by the legislator for the groups organization must be kept in mind and consider their possible limitation. This would bear upon the quantitatively increased development of agricultural producers organizations, and thereby upon the development of agriculture and rural areas.

Agri-environmental programme

The Measure, included in the draft Plan, concerning the agri-environmental programmes is formally and legally compliant with the Community regulations. It is the only Measure, which pursuant to the Council Regulation no. 1257/99 must necessarily be taken into account in a rural development plan. This is different from other measures, where individual Member States decide on their choice. The agri-environmental programmes, in the meaning of the EU regulations, are not till now implemented under Polish regulation, as the chances for development existing therein have not been used so far, like it was done by Slovenia (since 2001 it implements such programmes from its own funds and at present already 12 thousand farmers enjoy them). No profit was taken also from the good experience of some EU states (e.g. Austria or Ireland, where over 50% or about 45% of funds from the RDP are allotted for agri-environmental programmes). For since some time, the support for organic farming and preservation of old races of breeding animals from domestic funds does not have the character of typical agri-environmental measures.

The support for organic farming, which according to the formulations of the RDP is to be granted through the agri-environmental programmes (as the scheme III), must be compliant with the provisions regulating the matters of organic farming in the EU, and namely with the Regulation no. 2092/91 z 1991 on Organic Farming and Marking of its Products. In Poland, the matters related to organic farming are regulated by the Act on Organic Farming of 2001, which to a large extent is already compliant with the EU law, but still requires certain adjustments. The payments for farmers are made (since 1999) on the basis of annual Regulation of the Council of Ministers on Financing in Favour of Entities Performing Tasks for Organic Farming. A regulation of the Council of Ministers is expected, which will regulate the issue of payments in a longer period.

Less favoured areas (LFA)

The measure supporting the less favoured areas included in the draft Plan is compliant with the Community solutions (Council Regulation no. 1257/99, Articles 13-21) and the selection of just this project is justified. However, when determining the areas to be supported within the frame of this instrument, not all possibilities provided by the Council Regulation no. 1257/99 were taken into account – the areas, where:

- 1) limitations in agriculture, resulting from the principles of environmental protection in force in the Community (article 16) are applied, and
- 2) the areas, where agricultural activity should be continued e.g. for the purpose of preserving or improving the state of the environment, sustaining the state of landscape and maintain the touristic potential of these areas or for the purpose of coast protection (Article 20).

were not taken into account.

Yet it should be remembered, that (pursuant to Article 21 of the Council Regulation no. 1257/99) the total area of zones being subject to environmental restrictions covered by this range of Community assistance under Articles 16 and 20, cannot exceed 10 % of the whole state's area.

Other measures

Other measures considered in the draft RDP do not arouse significant reservations – these are the measures determined for new Member States in the Common Position of 31 October 2002, and then entered in the Accession Treaty. They include above all the support for the purpose of achieving compliance with the Community standards and technical assistance. The already mentioned support for holdings, which is to help them in reaching the minimal standard of holdings in the European Union and become permanently competitive with the Union holdings, has for purpose a lasting and sustainable development of Polish agriculture. These are the measures that do not require to meet too hard criteria and it is believed, that in practice they will not encounter difficulties.

2. Assessment of the relations between the measures proposed in the RDP, and similar measures implemented on the basis of Polish regulations and the way it is proposed to arrange these relations in the period after the accession to the EU

Relations between the RDP, and other programmes concerning the rural areas

The draft RDP is one of two programmes, from which agriculture and rural areas will be financed after the accession to the EU. The second one is the Sector Operational Programme "Restructuring and Modernization of the Food Sector and the Development of Rural Areas" (SOP). They both complement one another and are cross-connected. Besides, to prepare two separate programmes is substantially unjustified. Yet such decision is the consequence of the EU administration organization: both programmes are financed from the European Agriculture Guidance and Guarantee Fund (EAGGF), but the RDP from the Guidance Section, and the SOP from the Guarantee Section.

Independently from the RDP and the SOP, rural areas will also be financed from other operational programmes, also co-financed from structural funds and the Cohesion Fund. It is obvious that at least in the first three years of membership, the programmes not comprised in the EU system of programmes of support of agriculture and rural areas will be financed from Polish budget, if only for the reason, that Polish state will have to comply with the obligations, contracted vis-à-vis farmers in the period preceding the membership.

At last a programme, not being a programme of supporting agriculture in the strict meaning of this term, but only completing the farmers' income is the programme of direct payment. Although at present it is not known, whether in the period of the RDP implementation farmers will be receiving the negotiated, non-obligatory complement from Polish budget (up to 55% of full direct payments in 2004, up to 60% in 2005 and 65% in 2006), nonetheless in consequence of implementation of the direct payments programme, within the first three years of membership, an amount not much lower, than the one placed at Poland's disposal within the frame of structural programmes of supporting agriculture and rural areas, will come to the agriculture.

The basic strategic document, in which the basic problems of agriculture and rural areas have been formulated, is the „Coherent Structural Policy for Rural Areas and Agriculture Development” adopted by the Council of Ministers on 19 July 1999. As the most important problems of rural areas, the following has been recognised therein:

- 1) Insufficient development of technical, social and cultural infrastructure;
- 2) Low level of education and qualifications of inhabitants;
- 3) Insufficient possibilities of employment outside agriculture;
- 4) Little availability of services serving to improve the pursuit of economic activity;
- 5) Small economic and social activeness of inhabitants;
- 6) Registered and hidden unemployment;
- 7) Low level of income;
- 8) Weakness of institutions and organizations that support rural development.

Instead, as the most important problems of agriculture, leading to low income, the following was mentioned:

- 1) Fragmentation of agrarian structure;
- 2) Maladjustment of the production size and quality to customers' requirements;
- 3) Weak organization of the agricultural market;
- 4) Underinvestment of agricultural holdings;
- 5) Low level of professional knowledge;
- 6) Low degree of farmers' self-organization.

Finally as the problems concerning environmental protection in rural areas, the following was mentioned:

- 1) Local threats to the environment;
- 2) Lack of equipment serving to protect the environment;

- 3) Resting low class grounds, launching a spontaneous succession towards the creation of forests;
- 4) High construction costs of environmental protection devices.

Upon the identification of problems, the following was recognized in the programme as the main policy objectives:

- 1) Shaping the conditions of works and life of rural population, that correspond to civilization standards and making possible to realize inhabitants' ambitions;
- 2) Reconstruction of the agricultural sector structures;
- 3) Shaping the conditions for sustainable development in rural areas.

The assessment of the RDP compliance with the strategic documents requires above all to characterize individual programmes (measures), and also the priorities and measures envisaged in the SOP, strictly connected therewith. Furthermore the actual compliance and the compliance declared in the RDP have to be distinguished.

The RDP programme consists of two objectives, divided into eight measures, with the following funds being initially envisaged for their implementation in the period 2004 – 2006 (in EUR million):

Objective I Improvement of agricultural holdings competitiveness:	1066 (41.9%)
Early retirements	311 (12.2%)
Support for semi-subsistence holdings	525 (20.6%)
Reaching the EU standards	208 (8.2%)
Agricultural producers groups	22 (0.9%)
Objective II Lasting and multifunctional development with particular regard to the environmental aspects:	1,454 (57.1%)
Less-favoured areas (LFA)	1,099 (43.1%)
Agri-environmental programme	277 (10.9%)
Afforestation of agricultural lands	78 (3.1%)
Technical assistance	25 (1.0%)
RDP total	2,545 (100.0%) ⁵

In turn, the SOP programme, strictly connected with the RDP, consists of three priorities, for which the following funds are envisaged (in EUR million)⁶:

Priority I. Support of changes and adaptations in agriculture	1,098 (54.8%)
Priority II Betterment of the life standard in rural areas	185 (9.2%)
Priority III Development and adapting the treatment of	

⁵ In the third version of the draft RDP, important changes were introduced, since the share of early retirements was doubled, and the support for semi-subsistence holdings was decreased from 20% to under 9%. At the same time an additional measure was introduced into the RDP area of operation, i.e. a complement to direct payments of almost EUR 628 M.

⁶ The data concerning funds were cited following the draft Supplement to the Sector Operational Programme "Restructuring and modernization of the food sector and rural development" of April 2003

agricultural articles to the EU standards	716 (35.8%)
Additional measures	4 (0.2%)
SOP total	2,001 (100.0%).

It results from the above figures, that out of the whole amount of EUR 4546 M, which is envisaged for spending on both those programmes, almost 56% fall to the RDP %, and less than 45% to the SOP. The above figures witness a very important role of the Plan being assessed in the implementation of rural development objectives in the coming years, since the measures proposed therein practically require no contribution of own funds.

In the draft RDP it is stated, that it should serve to improve the competitiveness of the agri-food economy and to favour sustainable rural development especially through⁷:

- 1) Improvement of economic efficiency and productivity; the following is to have a bearing on that: afforestation, early retirements and the support for semi-subsistence holdings. It seems that supporting the establishment of producer groups, and also adapting agricultural holdings to the EU standards will also directly or indirectly favour this objective.
- 2) Improvement of return in agriculture and in rural areas, as a result of supporting the less favoured areas, introduction of early retirements and the support for semi-subsistence holdings. It seems that also the agri-environmental programmes will serve this purpose, and also indirectly the producer groups, generating new jobs and strengthening the consumption demand.
- 3) Improvement of food safety and its quality and orientation of production towards the market in consequence of the support granted to semi-subsistence farms and the adjustment of agricultural holdings to the European Union standards. Also the support for organic farming within the frame of agri-environmental programmes will favour the achievement of this objective.
- 4) Multifunctionality of agriculture development, on which the agri-environmental programmes and the support for less favoured areas will have a bearing. Afforestation projects will serve this purpose too, and also indirectly the producer groups generating new jobs and strengthening the consumption demand.
- 5) Reduction of rural population's unemployment as a result of introducing the early retirements and support for semi-subsistence holdings. It seems that agri-environmental programmes serve this purpose too through the supply of new tasks and resources; also the afforestation projects should strengthen the local labour market.
- 6) Betterment of the population's life standard as well as economic and social functions in consequence of introducing the early retirements, the support for semi-subsistence farms and the support of adjustment of agricultural holdings to the European Union standards.

⁷ Almost at every objective, measures that in the opinion of the authors of the experts report will also contribute to the accomplishment of a given objective, were added to the measures specified in Chapter 5.6.1. This proposal was not taken into account in the third version of the draft RDP.

Probably almost all measures of the RDP will indirectly serve the objectives mentioned in points 5 and 6.

Of course it is difficult to contest the above mentioned statements, but only for the reason, that all or almost all reasonable measures, aimed at improvement of the situation in agriculture and at development of rural areas provoke an improvement of agri-food economy competitiveness.

3. RDP-based measures, and similar reposing on Polish regulations

A measure to be found in the RDP, and functioning at present in Poland is the early retirement. A comparison of the EU and Polish system was effected in a study carried out in July 2002 and commissioned by the Ministry of Agriculture and Rural Development⁸. It was stated therein, that the Act of 26 April 2001 on Early Retirements in Agriculture is different from the EU regulations concerning this matter, the differences concerning, among other things such basic problems, as the conditions that must be met by a person applying for an early retirement and by the holding of the farmer taking over the transferred holding, and also the possibility of connecting the right to an early retirement with other benefits. After having compared the Polish Act with the Council and Commission Regulations it was found, that certain regulations of the Polish Act are more advantageous to farmers, than the EU regulations, but also in the EU regulations there exist provisions, which at least certain farmers consider as more favourable. For it can appear, that those farmers, which decided to give over a holding for a pension under the Act within the period of its being in force, will feel aggrieved, as they consider the EU regulations as more advantageous for example for financial reasons. Hence the possibility of different misunderstandings and many farmers can have a feeling of being deceived, and also the possibility that various problems of legal nature appear. In the above mentioned experts report it was also emphasized, that irrespectively of the decision taken, the issue of early retirements level needs a thorough consideration, as their upper ceiling (EUR 15 thousand per year, as stipulated in the Council Regulation no. 1257/99) is, in Polish circumstances, a very high amount. It was also deemed, that economic significance of early retirements will be small and that they will above all perform a social function. From the social viewpoint, the importance of early retirements is multidimensional; the function of a stable source of income is of course essential, but it cannot be identified with social assistance! Yet from the agricultural policy creator's point of view, it must not at all come out to the foreground. It provides new possibilities to convert resources or continue the process of generations exchange.

Referring to the need for assessment, whether the planned solutions are not possibly superimposed on other forms of state assistance, with regard to early retirements it must be stated, that on the ground of Polish law we deal with the institution of early retirements defined by the provisions of the Act on Farmers Social Security (Article 19 Paragraph 2), whose legal construction is indeed completely different from the system of early retirements, but they are bound by similar functions, consisting in stimulation of farmers to retire earlier.

The second programme, similar to the one financed by the RDP, is the support for agricultural producer groups. The rules of their organization in Poland are regulated by the Act of 15

⁸ „The assessment of effectiveness of the accompanying measures group from the viewpoint of their impact on the achievement of the strategic objectives of agricultural policy and rural development” (Authors: Janusz Rowiński and Marek Wigier)

September 2000 on Agricultural Producer Groups and their Associations and on Amendment of Other Acts. So far, in spite of the state's assistance, a few producer groups were established. It results above all from almost universal farmers' reluctance to associate into groups, dealing with the organization of production in member holdings, and afterwards with marketing of produced articles. Anticipating such farmers' attitude, in the Act on Producer Teams in force in Poland, extremely low organization thresholds were fixed (minimal number of members 5; absence of minimal commodity production level of member holdings). Poland also endeavoured to fix the minimal organization thresholds after obtaining the membership at the lowest possible level. The EU States complied with Poland's request. In consequence, a group of farmers will be able to be recognized in Poland as a team, when it numbers at least 5 members, and the combined commodity production of associated holdings amounts at least EUR 100 thousand. Fixing such low organization thresholds raises doubts. It is true that a small team is easier to organize, but it is not sure, if the farmers forming it will make any economic advantages. A small team is a small economic force, resulting both from the market position (it is determined by the volume of supply of products manufactured by the member holdings and organizational and negotiation efficiency), technical back up (storage places, cold stores) and financial possibilities. The financial support for a team from external funds will depend on its economic strength, measured by sold production. Therefore the teams with small economic strength will obtain little assistance. However, considering the new period of the RDP functioning, the change of organization thresholds does not seem justified. We think, that the experience gained in the period 2004-2006 will permit to plan this measure better, for the benefit of the next programming period. Furthermore, in the social sphere, the advantage coming from the success of collective operation can appear not to be overestimated (the effect of demonstration).

4. Assessment of the construction/set-up and completeness of the RDP document

Formal bases

Pursuant to Annex II to the Commission Regulation no. 445/2002, a rural development plan should comprise 16 chapters. In general it must be stated, that the received draft RDP document formally complies with the mentioned Annex, even if so far in the present version the following parts of the document are missing⁹:

- a. The assessment showing the expected economic, environmental and social impact (it is justifiable, because this assessment makes up the material for that chapter).
- b. The determination of needs in the scope of research, demonstration projects, trainings or technical assistance.
- c. The appointment of competent authorities and responsible bodies (the team was supplied on working basis only with a general outline of this part).
- d. The provisions assuring efficient and correct implementation of plans, together with monitoring and assessment, definition of quantitative indicators for the purposes of the assessment, the solution in the scope of control and sanctions and suitable publicity.

⁹ In the third version of the draft document an essential completion was made and at present the document formally contains all chapters required by the relevant Regulation.

- e. The results of consultations and the indication of involved authorities and bodies as well as social and economic partners.
- f. The discussion of the balance between various forms of support.
- g. The assessment of compatibility and compliance.
- h. The determination of the additional support from the state.

Completeness of the document

The essence of the document, from the viewpoint of its completeness, are the stipulations concerning the diagnosis of current situation, as they determine the legitimacy or its lack as to the chosen measures and their scale. The diagnosis covers many issues. Beside general information, the place and role of the agricultural sector was presented, the characteristics of agricultural holdings, the state of professional activeness of rural population, the level of plant production and the state of development of organic farming, and also the processing of agricultural articles, the state of forest husbandry and the system of nature conservation in Poland. Moreover, beside the strong and weak points of rural areas and agriculture, basic problems of rural areas were discussed, concerning the following: the labour force, the structure of agricultural holdings, horizontal and vertical integration in the agri-food sector, shortage of capital and adapting agricultural holdings to the EU requirements. A separate chapter was devoted to the problems that appear where agriculture abuts the environment, especially to the impact of agriculture on the environment, the intensity of soil degrading factors, the occurrence of rested lands and the condition of water and water managements.

In the diagnosis, a description of the plant production structure is included, yet the structure of animal production is not treated, and from the environmental point of view, a statement of information on cattle-breeding, its regional diversification, types of breeding, trends etc. – the state of the cattle and milk markets is of enormous significance for the size of cattle herds, and thus for the destiny of green lands¹⁰. Also the sanitary state of the country and the state of equipping the rural areas with technical infrastructure were not discussed. Unfortunately the problems of public participation structures and processes were almost completely ignored. The characteristics of the state of human resources pass over the issues of recognized, declared and realized life values, ambitions, objectives and plans of specific social categories (including for example the issue of the shapes of agrarian structure preferred by the interested social categories, or the rural population attitudes towards the natural environment – there are only two mutually conflicting opinions pretending to be a sociologic analysis), the state of social capital state in the country, the degree of rural population self-organization is also missing. They are all important to understand the need for supporting rural development by the measures hereinafter discussed in the Plan.

In its present form, the document contains a diagnosis, whose content is split into two chapters. In the principal chapter describing the state of rural areas (Part 2), the diagnosis of the state of rural areas natural environment, occupying 93.4% of the country area is reduced to a short description of the state of forests (Chapter 2.4) and a superficial review of the legal system of nature conservation (Chapter 2.5). It looks too indigently. Further, basic elements of the diagnosis are situated only in Part 3, which is a developed SWOT analysis, in particular

¹⁰ In the third version of the draft RDP, a subchapter was introduced devoted to animal production.

in Chapters 3.3 and 3.4.1. A single, coherent description of the natural environment *status quo* should be drawn up, moving relevant fragments from Part 3 to Part 2 of the document, in order to obtain just there, according to the title of the latter, a synthetic description, in place of superficial information on two aspects of secondary significance to the RDP. The alternative is to consider a fusion of Part 2 and 3 into one coherent text, in which for each problem (e.g. social structure, structure of holdings, plant production, water resources, state of soils, biologic diversity etc.) the following would be successively described: the present state (weak and strong points), threats and possibilities of development. Such scheme would not only make the reading of the text easier, but is also more compliant with the recommendations of the Commission Regulation no. 445/2002, where [Annex II, Point 5 (1)] exactly such system is explicitly mentioned. Putting aside the SWOT in a special chapter, forces either a repetition of information about the diagnosis, or – to avoid that – the transfer of a part of basic information from the descriptive part to the analytic one, and this bears data dispersion and text incoherence. In the third version of the draft RDP neither the character of the SWOT analysis was changed, nor its emplacement.

SWOT analysis

Approach to the SWOT analysis requires to determine clearly, what are the points of reference – are these the general objectives rural development, or something else? According to the stipulations in the RDP document, the SWOT analysis is to refer to the adopted objectives and priorities, and is not to be general. It requires a specific approach, individual for each priority. It could look differently, if the analysis referred to the entire rural development, but then a specific point of reference would be needed, in the form of vision or model of agriculture in Poland, and such one is missing. At the same time the SWOT analysis presented in the RDP document should be supplemented with the following problems:

- ◆ Shortages of own capital and lack of trust in external capital as a weakness;
- ◆ Low level of social self-organization as a weak point
- ◆ Planned development of the protected areas network Natura 2000 as a chance;
- ◆ Private ownership of land as a chance;
- ◆ Weak preparation of advisory services (organizational and professional) as a threat.

In the recommendations concerning the general problems, a new approach to the SWOT analysis was proposed together with proposals for supplements and corrections (see recommendation 11)¹¹.

5. Assessment of the RDP document internal integration

Logical sequence of document's particular parts

The document layout is to some degree imposed by Annex II to the Commission Regulation no. 445/2002, which includes a recommendation concerning the elements composing an RDP. Yet despite this formal obligation, the document should be logical both concerning the structure and the links between individual parts. Some fundamental remarks arise against this background:

¹¹ In the third version of the draft RDP no amendments concerning the SWOT analysis were introduced.

- The carried out assessment of the existing situation (it is difficult to read, because of the dispersion already referred to) is apparently incoherent with the proposed measures. This incoherence consists above all in the lack of link between the proposed measures, and the conclusions resulting from the effected diagnosis. The diagnosis is extensive and generally correct, though in some places it requires a supplement or revision – see recommendations. In terms of problems, the nature-oriented part is better described than the social and economic ones. It would be worth finalizing the whole body with precisely formulated conclusions, which would directly translate into the measures proposed within the framework of the RDP.
- The order of presenting information about the objectives and priorities is inappropriate, as in the first place the adopted objectives and priorities should be presented and described, their justification provided, and only then a comparison with the proposed measures should be made, and unfortunately, here it is just the other way about. At first, information was placed about the primary objectives of agriculture and rural development in Poland (Chapter 5.5.2) in a table, where these objectives are stated as codes, without verbal explanations (with a reference to Chapter 2 – there is nothing about the objectives over there). Only farther in the table in Chapter 5.6.1 these objectives are verbally presented, while the notice of their presentation is placed in the ending part of this Chapter, and their description only in the next subchapters. There lacks an introduction to this part, about on what basis and at what stage (when) these objectives were formulated.
- Simultaneously in Chapter 5 entitled „Strategy, objectives and priorities of the rural development plan”, half of the text is devoted to a discussion of other programmes and measures that concern rural areas. This causes, that the essence of this Chapter, that is the RDP and its objectives and priorities become blurred. The discussion of other programmes and measures should be placed in a separate chapter, what was done in the third version of the draft RDP.
- There occurs a great confusion in naming the objectives – once the low level objectives are referred to as objectives, in other places as priorities, once the high level objectives are objectives (tables in 5.5.2, 5.6.1 and 5.6.2), elsewhere priorities (summary financial table 10), once numbered with Arabic numeral (tables in 5.5.2, 5.6.1 and 5.6.2), or Roman numbers (table 10). Also the specific names of priorities (low level objectives) are differently written down, their number is also different in those different places.

Most of the proposed changes were not included in the third version of the RDP.

Complementarity or duplication of proposed measures

The proposed measures, written down in the RDP cover a wide spectre of impact on economic, social and natural aspects of rural areas functioning. The analysis of individual measures does not prove, that they duplicate one another, although the instruments, such as the early retirements and the support for semi-subsistence holdings, can in a sense be competitive with each other. And yet the stipulation stating, that there is no possibility to obtain any additional support in the case of receiving an early retirement protects against a possible doubling of instruments.

The individual measures within the framework of the RDP, as well as from other programmes supporting the rural areas, complement one another, yet subject to their functioning from the

side of a holding, and not from the side of the institution directly dealing with their implementation. If a conscious farmer (or convinced by a competent adviser) prepares a programme of his holding development (not only in the field of agricultural production), in which he will envisage the use of different measures, from various supporting programmes, for different elements of this programme, so that it is implemented in the most efficient way, then the complementing function of measures within the framework of the RDP will appear more widely. But if the purpose of implementing particular measures within the framework of the RDP, is above all the most efficient administration of individual measures, so that the directly implementing institutions be possibly the least troubled by their implementation, then the formally existing supplementation will not appear or will appear to a limited extent.

6. Assessment of external integration of the RDP document

Relations of the RDP document to Polish strategic documents

Within the framework of the RDP, some basic Polish documents were discussed, such as:

- ◆ First Strategy for Rural Areas and Agriculture;
- ◆ Coherent Structural Policy of Rural Areas and Agriculture Development;
- ◆ National Development Plan 2004–2006 together with the SOP „ Restructuring and Modernisation of the Food Sector and the Development of Rural Areas”;
- ◆ Second National Environmental Policy;
- ◆ National Woodland Extension Plan;
- ◆ National Strategy for the Protection and Reasonable Use of Biodiversity.

In these discussions, the relations of a given document to agricultural and rural problems were presented. In treating the subject, one essential document passed by the Parliament was ignored, i.e. “Poland 2025. Long-term Strategy for Lasting and Sustainable Development”. Moreover the “Guidelines Concerning the Principles and the Extent of Including Environmental Protection Problems in Sector Programmes”, passed in November 2002 by the Council of Ministers, were not addressed. In the Guidelines it is clearly defined, what agriculture and forestry is deemed sustainable. As in December 2002 the Council of Ministers adopted the document “National Environmental Policy 2003-2006, including the prospects for 2007-2010” the RDP should refer to its provisions, and not only to the “II National Environmental Policy”, especially because in May 2003 this document was adopted by a resolution of the Sejm of the Republic of Poland. At the same time, discussing the “National Woodland Extension Plan” (2003 update), the “National Forest Policy “, adopted by the Council of Ministers in 1997 should be also referred to.

Relation of the RDP document to the EU strategic documents and declarations

With reference to the European Union documents, the document being assessed is rather poor, as it contains only the information on the common market organization, an analysis of compliance of high-level objectives of agriculture and rural development with the instruments of the EU structural policy and links with other structural programmes.

Above all, it lacks the discussion of the following¹²:

- ◆ The EU Common Agricultural Policy together with the Agenda 2000 and with expected directions of this policy changes, with crucial decisions recently taken (during the meeting in Luxemburg on 26 June this year);
- ◆ The document “Sustainable Europe for the Better World: Strategy of Sustainable Development for the European Union” – adopted by the European Council in Goeteborg in June 2001. Among the principal objectives of the measures for sustainable development in Europe, the following was stipulated in the Strategy with regard to agriculture and rural development:
 - making an objective of the food safety and quality, which will be implemented by all participants of the food production chain, and
 - protection and regeneration of habitats and ecosystems, and also stopping the loss of biodiversity until 2010
- ◆ “VI Action Programme for the Environment of the European Community: Environment 2010: Our future, our choice” – a document adopted by the European Parliament and the European Council on 22 July 2002. The main objectives, making up a response to the key environmental problems of the Community have been formulated for the following domains, recognized as priorities:
 - climatic changes,
 - nature and biodiversity,
 - the environment and health and life quality,
 - natural resources and waste.

The objectives formulated for all these domains concern more or less both rural areas and agriculture. Above all in the second and third domain, recognized as priorities, many such objectives have been formulated. And so among the most important objectives, the following are set: protection and if needed restoration of natural assets on farmlands and promotion of sustainable use of soils with particular respect of counteracting erosion, soils quality deterioration, their pollution and ground overdrying. Therefore a need is assumed for the promotion of best practices from the viewpoint of biodiversity protection purposes – so this refers also to the agriculture and rural development. Moreover, one of the main objectives is the reduction of pesticides impact on human health and on the environment and pursuit of sustainable use of pesticides. Within the framework of this objective implementation, it is intended to promote the application of production methods without using pesticides and widely promote the application of good agricultural practices’ recommendations codes.

- ◆ The “European Strategy for the Protection of Biodiversity”. This document in its point III.(2).11a contains vital statements providing grounds for the necessity to maintain extensive methods of farming for biodiversity protection. The next sub-point [III.(2).11b] says about the necessity to reduce the negative impacts of agricultural economy on natural

¹² In the third version of the draft RDP, this lack was complemented, which was not done in relation to the above mentioned national documents.

environment. The strategic objectives formulated for agriculture in point III.(2).13 are equally important.

7. Assessment of proposed measures from the viewpoint of their impact on economic, social and environmental relations and their potential efficiency and the possibility to solve the main problem of rural areas

Impact on economic relations in rural areas

The RDP document is marked by specific blend of measures of protective nature, serving mainly to improve temporarily the existence of the poorest farmers, with measures of restructuring character. The lack of clear separation of measures impedes the identification and assessment of these measures' results. In the descriptions of measures, there also lacks an unambiguous indication, which of them is a complement, or intensification (and why!) of programmes already existing in practice, and which of them constitute a new quality. The proposed proportions of funds' spending decide mainly of the RDP protective nature, above all solving current problems. In the short term, the measures implemented will contribute to mitigate the problem of the weakest holdings income incapacity, while in longer outlook they will not really contribute to solve structural problems.

Doubts are raised by early retirements, the support for semi-subsistence holdings, and also the support for the holdings situated in the LFA, being a subsidy for more expensive production. From the economic point of view, the assistance funds should above all stimulate farmers to transform their holdings into economic units, which can assure suitable returns to their owners. It should also be considered, that in the next few years, the opinion about agriculture, as about one of the least profitable branches of economy, should change. The popularity of this opinion is one of the most important reasons for the slowly proceeding restructuring and modernization of Polish agriculture. In a few years, when the direct payments obtained by Polish farmers grow up to 70-80% of the full payments received by farmers in the EU, a well organized agricultural holding, with suitable economic potential should provide decent income.

The stimulation of farmers to strengthen the holdings they possess is not an easy task. This is proved by an extremely alarming, at the beginning minor, farmers' interest in SAPARD, as farmers do not possess financial resources necessary to start the investment projects (they must incur themselves 100% of expenses, and upon completion a repayment of 50% can be granted). Recently (data from May this year), the interest in SAPARD has somewhat improved. Nevertheless there is no other way for the modernization and restructuring of Polish agriculture, since this operation cannot be performed without farmers. If an assessment criterion adopted were a programme of strengthening the agriculture's economic force, an RDP with small participation of programmes, consisting in „giving” money to farmers, would be a correct one. The RDP measures consisting in direct rising of farmers' income will be at variance with the processes aimed at stimulating the economic activeness of rural communities. Such is the nature of subsidizing agriculture in the less favoured regions. The subventions will be received by all farmers that have lands in the communes belonging to one of the four zones, delimited on the basis of a study by the Institute of Tillage, Fertilization and Pedology. According to the proposal, over 40% of farmlands area in Poland is to be covered by the programme. This will cause, that the LFA support programme is a programme almost universally accessible.

The support of income can lead to maintenance of the existing sector's structural state, and not to its change. Fundamental discrepancies of adopted objectives with the resources assumed for their implementation, showing in the Plan, result therefrom. For example:

- ◆ Whether the transfer of holdings against a pension is to contribute to the improvement of the holdings' territorial structure, then can it be reconciled with the „slowing down the concentration” of holdings, advisable according to the opinion of the Plan authors (page 70 of the document) and simultaneous quest for the increase of competitiveness?
- ◆ Whether the support planned for about 300 thousand semi-subsistence farms will not reduce their interest in seeking extra-agricultural sources of income or in enjoying the early retirements, therefore impeding the improvement of agrarian structure and in consequence in the long term will not worsen the sector's competitiveness?
- ◆ Whether when stating on page 65 of the document, that „*the support for semi-subsistence farms will contribute to the improvement of life conditions and rural development and will significantly reduce unemployment in the rural areas*” it is assumed, that these holdings, thanks to higher income, will significantly increase the employment?

Also the measure favouring the support for semi-subsistence farms can become in its present form a protective programme. According to the RDP proposals, the holdings participating in the programme will be concerned with the following conditions of aid implementation:

- ◆ Only after three years a control of received funds appropriation will be carried out (whether the indirect objectives, resulting from the holding's development plan were achieved) and if it appears, that money was not spent on development, further aid will be stopped;
- ◆ A holding will be receiving the aid of EUR 1250 yearly during 5 years. It is not known, why an investment of 25 thousand PLN worth (EUR 1250 x 4 PLN x 5 years) should be spread over such a long period. In consequence, the programme supposed to support modernization, can become a typical „consumer” programme, if for no other reason because money received in the first three may be spent on any purpose.

The content of Chapter 5.6.2 „Objective 1 Improvement of agri-food economy competitiveness” is incompliant with its title – as only protective measures are in reality proposed therein. Among these holdings a deep stratification will occur – one part will perhaps pass to the group of those, which can survive on the market, and for the remaining part (it is not known how serious), this financial reinforcement will have to be treated as a protective measure.

Yet the support of agriculture in the less favoured regions and in the regions, where there exist limitations resulting from the necessity to protect specially the environment, cannot be assessed with the use of the efficiency calculus. Since the objective of this programme is to maintain agriculture in the regions, where owing to existing conditions the costs of agricultural activity are relatively high, and in consequence agriculture is a profitless activity, or brings in insignificant income. Subsidizing agriculture in these regions results from the opinion, substantiated by examples, that in rural regions it makes up an extremely important part of economy. If agriculture deteriorates in a rural region, then the whole region begins to suffer from serious economic difficulties. The discussed programmes help the countrymen to shape the conditions of work and life meeting the civilisation standards, and also form the

conditions for sustainable development of the region. Their effectiveness can be assessed in the long-term, the basic indicator being the containment of economic and social degradation of the region and restraint of agriculture deterioration. It should be accompanied by a programme of extra-agricultural activity development in the less favoured regions. It should be the business of agricultural advisory services to draw farmers' attention to the possibilities of economic activity diversification, when using the possibilities of the programmes other than the RDP.

The third measure, which above all can be of protective nature, are the early retirements. In the EU states, early retirements are reckoned among the measures efficiently accelerating the transformation of agricultural structures. Yet their effectiveness in Poland will depend on the number of farmers that are ready to transfer a holding against the the early retirement pension. Moreover, it is necessary to find farmers, whose holdings, after being enlarged by the transferred lands, will meet specific conditions. It seems, that in the regions with fragmented agriculture it is often difficult to find a farm, which upon taking over the lands transferred against the pension will meet the viability criterion. Simultaneously a weakening of incentives for agrarian structure transformation can be expected, because of the contradictory impact that cannot be excluded, of the early retirements programme (to which which anyway direct payments and the prospect of their rise will not be conducive) and the support for semi-subsistence farms, weakening itself the search for extra-agricultural sources of income.

Although the measure concerning the early retirements raises various reservations, its abandonment is not possible for at least two reasons:

- ♦ at present it makes part of the instruments of Polish agricultural policy - its removal would directly prove a lack of the decision-makers' consistency;
- ♦ it functions in all EU states – the absence of such programme in Poland would mean that certain group of farmers is discriminated.

The measure concerning the early retirements should be planned in a way to make the access thereto possible for all farmers, which meet the conditions, authorizing to pensions (meeting this condition requires to allot therefor an amount guaranteeing that pensions will be received by all entitled persons, applying for them). Though the problem of farm workers is marginal, yet it exists and it should be taken into account at the formulation of task's range. In the third version of the draft RDP, the level of early retirements was lowered and a significant increase of the number of beneficiaries is expected, which is compliant with the proposed changes.

Assuming, that the three mentioned measures will above all have a bearing on the growth of farmers' income, it appears that over 75% of funds, provided for spending within the framework of the RDP programme, are the funds, which most probably will contribute only to a small degree to restructuring and modernization of agriculture. Such programmes always rise the so-called „mixed feelings”, as many farmers' financial conditions is difficult and „having consumed” the received subvention can be fully justified. It is difficult to contest the expenses on the improvement of housing conditions, children's education or nutrition improvement. Yet irrespectively of the profits gained by the recipients, the influence of so expended funds on permanent improvement of economic situation will be minor. That is the way it will go, because many problems, contradictions and controversies accompanying the RDP, are a simple effect of the complexity of problems that distress Polish agriculture and Polish country.

It should be also noted, that some of other measures (agri-environmental programmes, afforestation projects) will have a small bearing on the growth of agricultural holdings' economic strength. The effectiveness of agri-environmental and afforestation programmes depends, among other things on detailed solutions and the way of implementation. A programme successfully implemented in one region can appear completely useless in another. This concerns especially the agri-environmental programmes, inseparably connected with the local environment. A well designed and executed agri-environmental programme efficiently protects the resources of natural environment, while a bad project or even inappropriate realization of a good project, can cause serious harm in the natural environment. This measure should produce a positive, although rather not significant influence on the development of organic farming, regarding its only passive fostering (through the subventions for holdings), in place of active support, like it is done by the authorities in many EU countries EU (e.g. in Austria, in Italy) actively participating in the promotion of this type of agriculture, directed both towards consumers and farmers. They finance information, instructing materials and trainings, or co-finance events like fairs. Allotting undoubtedly small funds for the support of organic farming (the assessing team was not supplied with the proportions of funds for individual schemes of agri-environmental programmes) will not permit to popularise widely this production system either.

It is equally difficult to assess the effectiveness of the programmes in the field of the forest economy. Beneficial environmental effects will appear only when afforestation are concentrated in a limited area, making up compact entities (foresters estimate, that a lot being afforested should have an area of at least 5 ha). If the programme admits the afforestation of lots of the size of 0,4 ha, and in addition they are far away from each other, than such programme does not form the conditions for sustainable development and does not protect the natural environment resources. Possibly it fulfils some social functions (a farmer that participates in the programme, is remunerated for tending the afforested area and obtains a compensation for exclusion of land from agricultural use), but this is not the principal programme's objective. Even without performing the economic efficiency calculus, it may be stated without any risk, that the afforestation programme does not meet the criterion of economic effectiveness. If it met that, it would be needless, as farmers would afforest farmland without any supporting programmes. Besides, it should be noted, that private forests (and only such may be supported from the EU programme) make up a margin of the forest economy in Poland. Within the coming years, afforestation projects should cover above all, the lands in possession of the Agency of State Agricultural Properties¹³ that do not find purchasers. Unfortunately, their afforestation cannot be supported by the EU funds.

In consequence solely the adaptation of agricultural holdings to the EU standards and the support of producer groups can be, without reservations, reckoned among the measures, which will contribute to the modernization of agricultural holdings. However, for both these measures only a little more than 9% of funds were earmarked, including a rather symbolic amount for the producer teams. The assumption, adopted in the RDP, concerning very slow organization of producer teams (groups) raise a particular anxiety. Since many years all persons, who should participate in the organization of teams explain, that Polish farmers, estranged from the production co-operatives, do not want to organize themselves. It is an

¹³ It should be noted, that from 16 July this year, pursuant to the provisions of the Act on Shaping the Agricultural Regime, the agency changed its name to: Agricultural Property Agency.

explanation aiming at hiding the incompetence of agricultural advisory centres and local bodies of the state administration. For it is obvious, that producer teams are the organizational form, which will permit farmers to take a stronger position on the market. After Poland's accession to the EU, a participation in a team of certain products producers (fruit and vegetables) will probably be an essential condition for the holding's existence.

Impact of rural areas on the environment with particular regard to the nature conservation problems

The „sustainable rural development” was adopted as one of the two main objectives of the RDP, and within the framework of this objective, a priority named „environmental protection and maintenance of rural areas natural assets”. Therefore it should be expected, that the RDP implementation will proceed to the advantage of the environment, and anyway that no negative impacts will take place as a result of this Plan implementation. It is all the more important, because rural areas account only for 3% of the national product, but 38% of Poland's citizens and as much as 94% of the country area (including forest lands, occupying 29% of the country area and farmlands – almost 60% of the country's area). And though the economic importance of rural areas is minor from the macro-economic viewpoint, their social (more than one third of the population) and environmental rank (the majority of the country territory) is enormous. Agricultural production space is a life space, the forests likewise. So if the agriculture brings only 3% of the national product, it means, that other functions in rural areas, except forests, must have another value from the general-social point of view. It is like with the forestry, forests bring some income, but it is also small (0,5% of the GDP) – since some time much is said about the role of extra-production function of forests, they simply became the principal concern of the state forest policy – the value of extra-production (infrastructural) function of forests is estimated to be 5-10 times more important, than their economic value. Considering the size of rural areas, the pervasion of agricultural lands into the compass of other areas (forests, protected areas, areas with weak urban development, and also industrial areas), a correct management of agricultural space has an enormous importance for the entire natural system of Poland. What is more, the adoption of appropriate course of rural development will have an enormous importance for increasing their economic role. It means, that this development cannot concern only the support for agricultural production, but requires a wider consideration of multidirectional rural development.

The implementation of measures planned within the framework of the RDP should not provoke major negative impacts on the environment, and what is more, the generation of positive impacts can be expected. The size of the RDP positive impact will depend above all on the way of funds allocation for individual priorities and measures and on the methods of their implementation.

In the RDP, the natural environment assets of Poland's agricultural areas are emphasized against the background of Europe. This opinion is justified with regard to a considerable part of the country territory. The proposed measures, especially concerning the sustainable rural development and, within this framework, the agri-environmental programmes should permit to maintain these values and strengthen the natural system in these areas. Positive potential environmental effects of the RDP implementation in these areas, and also beyond, are above all the expected protection and preservation of biodiversity and the beneficial effects of landscape and cultural nature accompanying them – through the preservation of specific agricultural landscape and the country cultural traditions. This should permit to preserve the

specificity of „little homelands”. Highly developed EU countries proved, that it is possible and it pays. Such areas, in consequence of changes can count on touristic interest and on development of other forms of activeness, and what follows, on the growth of population’s level of life. Positive effects for the environment can be visible if many beneficiaries and environmentally oriented measures, especially Measure 4, concentrate on a wide area. Yet it is difficult to forejudge, if it will happen so. It will depend on how many farmers consider, that these programmes are profitable for them from the economic point of view and how many of them assess, that they are able to meet the requirements, which permit to participate in the programmes. This is why it is not possible to overestimate the advisers’ role, as their advice and assistance can often determine the taking of decisions by farmers about the participation in the agri-environmental programmes. The implementation of Good Agricultural Practice principles, being the basis for accomplishment of agri-environmental programmes and the support for holdings in the LFA will certainly produce positive results in reducing the pressure on the environment, on the part of agricultural pollution. Yet allowing farmers quite a long interim period, in which they have to meet these requirements, will cause a displacement of positive effects in time.

Implementation of the afforestation projects that have been planned within the framework of the RDP (they concern only private farmlands), can have direct effects for the materialization of sustainable agriculture and rural development both directly through the increase of woodiness, and by that the creation of conditions for strengthening the ecosystems and biodiversity, and indirectly through the creation of the possibility of additional employment and additional income. The European Commission, in its report devoted to the assessment of various economic and social aspects of afforestation projects accomplished in the period 1993-1999 in the EU territory, showed their beneficial impact, especially on: 1) the rural development, 2) the improvement of forest resources (with regard to the quantity and quality) and 3) the state of the environment, including: the mitigation of climate changes, biodiversity protection, preservation of natural resources.

Nevertheless, wrongly performed afforestation can contribute to the rise of threats to the natural environment. Such a threat is the risk of biodiversity reduction in the areas of new forest plantings. This is why the areas, whose afforestation will cause losses from the natural point of view must be excluded from afforestation. In particular, the areas that are vital refuges of protected open ground animals – above all birds, must be taken into account. Young plantings, especially pines, provoke also a reduction in the number of plant species occurring in that area, in relation to neighbouring non-forest communities (e.g. grasses growing on sands, meadows or heath lands), so many such areas should not be afforested. Also specific, ecologically extreme habitats, namely those definitely moist, marshy and particularly dry, especially thermophilous ones, should be excluded from afforestation. Regional restrictions must also be introduced – afforestation must not be forced in mountains and on highlands, where the biodiversity of non-forest areas is impressive (mountain pastures and glades with very high natural and landscape assts must be preserved, forest swamps and peat lands, petro- and xerothermic swards and the like, most precious open ecosystems). The attempt to afforest big hillsides, provoking during the plantings the exposure of deeper soil layers, can also cause the intensification of erosion. Restrictions regarding the size should be also introduced (small areas within the compass of an already existing forest should not be afforested, so that forest glades can remain – places of high biodiversity and with vital

ecological functions). Summarizing it must be stated, that the afforestation instrument should not be treated only as a tool of financial support for the rural population, but to a large extent (and perhaps above all) also as a measure for the natural environment. To increase positive impacts of the afforestation projects on farmlands on the environment, also the need to strengthen ecological corridors should be taken into account at their planning and supplementary afforestation projects should be preferred in these directions.

Unfortunately there exist some fears, that in some places the implementation of other measures planned within the framework of the RDP can produce negative results with regard to the environment. The proposed measures do not pose any new environmental threats, which up to now did not occur even in any limited area; instead they can provoke intensification of the existing ones. Intensification of agriculture will certainly cause the reduction of biodiversity, deterioration of landscapes structure and chemicalization of the natural environment. Local intensification of such process can be expected in places, where farmers, upon obtaining the funds that they lacked so far (e.g. in the LFA or obtaining the support for semi-subsistence holdings, or even from the agri-environmental programmes), assign them for intensification of their agricultural activity. Such a threat can also appear in the case of increasing the acreage and intensification of production upon the holding take-over by a young farmer within the framework of the early retirements programme. On the other hand, young farmers are better educated and they have a higher level of ecological awareness. Maintenance of the Union norms (through the compliance with the principles of Good Agricultural Practice, to which the farmers, obtaining the support in the LFA and within the framework of agri-environmental programmes, will be obliged) can also contribute to the reduction of this threat.

The idea of sustainable development permits to convert the weak points of our agriculture into its fortes. From the nature point of view this concerns such fields, as biodiversity of the areas used for agricultural purposes or the state of semi-natural landscapes preservation. The prevailing majority of features recognized as strong points of our rural areas concerns just the state of the natural environment. These are the assets precious enough in Europe to be used in an appropriate way. It is not the point to create skansen museums. Properly oriented financing should permit rural citizens to live worthily in the standards of the XXI century. Above all the point is to use the complementary payments for the less favoured areas and the financing of agri-environmental measures to the benefit of nature. These funds should be directed to the areas that are valuable from the nature viewpoint, whether they are already covered by existing forms of protection (national parks, nature reserves, landscape parks). The question is to link the planned measures with the design of the Natura 2000 network and other environmental programmes that will be implemented from the EU fund in a way to achieve the most environmental advantages. From the farmer's point of view, not the legal status of the area, in which his holding is situated is important, but the restrictions imposed thereon, bringing in concrete losses or benefits that he can obtain from specific programmes or funds.

This is why linking the measures planned within the framework of the RDP, and in particular those measures, which have a clear environmental reference, with the design of the Natura 2000 network is extremely vital in Poland. The advantages for the environment can be thus maximised, especially for Polish nature, from the implementation of both those programmes.

In connection with essential amendments made in the third version of the draft RDP, concerning the agri-environmental programmes, it should be stated, that the above mentioned generally positive assessment concerning the Plan's impact on the preservation of natural and landscape assets and on the strengthening of the natural system in areas selected for their implementation must undergo a verification. A significant restriction of the scope of the agri-environmental programme (including the reduction in the number of packages from 15 to 4), the change of its structure and the change of programme's objectives, which were made in the third version of the draft RDP, compared to the version which was being assessed by the Team, must be recognized as highly disadvantageous from the nature point of view. For these changes will lead to a situation, where many packages that are to be implemented within the framework of pilot measures from the SAPARD Programme funds will not be continued within the framework of the RDP, which is incompliant with the principles stipulated in the description of Measure 5 of the SAPARD Programme, approved by the Monitoring Committee in June this year and by the STAR Committee of the European Commission in July this year, and which is necessary considering the multi-annual character of the agreements on those programmes. The European Commission should not accept the proposed changes of the agri-environmental programmes. The changes of this type will lead furthermore to a loss of experience acquired both by farmers and advisers. Also there will be no possibility to protect the most menaced by extinction valuable natural habitats and species habitats in agricultural areas – the ones that cannot wait till the next period of programmes implementation within the framework of the next RDP, that is in period 2007-2013.

The main changes in the scope of the programme – explained by the Ministry as needed for its simplification – and which we consider as disadvantageous are the following:

- ◆ liquidation of the I programme scheme intended for the protection of biodiversity in four selected areas (of pilot nature for the future nature-sensitive areas),
- ◆ abandonment of a whole series of nature-oriented agri-environmental packages (only the block connected with mowing of grasslands was left, however its qualification was changed, counting it in the group of environmental blocks),
- ◆ restriction of the extent of implementation of the genetic resources protection in agriculture, by the abandonment of the utility plants genetic resources protection,
- ◆ abandonment of a part of the environmental and landscape packages (buffer zones, protection of traditional orchards),
- ◆ narrowing the implementation of the system packages for sustainable agriculture (the abandonment of the variant referring to the multilateral production is groundless).

The quoted reasoning, indicating why such drastic changes were made is inconclusive – it could substantiate a small delay in the implementation of certain packages, but not the abandonment of so many of them.

The deletion from the programme of blocks consisting in the support of extensive pasturing is highly harmful, as in the conditions of Central Europe the pastures are a habitat of key importance for the plover birds survival (one of the most menaced bird groups of our continent), the extensive pasturing is also a necessary condition for preserving certain types of very precious natural habitats (above all xerothermic swards, salt grasses, mat-grass swards, mountain pastures, village greens and humid pastures), which Poland in majority undertook to

protect (under the EU regulations on nature protection), and which without the support have no chances to survive, considering this form of land use is disappearing. Abandonment of this form of support is inexplicable, as this is the only form of land use directly indicated as an objective of agri-environmental programmes in the Community legislation in force (article 22 of the Council Regulation no. 1257/99).

Abandonment of the support for arable grounds conversion towards permanent green lands for the reversal of a very harmful process of grasslands conversion into arable grounds is inadvisable not only from the natural point of view, but also in consideration of the need to protect the retention capacity of soils in river valleys, which in the age of torrential floods is very important.

Abandonment of the support for establishing and reconstruction of midfield tree plantings and buffer zones is inadvisable – they are of enormous importance both natural and from the viewpoint of preservation of country landscape assets and establish important barriers limiting the flow of pollutions from agricultural areas into water (nitrogen compounds in particular).

The protection of genetic biodiversity in agriculture is not only the preservation of old animal breeds. It is also necessary to preserve old varieties of cultivated plants (and not only the varieties recorded in the second RDP version, as it lacked the cereal plants, flax and hemp) and old orchards, because storing their genetic material in the gene banks is not sufficient – it is necessary to preserve them in the conditions of traditional growing.

The proposed changes rather indicate an effort to support the production methods, including especially those of sustainable agriculture, which is an obvious way of carrying out the agricultural production in compliance with the law in force. The support of this method, depending on fixing the maximal admissible dose of nitrogen from all fertilization sources and on its adjusting to local conditions can lead either to a reduction of pressure on the environment or unfortunately to the deterioration of the state of water pollution, as a result of increasing the flow of nitrogen compounds – in such cases this measure can have a reverse environmental effect, than the objective indicated in the Council Regulation no. 1257/99, being the improvement of the state of the environment. There is a risk, that it will occur so in many places where the RDP measures are implemented. In the third version of the draft RDP, an „optimal” level of fertilization of 170 kg N/ha has been proposed – in the pilot programmes of the SAPARD Programme, a maximal dose of 150 kgN/ha (and on the green lands up to 120 kgN/ha) has been proposed. The fact that in the draft Plan the maximal dose of nitrogen from fertilizers is not fixed when adjusting to the local conditions can provoke a tendency to increase the fertilization doses (at present the average amounts to 90 kgN/ha).

Such a limited programme will offer the farmers very few possibilities of measures selection – instead it will bring them many duties, as they will have to meet the requirements of the Good Agricultural Practice and the requirements concerning the sustainable agriculture or organic farming. The typical agri-environmental measures, undertaken voluntarily by farmers depending on their conditions of farming and on the level of their ecological awareness, will be missing – the measures, for which they would receive the principal payments. The proposed packages will not apply everywhere – after all, Poland is a country with very diversified natural environment and the multitude of solutions within the framework of programmes should be adjusted to the diversity of local conditions. That great reduction of agri-environmental programmes will be detrimental especially to the farmers running semi-

subsistence (low-output) holdings (to the farmers running high-output holdings, this will be a fraction of their profits).

The reduction of the gamut of offers, from among which a farmer could make a choice, does not lead to an increase of this proposal's attractiveness and increased absorption of funds – as it is not compliant with the consumer's logic. On the contrary, a smaller „assortment of goods” leads, as a rule, to a reduction of demand, and not to its increase. The activities increasing the absorption of funds for the agri-environmental schemes should focus on the following:

- ◆ simplification of the criteria of access to individual packages,
- ◆ suppression of territorial restrictions in their application,
- ◆ significant support of activities that popularise these programmes, and
- ◆ increase of the number of competent advisers, coming from not only the existing agricultural advising centres, but also making use of the enormous potential of professional non-governmental organization, operating in this field.

8. Impact on social relations in rural areas

Point of departure

The point making a difference between Polish agriculture and the features of this sector in the Western states, is that within its scope, there function some social and economic structures, which are not at all present on the agricultural market or function thereon only to a very limited extent, and the reversed proportions of holdings that produce basing mainly on their own resources (type of agricultural farming referred to as *farming economically*) to those heavily industrialized that are only a link in the chain of agricultural production (*modernized farming*). The intention of the CAP changes in progress is to stop the unceasingly advancing polarization process, and prospectively to reverse this trend. Therefore a viable agricultural holding should adjust the production scale to its own resources. It can be estimated, that among circa 2 million holdings exceeding 1 ha of croplands, 670 thousand do not perform any market agricultural activity. The families connected with these holdings support themselves upon gainful employment outside the holding (57%) or social benefits i.e. retirement pensions and disability pensions (35%). According to the declarations filed in recent years by farmers, a few of them intended to dispose of land (only about 15% of social holdings users planned to wind them up), and at the same time even a smaller group (10%) expressed its interest in the extension of agricultural production. It is worth quoting here the results of public opinion studies, indicating the decreasing interest in running an agricultural holding under the hitherto existing principles and the violently descending attractiveness of „being a farmer”, manifested in the analyses of rural youth aspiration. However, at the same time, among the selected paths of professional activeness, the community of those choosing to run a firm – that is a holding treated/managed under the procedures of a small company, was proportionally growing. So it is not a definite withdrawal from the agriculture – it is a change of the cultural pattern. So the RDP comes out to meet these expectations. The financial incentive should stimulate this pattern dissemination in the social structure. The exclusion of social holdings from agricultural structures changes fundamentally the image of Polish agriculture.

Among all agricultural holdings users in Poland, the persons aged under 35 account for 20%, while in the EU 8% on an average. When underlining this feature, it can be supplemented

with a statement, that young farmers are better educated than the old generation, more often than the rest of farmers they possess school agricultural qualifications, but at the same time 27% from among them permanently work outside their holding. This group's education level and economic activeness makes possible to judge, that it will display interest in the optimal use of the possibilities created by individual programmes financed from the EU fund (including the RDP). Regarding the social conditions, it is essential to draw the attention to the generally emphasized small social activeness of the rural population. The level of social activeness of the country citizens in the activity of voluntary association structures and self-government organizations is relatively low (but not at all deviates significantly from the level of analogical activities of urban citizens!). At the same time, sociologists prove, that the pattern of social participation evolves from the model of mass activeness to the model of selective activeness. This concerns also the local rural communities. Yet let us underline – following the authors of the UNDP Report Poland 2000 Rural Development – that Polish rural community is characterized by features significantly deviating from the basic patterns of a civic society, and just from this diagnosis derives the imperative need to support all initiatives of the rural population's social self-organization. The still small farmers' involvement in the group production activity doubtlessly restricts the family holdings market possibilities. Depending on studies, it is estimated, that from 1 to 6% of farmers could be interested in the accession to producer groups. However let us remember, that even 1% means in absolute values some 20 000 farmers, that is e.g. 4 000 potential new groups. If they were only 400, it would be a change not only in terms of quantity. At the same time it is reasonable assumption, that farmers functioning in the CAP conditions will be lead by other rationalities. Their knowledge of the CAP is still superficial, thus limiting the calculations of chances and aspirations. The obtainment of a guarantee of even certain stabilization, making possible to evaluate the chances, will certainly stimulate farmers' economic activity.

Measure 1 – early retirements

Assessing the intended objectives of this measure implementation it must be assumed, that the expected benefits will be connected above all with the state of human capital and will mainly concern the improvement of the farmers' qualifications level (as successive generations are usually better educated, than their predecessors). Doubts can be raised by the extent of this measure's impact on the improvement of agrarian structure. In the case, when a holding is taken over by a successor (which is included in the access criteria), the acceptance of an early retirement does not directly affect the changes within the compass of agrarian structure. It can be expected, that a part of successors will try to enlarge the holding taken over, but the regulations do not refer to their attitudes and professional plans. The requirements are limited to the professional skills and the non-exceedance of the age of 40, while a guarantee is lacking, that the holding will maintain a suitable viability in the next years.

Moreover, it is reserved in the regulations, that only those farmers can join the programme of transmitting a holding to a successor, which own holdings of a specific (relatively high) acreage. This excludes a part of potential beneficiaries from using this form of enjoying the programme. The alternative is to transfer the property for the purpose of enlarging another holding or transmitting lands to the Agency of State Agricultural Properties, which in turn can be hardly acceptable for heirs.

Yet the proposed project of early retirements raises a number of doubts, mainly in the situation, when the reasons of social nature interlace with financial issues, when funds are limited and it is necessary to make choices:

- ◆ the early retirement, very attractive regarding its amount in relation to other social benefits and returns – especially in the rural areas, can lead to professional passivity at the age of 55, which is not grounded socially not economically, since it is not an age, which decides about fecklessness or reduces the chances of success in the performed activity. A policy consisting in deactivation of the measure's beneficiaries („you receive the benefit, then stay quiet and do not protest against the structural reforms undertaken”) reminds the definition of the social aid tasks in Poland in the first years of transformation. Yet it is a policy opposite to the world trends. For example in Denmark, one of the closest geographically countries in the EU, social benefits (except for the support for permanently dependent persons) and inactive forms of support are being abandoned. To have the right to a support, one should participate there in an activating programme. It must be remembered (especially that the early retirements are long-term benefits) that not only the Objective of the measure undertaken and the way of its implementation are very important, but also its perception by the interested. In other words, not how a country citizen will treat the early retirement at the moment of acquiring the right thereto, but later. In the third version of the draft RDP, important amendments have been introduced, lowering the amount of pensions, extending the number of potential beneficiaries and increasing the pool of funds earmarked for this measure. Apart from the objective, for which such an instrument is introduced, in the case of such operations, the way of such measure introduction is be very important (especially that these are not one-time benefits) and rough knowledge of farmers' attitudes towards such kind of benefits. We found no such scenario in the RDP. It is all the more important, as we talk about sustainable rural development.
- ◆ Although the early retirements undoubtedly will bear on the rise of the rural population's income, the proposed level of benefit (EUR 6150 yearly on an average) can antagonize the rural community both in neighbourly and family relations, as not all of them will have the same opportunity to enjoy this benefit, even more that ownership relations in Polish country are often disordered. A feeling of discontent with such solutions can be expected, especially in the first period of early retirements introduction, above all considering their modest number (for 500 persons in 2004). The changes proposed in the third version of the draft RDP pursue the direction proposed by us.
- ◆ It can be supposed, that in the first place relatively big and economically family holdings will enjoy the early retirements, in which an exchange of the agricultural production manager will occur – which probably will not result in fundamental changes within the compass of rural structures, nonetheless thanks to that also the social structure will change: through the qualitative changes of human capital among the persons running the holdings, with all consequences of the type of open channels of social mobility, extension of the freedom/choice sphere, increasing the life chances of the young rural generation etc.

The fears for low interest in early retirements derive from the calculation (evaluations performed on the basis of the material from the IAEFE¹⁴ inquiry of 2000), from which it results, that among the holdings managers aged between 55 - 64 (men) and 55 - 59 (women), about 21 thousand do not have successors. In the majority of cases, such situations concern the holdings with up to 5 ha of croplands area – 89% of declarations about the absence of a successor are comprised in this class. In the units exceeding 15 ha of croplands (in Poland about 186 thousand family farms) the absence of a successor occurs sporadically. Mostly the holdings that meet the viability criterion are comprised in this class, so they may enjoy the early retirements upon the transfer to natural heirs. Fundamental amendments, concerning the conditions of access to these measures, introduced in the third version of the draft RDP, in the form of lowering the threshold of size, from which it is possible to transfer a holding from 3 ha to 1 ha and softer criteria for the assessment of holding's economic viability improvement can be conducive to increase of interest in this instrument.

From the viewpoint of early retirements effectiveness in stimulation of Polish agriculture reconstruction and modernization of its structures, the dissemination of information about this measure seems to be the most effective, above all among these farmers, who run the holdings of 5 to 10 ha, as this group is expected to show the greatest interest - which is not a suggestion not to cover other farmers by pensions. 24% of the totality of agricultural holdings and 20% of croplands are comprised in this range. In the period before the regime transformation, in terms of economy they occupied a very strong position in agricultural structures, yet in new conditions, it is just this group that hardly adapts to the competitiveness requirements and it is gradually eliminated from the market. At the same time, about 26% that is over one fourth of the totality of holdings' managers in the age envisaged for the beneficiaries of early retirements is comprised in this class. In the period 1996-2000, on average about 4% holdings left this class yearly (compared to 2% in the whole lot). The acceleration of this process, and above all the increase of its effectiveness (in most cases only a part of the acreage was disposed of, on average the area of such holdings after the transaction covered about 3.5 ha of croplands and has been functioning in the group of so-called social unit, which means that they were not present on the agricultural market) could contribute to more fundamental changes in the agrarian structure and to improve the economic situation of a part of rural families covered by marginalization processes.

The period of paying the benefit, provided for in the RDP, was not precisely fixed, only the maximal period for paying the early retirements has been entered - 10 years. The possibilities offered by the Council Regulation no. 1257/99 have not been fully exploited, that is a 15-year period of paying the early retirements (Article 12). It is necessary to determine a specific, fixed period for which the early retirements will be granted in Poland.

It seems necessary to introduce a longer period of paying an early retirement in the case of women – holdings' managers. In Poland, in rural areas we deal with an average statistical lifespan in the age group that may apply for early retirements, which is different for women (until 82) and men (until 77). This difference shows, that the share of women in the group affected by the drop of income in consequence of stopping the payment of early retirement benefits (higher than the average agricultural retirement pension) will be definitely higher,

¹⁴ Institute of Agriculture Economics and Food Economy

then the share of men. The draft RDP does not envisage any measures that are to counteract such phenomenon.

Measure 2 – support for semi-subsistence farms

There exists a difficulty in the approach to this point of the project, since in our country the economic size of a semi-subsistence agricultural holding is still not fixed. However a reservation must be made, that in Polish conditions, a part of the so called social holdings fulfils mainly the residential function and their users are not interested in carrying out agricultural production destined for sale. Certainly they will be interested in – for the reason of direct payments – in maintaining the land in the required condition. On the basis of available data from the IAEFE inquiry 2000 it can be estimated, that some 670 thousand agricultural holdings (according to the nomenclature in force from 1 ha of croplands) is not market-active, including 207 thousand that do not produce for the market at all, and 468 thousand do not exceed 20% of the goods production value of the average of one holding that makes such sale. In this class only 6,5 % have been investing in the holding, and 8,6% intended to do so. It must be also taken into account, that 57% of families from the distinguished group of holdings have supported themselves upon gainful employment, and for 35%, disability pensions and retirement pensions have been their basic income. At the same time, about 58% of all registered rural unemployed from among those living in the families running farms were placed in these holdings and 38,4 % of persons reckoned among the hidden unemployed.

The support for this type of holdings should become a chance for a considerable group of farms and at the same time an inspiration to determine the development strategy for own holding. Doubtless a deep stratification will occur among these holdings – one part will perhaps pass to the group of those, which can survive on the market, and yet the point is to offer them this chance (seizing this chance will require a farmer's strategic decision – there is no automatism here), while an insufficient amount of funds may be a problem antagonizing local communities – so the criteria of awarding and periodical settling are all the more important.

It can be estimated that in the pre-accession conditions, about 10-15% of families interested in the offer for semi-subsistence farms would be situated in this distinguished class. It results from this, that if the support for semi-subsistence farms were to be addressed solely to the described group, the number of potential beneficiaries adopted in the RDP would seem to be correctly estimated. In the third version of the draft RDP, the pool of funds earmarked for this measure has been reduced by half, so in this relation the number of farmers that will be able to receive this support will be significantly smaller.

It must be marked here, that among the social holdings inhabitants, exceeding the age of 15, about 7-8% have agricultural education. It can be also expected, that the nature of social holdings and the interest of their users in undertaking different forms of agricultural activity will be diversified in terms of space, and judging on the basis of the mechanisms of this group separation, relatively the biggest number of such attitudes will occur among the persons living in mideast and northern areas.

Measure 3 – support for the less favoured areas (LFA)

The presented description of the measure indicates, that two criteria will be taken into account at the selection of the LFA areas. The first refers to geographic, natural and climatic conditions and as such does not raise doubts, although it should be applied at the level of cartographic precincts (village administration units) – their application at the level of a commune does not allow for precise identification of the less favoured areas. On the contrary, the second criterion, referring to demographic factors, seems controversial. In the draft they have been defined as the population per square km and the share of rural inhabitants connected with agriculture. First of all, this last requirement is not clearly formulated, as it is not known, if it means the proportion of persons living in families with agricultural holdings users, or the number of persons subsisting by agriculture or those employed at agricultural production. These numbers are not equivalent, and in terms of space there exists between them a scale of divergence, which is all the more important, as the first criterion refers to regional features. Moreover it is difficult to find grounds for the assessment, that „*at least 66% of the population connected with agriculture proves a good demographic situation*”. In Polish conditions, the relatively high share of population connected with agriculture (whatever it means), usually indicates an agrarian fragmentation and unemployment.

From the viewpoint of farming conditions, among the criteria characterizing the demographic features of the population connected with agriculture, the proportions of men to women (migrations of women from rural areas are the first indicator of conditions worsening in these areas) and the absence of children, seem to be more reliable than the information, distinguished in the RDP about the share of this population (it was not specified, whether within the rural community, or within the totality of region's population?). As a pronounced surplus of men over women and the absence of children is characteristic for problem areas, threatened by the depopulation and / or suspension of agricultural activity. The situation of agriculture in particular areas reflects also the percentage of women and aged persons among the holdings managers. For example in submontane areas women account for 27% of holdings managers (on average they are 21% in the whole country), and 30% are the persons aged over 55 (while on average they account for somewhat less than 24%). The share of holdings managers with agricultural school education can be another indicator. In the year 2000, in the southwest areas it was 18%, and in the southwest ones - 14%. To compare, among the totality of rural areas, the analogical percentage was 23%, and most of the holdings managers with school professional qualifications - 39%, were present in the midwest macroregion (i.e. jointly in the wielkopolskie and kujawsko-pomorskie voivodeships). In the third version of the draft RDP, no amendments concerning the demographic criteria were introduced

When delimiting the areas with difficult natural conditions for agricultural production it must be also considered, that very often these are the areas of high touristic value, with the traditions of such activity and that many potential beneficiaries of the Plan intended for the less favoured areas will want to enjoy also the support provided for the development of agrotourism. It must be emphasized here, that the criteria of access to the obtainment of a supplementary subvention for location reasons are relatively easily accepted by the majority of users of holdings located within the LFA boundaries, though some requirements related to the fulfilment of duties resulting from the Good Farming Practice can be difficult to introduce, considering the lack of own funds, as well as the lack of access to other funds.

Measures 4 and 5 – agri-environmental programmes and afforestation agricultural land

The philosophy of agri-environmental programmes will be something new to Polish farmers, and the requirements that must be met in order to participate in these programmes will be difficult for many farmers (or the lack of appropriate knowledge and practice or lack of funds). Therefore clear rules concerning the participation in these programmes are needed, and a special action, explaining the purposefulness of measures and justifying the necessity to observe specific rules, will be indispensable for the popularisation of these programmes and bringing them closer to farmers. Moreover another restraint can be the convincing of holdings' users of relatively small advantages compared to the necessity of active participation in works on behalf of the fields, which in rural environment were not so far the object of particular efforts. A part of farmers can consider, that for them it is a form of degradation, when they become nature guardians in place of agricultural producers. This is why it seems important to raise the farmers' awareness of the importance of environmental protection measures. In this way we emphasize the importance of appropriate institutional instrumentation – the presence of advisers playing the role of farmer's consultants and tutors in his environment becomes a necessary condition for the project implementation and success.

In turn, as far as afforestation of farmlands is concerned, the reluctance to prospectively exclude grounds from agricultural production (even those that are currently rested) can be a certain barrier in taking the decisions on participation in the programme of farmlands afforestation. In attractively located areas, the conversion of land to non-agricultural objectives, which is usually very profitable, can be competitive to the afforestation programme.

When defining potential beneficiaries of the described measures, the access criterion of the „*person carrying out agricultural activity*” does not seem to be clearly formulated – does it mean, that the users of subsistence holdings will be excluded from the possibility of receiving the subventions? In the third version of the draft RDP, this term was defined.

Measure 7 – agricultural producer groups

According to the available statistical data, until the end of March 2000, over 250 producers organization have been registered in Poland¹⁵, associating mainly the producers of fruit and vegetables, swine and potatoes. The level of these organizations activity and their share in global trade in agricultural products were insignificant and practically had no influence on the food market situation.

Pursuant to the EU law, it results from the assumptions to this measure, that the already existing agricultural producer groups will not be allowed to enjoy the support proposed in the Plan, as it may cover only the groups that will be established between the date of Poland's accession to the EU, and the end of the year covered by the RDP. Also the fact should be considered, that the location of producer groups would probably be very diversified regionally.

The social advantage is the strengthening of the processes of the rural population social self-organization (and thereby a development of a civic society), generation of new workplaces

¹⁵ According to the Agricultural Markets Department of the MARD, in March 2000 there existed 400-600 variously organized producer groups, more or less formally.

and the strengthening of consumption demand. The effect of demonstration, displaying the advantages of group measures is also crucial.

Measure 8 – technical assistance

The significance of measures within the framework of this part of the programme will play a decisive role in its dissemination and its effectiveness in accelerating the process of rural development. Apart from the presentation of tasks and costs of works undertaken, they should be also divided into stages according to the order of particular intentions. In such a plan, information and promotional measures should be put in the first place, then the trainings and preparation of implementations. The next stages of works covering the assistance in the use of funds should concern the monitoring and the preliminary assessment of the results of activity within the framework of individual programmes, taking into account their mutual complementariness and the determination of needs in amending the Plan, together with the update of rules applied to the access criteria.

8. Assessment of proposed proportions concerning the expenditure of funds and proposals of their changes

The Rural Development Plan 2004 – 2006, assuming the possibility of financing for the next two years (under the EU rule n+2) will be implemented in Poland for the first time. This means, that it is very difficult to forecast the effectiveness of individual measures. Their implementation system is not only still unprepared, but it will start with very little experience (only since 2002 a pre-accession programme SAPARD is implemented with great difficulties). It is hard to forecast the attitudes of potential final beneficiaries i.e. farmers, that are suspicious and cautious by nature. They also have no experience whatsoever in the preparation of applications and their attitudes can be shaped not only under the influence of a deep analysis, but also under the influence of current media communications.

The proposed measures cannot be consistently evaluated, as the assessments look differently from the viewpoint of farming effectiveness, need of environmental protection or shaping an appropriate social tissue. From the economic point of view, the budget allocation for individual measures proposed in the RDP indicates their concentration on the support of farmers' income, earmarking the remaining funds for the measures of restructuring character. In consequence this threatens with a potential „dilution” of the expected restructuring effects. In practice, the strategy proposed in the RDP will concentrate on the measures of protective nature, serving mainly to improve temporarily the existence of the poorest farmers. Such is the nature of early retirements, support for semi-subsistence farms, and also of the support of holdings situated in the LFA, being a subsidy for more expensive production.

From the viewpoint of economic effectiveness, the aid funds should serve above all the transformation of holdings into economic units that can provide their owners with appropriate income. Only the adjustment of agricultural holdings to the EU standards and the support for producer groups can be reckoned without reservations to agricultural holdings modernization. However, only a little more than 9% of funds were earmarked for both these measures. A much better effect could be achieved through the concentration on the support of a clearly determined new quality in the process of Polish agriculture restructuring, which could be e.g. a dynamic development of organic farming, which until now is only crawling in Poland (at present hardly around 2000 holdings). It would be a logical consequence of recognizing the organic production with relatively higher labour demand, as the one providing greater

possibilities of maintaining high employment in agriculture and indicated in the SWOT analysis as the chance of „growing market for organic food products”.

Also attention must be drawn to the fact that the introduction of the early retirements measure will not necessarily contribute to the improvement of agricultural holdings agrarian structure. At the same time the effect of removing the persons aged 55 from active life can be disadvantageous. Furthermore the amount of this pension is excessive in relation to the rural population's income. From the social perspective, the measure for extending the range of human choices, including the unblocking of social mobility channels: vertical, intergenerational and intra-generational is an unquestionable advantage.

Considering Polish agricultural landscape assets, exceptional by European standards, the budget allocation in the following proportions: agri-environmental programmes 11%, afforestation projects 3%, LFA 43%, other measures 43%, must be considered as inappropriate from the environmental point of view. The adopted criteria of the LFA separation are not connected with the protected areas system, so they make impossible to recognize the funds transferred therefor as funds directly serving to protect the environment. Only the funds destined for agri-environmental programmes can be recognized as funds directly serving this purpose and indirectly those earmarked for afforestation projects.

For the assessment of payments proposed in the draft RDP concerning the afforestation measure, the amounts of financial support now (in 2002) applied in Poland and the European Union countries have been compared. The rates are given per 1 ha yearly. For the conversion of EUR into PLN it was assumed, that 1 EUR = 4 PLN. From these data comparison it results, that the maximal rates proposed in the draft RDP in relation to the establishment and tending of forests may be considered as appropriate. Instead the afforestation bonus rate is decidedly too low. It is 3 times lower, than the one applied at present in Poland under the "Afforestation" Act of 2001 and more than 4 times lower than compared to the rate adopted in the EU countries.

Taking jointly into consideration the economic, social and natural criteria, the following changes should be introduced in the financial tables:

- ◆ To lower the amount of early retirements to EUR 3,600 yearly (i.e. circa 160% of the early retirements resulting from Polish law, currently in force) and simultaneous increase by 1.7 times of the number of beneficiaries. Altogether it would permit to increase the number of beneficiaries up to 40,800, and total expenditures on this measure would amount to EUR 309,060,000. EUR 1,515,000 would remain from this measure for other use. The calculation of this level of benefit was based on two assumptions. Firstly, the pension should be higher than the present early retirement (not much popular). It should be also competitive in relation to the lost income provided by the holding (calculated on the basis of the minimal agricultural retirement pension, direct payment and tax burdens). On the other hand, the early retirements level must be limited, considering the limited group of potential beneficiaries and the need to avoid social conflicts.
- ◆ To use the surplus resulting from the measure concerning the early retirements (plus the error correction¹⁶) for strengthening the development of producer groups, in a total amount of EUR 24,181,667 and for increasing the number of beneficiaries to some 160.

¹⁶ See Recommendation 102.

- ◆ To increase the funds for the measure concerning the agri-environmental programmes by 20% and thus create the possibility to obtain a bonus, as well as the possibility to support the development of organic farming. This means an increase of funds earmarked for this measure up to EUR 332,640,000.
- ◆ To lower the budget for the measure related to the support for the less favoured areas by an amount, by which the agri-environmental programmes were increased. This means a reduction of funds down to 1,042,988,277 i.e. by 5%.
- ◆ To increase the amount of the afforestation bonus from the level of PLN 600 /ha/year to a minimum level of PLN 1000 /ha/year. As the afforestation bonus is calculated as a reflection of the lost potential income (as a result of afforestation) from agricultural production, it should not have one level for the whole country – it should depend on the local conditions, since they decide, to a large extent, about the potential income possible to be obtained. The amount of the afforestation bonus should oscillate between PLN 1000 and 1500.

It is worth noting, that as there exists a possibility of changing the funds allocation - up to 10% from each measure, then having the surpluses generated, without significant complications the strengthening of the following measures may be considered: agri-environmental programmes, producer groups and adaptation to the EU standards.

In the third version of the draft RDP, the suggestions here above mentioned were partly complied with. The level of early retirements was lowered, and the number of its potential beneficiaries was increased, which alongside the decrease of the threshold, from which a holding's manager may apply for it, is mainly the result of a significant increase of funds destined for this measure, at the expense of the support for semi-subsistence farms (the Assessment Team did not propose to increase the funds for Measure 1, nor to reduce the pool of funds for Measure 2). The rate of the afforestation bonus was increased up to PLN 1000. Instead, the proposal of increasing the funds for agri-environmental programmes together with the introduction of a bonus (incentive) and for the support of producer groups was ignored.

Regarding the specificity of these measures, within the framework of which the State's financial obligations towards the beneficiary can extend up to five years (i.e. until 2011), and in the measure concerning the early retirements even up to 10 year (i.e. until 2016), it seems advisable to introduce explanations (assurances) to the RDP, that those funds will be really paid to the beneficiaries, despite the fact, that the present EU budget comes to an end in 2006 (and the financial tables in the RDP end up in 2008). These will be the mandatory obligations for the next RDPs, which should be demonstrated in the tables.

Attention should be also drawn to a very illegible way of presenting the detailed financial tables concerning individual measures. It is very hard to see clearly the number of beneficiaries, or the number of hectares contracted in a given year and their continuation in the successive years, with reference to the financial year, to which those beneficiaries and contracted hectares refer to, although the agreement may be signed both during that financial year and in the next two years. It is necessary to indicate clearly the number of new beneficiaries or contracted hectares, how many pass from the preceding years to the following years – the amounts referring thereto should be separated. This concerns in particular the years 2007-2008.

9. Assessment of the solutions proposed in the scope of management

The key issue connected with the management of the RDP implementation is the ability to use maximally the funds earmarked for its realization. However, the absorption of funds is not an objective by itself, it is the criterion of assessing the ability to achieve the RDP material objectives – that is the real rural development. The absorption of funds does not depend on the measures alone, but to a large degree on the approach to their implementation. The ability to absorb funds will depend mainly on the adopted implementation procedures – institutional solutions. The second version of the draft RDP, which has been the object of assessment, did not practically contain any description exhaustively presenting the implementation and management of this Plan's realization. Analysing the structure of funds expenditure within the framework of the RDP it can be judged, that the current absorption possibilities were adopted as the basic criterion for the distribution of funds among individual measures. Almost 64% of funds were earmarked for such measures as: the support for semi-subsistence farms and for holdings located in less favoured areas. These measures are easily accessible for beneficiaries, which also means their relatively high absorption, at the smallest possible labour expenditure by the central and local administration, and also by agricultural advising centres servicing these measures. In the third version of the draft Plan, after a measure related to early retirements (an easier access has been proposed and significant increase of funds) was added to the two above mentioned, they already account for 76% of funds (without including the complementation of direct payments). This means that the Plan is being oriented towards the measures with relatively high capacity to absorb funds, without any reliable analysis, what could be the potential directions for a significant growth of this absorption. This indicates also, that less importance is attached in the RDP to its instruments adjustment to the needs for changes in rural areas and to the need to gain experience. This trend is also visible in the change of approach (between the second and the third version of the draft RDP) to the measure concerning the agri-environmental programmes. Indicating, that totally implemented agri-environmental programmes are difficult, they were limited to simple elements, judging that it would certainly contribute to a better use of funds. Instead it will doubtless delay the necessary transformation in rural areas towards the directions set by the common Agricultural Policy evolution. This can mean that Poland, unlike other countries of the future EU, will at the very beginning deprive itself of the possibility to gain experience in implementation of agri-environmental programmes in their full extent. This can delay the necessary rural areas transformation.

Performance of the management function by the MARD and indication of the Agency for the Restructuring and Modernisation of Agriculture (ARMA) as the payment authority seems to be a natural consequence of the RDP nature. However, it does not clearly result from the short description of the implementation system, whether an efficient implementation of these tasks will be possible in the present state of the ARMA in terms of staff and organization. Perhaps an efficient management of these tasks will require a special system preparation and creation of special units or teams. In the RDP, even the envisaged charges upon the regional structures that are to deal with its implementation, have not been shown. Such approach, even approximative, would provide a better image of the tasks feasibility. In the case of implementation of the early retirements measure, considering its *strictly* social character, it should be delegated to the ASIF, being an institution specialized in this field. This would

permit to connect it more closely with the present system of agricultural pensions and correct control of required documents.

When preparing the plans of measures (business-plans) and the applications for holdings, it is worth specifying the rules under which the advisory assistance will be provided (state and private services). It is also important to define clearly the procedures of plans and applications verification and acceptance, and also of the monitoring of their implementation. It results from the current version of the Plan, that the technical assistance within the framework of the RDP means only a support from the Ministry of Agriculture and its agencies. Not only the AACs should be perceived as supporting institutions, but also the professional farmers self-government (agricultural chambers) should certainly participate in that, as well as other professional and non-governmental organizations operating in rural areas, and also private firms. It will be necessary to base on organizations, which have the will and the vision of change in rural areas – they have skilled staff and technical possibilities to prepare the necessary documents – business-plans, plans of agri-environmental measures and many years' programmes of activities for specific holdings. No use of these proposals was made in the third version the RDP.

The role of territorial self-governments is being marginalized in the document, and this is the most stable institution responsible for rural development. No co-operation with self-governments was envisaged at afforestation, or other local co-operation and relations with regional spatial management plans and communes' development plans. In consequence, the role of local agreement is not perceived, which will be of fundamental importance in the organization and quality of afforestation projects; how the afforestation projects will be executed, whether the works will be performed under the supervision and with the participation of professional forest services, or not. The role of nature conservation services is not visible either, and they will be necessary, in particular at the implementation of Measure 5.

10. Impact of the RDP implementation on employment:

It was very difficult to assess the potential impact of the Plan implementation on the employment, without having a sufficient volume of data concerning the potential number of beneficiaries and without carrying out concrete simulation studies, which was not envisaged within the framework of this inquiry.

But with a great probability it can be forecasted, that the majority of the RDP measures will have no direct impact on the employment evolution – above all they will be conducive to obtainment of additional income by the measures beneficiaries. The only measures, which probably will directly influence the employment, are the early retirements. Formally speaking, every retirement of a person reckoned as employed should automatically reduce the employment. So the employment reduction should be equal to the number of pensions granted – this simple relation may occur in the case when the released land will be taken over by "fully-employed" farmers, that is the owners of other holdings or successors, which were ranked among the persons employed in agriculture. Yet where holdings will be taken over by successors, which have been so far ranked among the unemployed, then only the change of the person employed will occur – instead the number of registered unemployed will drop. In the holdings that will be enlarged in consequence of lands take-over, the demand for labour can rise. The result can be, that they will employ additional persons, in particular on a seasonal basis. Where holdings are taken over by successors, the persons receiving pensions,

formally not engaged in agricultural activity, will in fact move to the category of holdings ancillary workers. Assuming a relatively easy access to pensions (in particular after the changes introduced in the third version of the draft RDP) it can be finally judged, that in a short time the RDP implementation will probably slightly accelerate the employment reduction, while in the long time the effect will next to neutral – that is the reduction of employment in agriculture will occur independently from the RDP implementation. Yet it is worth remembering, that the economic restraints in transferring lands against pensions will be shaped by a general conviction, that after the accession to the EU the prices of land will rise and the awareness of the fact, that in this way the expected direct payments will be lost. Moreover the effect of early retirements can be compensated by the measure consisting in supporting "low-output" holdings, which in other circumstances would be, perhaps, taken over by economically stronger units.

The RDP implementation will also affect the labour market in an indirect way – not through the implementation of particular measures, but through the servicing of the whole Plan and its particular measures implementation.

Some RDP measures (agri-environmental measures, afforestation projects, implementation of standards, LFA and producer groups) will require the assistance of advisers, which will have to help the farmers in planning out their activities that would entitle them to obtain the payments and help to meet accepted engagements – in particular this concerns the requirements of the Good Agricultural Practice. Therefore a large number of qualified advisers will be needed – certainly more numerous and differently trained than the personnel of present agricultural advising centres. A large number of trainings will be needed too – both for advisers and farmers – so many persons should be employed at the management and servicing of these trainings. In order to widely implement the measure related to afforestation projects, seedlings would be needed in large numbers, hence nursery services for the RDP, which will probably increase the employment above all in the State Forests Nurseries.

The growth of demand for the services connected with the RDP implementation will concern furthermore: geodesic services (information related to the land records will be needed for territorial payments and the plans of holdings for the plans of agri-environmental measures), the services related to the investigation of soils chemistry (such analyses will be needed for suitable fertilization settings within the framework of sustainable agriculture system), and also the services connected with the control and monitoring of particular RDP measures implementation.

Moreover it can be judged, that due to the fact, that many farmers will obtain additional funds, they will become more active in taking up various small investment operations and thereby a growth of demand for various petty services can occur.

ANNEX K. Usual Good Farming Practices

<i>Obligations</i>	<i>Legal Basis</i>	<i>Negative control result</i>	<i>Controlling authority Control (enforcement institution) and test legal responsibility</i>
17. AGRICULTURAL WASTEWATER APPLICATION IN FARMS			
Wastewater meant for agricultural application must go through initial cleaning. It must comply with the sanitary norms and the contamination cannot exceed the values referred to in the Regulation of the Minister of Environment. Responsibility for compliance with the above requirements shall rest with the wastewater provider.	Water Law of 18 July 2001 (O.J. 2001 No 115 item 1229, with subsequent amendments) Regulation of the Minister of Environment of 29 November 2002, on the conditions required for wastewater introduction into inland waters or ground, and on the substances particularly harmful for water environment. (O.J.02.212.1799)	1. No copy of the appropriate permit and the fertilisation plan.	Agency for Restructuring and Modernisation of Agriculture (ARiMR) Environment Protection Inspection Sanitary Inspection Fine penalty Decisions on these cases shall be taken on the basis of and in the mode referred to in the Code of Petite Offences.
Wastewater applied in agriculture shall come solely from subjects authorised for specialised use of inland waters in agriculture.			
Farms using wastewater shall have fertilisation plans featuring specific nutrient quantities in relation to wastewater doses meant for application in agriculture.			
The use of waste is prohibited on the arable land used for cultivation of plants meant for direct human and animal consumption.			
2. AGRICULTURAL USE OF MUNICIPAL SEWAGE SLUDGE			
Municipal sewage sludge may be used in soils with reaction under pH 5,6, and the wastewater sludge heavy metal content should not exceed the quantities referred to in the Regulation of the Minister of Environment. Municipal sewage sludge should comply with the sanitary norms as per the above Regulation.	Waste Disposal Law of 27 April 2001 (O.J. 2001 No. 62 item 628, with subsequent amendments) Regulation of the Minister of	2. No documents on the composition of wastewater sludge and on the fertilisation plan.	Agency for Restructuring and Modernisation of Agriculture (ARiMR) Environment Protection

17 Application of wastewater / wastewater waste for irrigation and fertilisation of agricultural lands and fish ponds.

<p>The farmer using municipal sewage sludge must have a fertilisation plan which shall specify nutrient (bio-gene) quantities contained in wastewater sludge doses meant application in agriculture. Soil tests must also be conducted directly prior to the application of wastewater sludge.</p>	<p>Environment of 1 August 2002 on urban wastewater sludge. (O.J.02.134.1140)</p>		<p>Inspection</p> <p>Fine or imprisonment penalty</p>
<p>It is prohibited to apply wastewater sludge on soils used for cultivation of plants meant for direct human consumption.</p>			<p>Decisions on these cases shall be taken on the basis of and in the mode referred to in the Code of Petite Offences.</p>
<p>3. ORGANIC AND MINERAL FERTILISERS, AND APPLICATION THEREOF</p>			
<p>Only organic fertilisers or fertilisers authorised for application based on the Announcement of the Minister of Agriculture published in the Official Gazette of the Republic of Poland "Monitor Polski" may be used on farms.</p>	<p>Act on Fertilisers and Fertilising of 26 July 2000. (O.J. 2000 No. 89 item 991)</p>	<p>3 Requirements on the storing of mineral fertilisers as specified in the application and storage manual are not observed.</p>	<p>Agency for Restructuring and Modernisation of Agriculture (ARiMR)</p>
<p>Pure nitrogen (N) content in the annual organic fertiliser dosage shall not exceed 170kg per 1ha of arable land.</p>	<p>Regulation of the Minister of Agriculture and Rural Development of 1 June 2001 on detailed fertiliser application methods and the related trainings. (O.J.01.60.616)</p>	<p>4. Application of fertilisers not permitted for circulation.</p>	<p>Environment Protection Inspection</p>
<p>Solid organic fertilisers shall be stored in inventory facilities or on impermeable plates featuring installations draining the leaks into hermetic containers for liquid manure or manure water. This regulation shall come into force after 25 October 2008 except the NVZs where farmers are obliged to implement Action Programmes¹⁸.</p>			<p>Central Institute for Agricultural and Comestible Products</p>
<p>Liquid organic fertilisers (liquid manure and slurry) shall be stored in hermetic containers. This regulation shall come into force after 25 October 2008 except the NVZs where farmers are obliged to implement Action Programmes.</p>			<p>Trade Quality Inspection (GIJHARS)</p>
<p>Manure plate and slurry container shall provide storage capacity for at least 4 months organic fertilisers storage except Nitrate Vulnerable Zones for which this capacity is 6 months.</p>			<p>Fine penalty</p> <p>Decisions on these cases shall be taken on the basis of and in the mode referred to</p>

<p>Solid mineral and organic fertilisers shall be stored in their original containers and in accordance with the application and storage instruction.</p> <p>Loose fertilisers shall be stored in warehouses or under a roof:</p> <ul style="list-style-type: none"> • the above fertilisers may be stored in piles formed on solid impermeable base and covered with waterproof material, • piles cannot be formed on slopes and within the indirect protection zones, as well as in sensitive water areas, • ammonium sulphate and fertilisers containing ammonium nitrate in the amount exceeding the 28% of total nitrogen content cannot be stored in piles. 			<p>in the Code of Petite Offences.</p>
<p>It is allowed to apply solid and liquid organic fertilisers only from 1st March do 30th November, except for the fertilisers used for cultures under coverings.</p>			
<p>Organic fertilisers applied on arable land shall be covered or mixed with soil at least the day following transportation.</p>			
<p>It is prohibited to apply organic and mineral fertilisers on soils covered with water, snow, or frozen 30 cm deep.</p>			
<p>It is prohibited to apply:</p> <ul style="list-style-type: none"> • liquid and nitrogen organic fertilisers in bare soils on slopes slanting above 10% • liquid organic fertilisers during vegetation of plants meant for direct human consumption. 			
<p>Organic fertilisers is prohibited from application to 20 m located in vicinity of the water source protection zones, water intakes, coasts/banks of water reservoirs and water flows, watering-places located on surface waters, and near the sea coast-line.</p>			

¹⁸ Polish Act on fertilisers and fertilisation states that meeting standards in terms of storage capacity constructions have *vacatio legis* till 25th October 2008 .

4. PLANT PROTECTION MEASURES		
It shall be allowed to apply only the plant protection measures and sowing material containing plant protection measures authorised for circulation and application based on regulations on cultivation plant protection, and regulations on organic agriculture (the index has been published in the Official Gazette of the Republic of Poland "Monitor Polski".)	Law on the Protection of Cultivated Crops of 18, December 2003 (O.J.2004, No 11, item 94)	<p>5. No register of operations performed with application of plant protection measures.</p> <p>6. Recommendations contained in the instruction leaflet are not followed.</p> <p>7. No document to certify training attendance in scope of performing operations with application of plant protection measures (in case of plant protection measures identified as very toxic and toxic) or no available document to certify that the operations have been performed with application of technically fit equipment.</p>
Plant protection measures shall be applied solely for purposes expressed in the application instruction leaflet, and strictly in accordance with the recommendations contained therein.		
The farmers shall be obliged to keep a register of operations performed with application of plant protection measures and the register shall be available for the period of four years from the date of operation.		
Chemical plant protection operations shall be performed with application of technically fit equipment, and by persons having a valid certification of training in that scope (in case of plant protection measures identified as very toxic and toxic) or using manual equipment.		
Plant protection measures shall be applied on open terrain only if the wind speed does not exceed 3 m/s and the location of application is at least 5 m away from public roads, and at least 20 m from the habitable building and inventory facilities, apiaries, herb cultures, cultivation gardens, nature parks, surface waters, and from the boarder of internal indirect protection zone of water sources and water intakes.		
It shall be prohibited to start cultures with high plant protection yield closer than 20 m from the habitable building and inventory facilities, apiaries, herb cultures, cultivation gardens, nature parks, surface waters, and from the boarder of internal indirect protection zone of water sources and water intakes.		
While preparing the plant protection measures, the farmers is obliged to observe the waiting and prevention periods.		
It is forbidden to apply plant protection measures against the prevention periods for bees.		
		<p>Agency for Restructuring and Modernisation of Agriculture (ARiMR)</p> <p>Plant and Seed Production Inspection</p> <p>Fine or imprisonment penalty</p> <p>Decisions on these cases shall be taken on the basis of and in the mode referred to in the Code of Petite Offences.</p>

5. FARMING ON GRASSLANDS			
It is forbidden to burn flora on meadows, pasturages, fallow lands, dundary strips, ditches, roadside strips, railway routes, and in areas covered with bulrush and cane.	Act on Nature Protection of 16 November 1991 (uniform text, O.J. 2001 No 99 item 1079, with subsequent amendments)	8. Burning of flora	Starosta (head of a Powiat) (Art. 47) Fine or imprisonment penalty Decisions on these cases shall be taken on the basis of and in the mode referred to in the Code of Petite Offences.
Farming on grasslands shall not result in water contamination with nitrogen compounds and permanent sod damage caused by excessive pasturing.	Water Law of 18 July 2001 (O.J. 2001 No. 115 item 1229, with subsequent amendments)		Agency for Restructuring and Modernisation of Agriculture (ARiMR) Environment Protection Inspection
6. HABITAT PROTECTION			
Obligations resulting from the Act on Nature Protection shall be observed in areas under legal protection.	Act on Nature Protection of 16 November 1991 (O.J. 2001 No 99 item 1079, with subsequent amendments)	9. Protection requirements specified for the protection areas are not met (protection plans, annual protection tasks)	Nature protection authorities (National Park, Landscape Park, NATURA 2000 area, Starosta (head of a Powiat)) Fine or imprisonment penalty Decisions on these cases shall be taken on the basis of and in the mode referred to in the Code of Petite Offences.

7. MAINTENANCE OF CLEANLINESS AND ORDER			
The farmers is obliged to keep the farm clean and ordered and to use storage device for waste generated on farm.	Act on Maintenance of Cleanliness and Order in Municipalities of 13 September 1996 (O.J.96.132.622, with subsequent amendments)	10. No urban waste storage devices. 11. Urban waste present on farm.	Municipality Fine penalty Decisions on these cases shall be taken on the basis of and in the mode referred to in the Code of Petite Offences.
8. SOIL PROTECTION			
The responsibility for technical maintenance of anti-erosion devices and melioration equipment shall rest with the owner of the land on which the machinery is located. It is forbidden to burn stubble, fields and straw.	Act on Protection of Agricultural and Forest Land of 3 February 1995 (O.J. of 1995, No. 16, item 78 with subsequent amendments) Law on environmental protection of 27 April 2001 (O. J. of 2001, No. 62, item 627 with subsequent amendments)	12. Burning of stubble, fields and straw.	Agency for Restructuring and Modernisation of Agriculture (ARiMR) Starosta (head of a Powiat)

9. WATER PROTECTION

<p>Human produced wastewater shall not be discharged directly into the surface waters or into ground.</p>	<p>Water Law of 18 July 2001 (O.J. 2001 No. 115 item 1229, with subsequent amendments)</p>	<p>13. Wastewater drainage to melioration systems, surface waters or into ground.</p> <p>14. In case of existing water pipeline connection, there is no drain-less container for liquid impurities, or an adjacent human produced wastewater cleaning facility, or the estate lacks sewage system connection.</p>	<p>Agency for Restructuring and Modernisation of Agriculture (ARiMR) Environment Protection Inspection Fine penalty Decisions on these cases shall be taken on the basis of and in the mode referred to in the Code of Petite Offences.</p>
---	--	---	--

ANNEX L. The catalogue of packages for the National agri-environmental programme

Name of package					Option No
Package	Variant	Option	Code		
S01			S01	Sustainable farming	1
S02			S02	Organic farming	
	a	01	S02a01	Non-certified arable crops	2
		02	S02a02	Certified arable crops	3
	b	01	S02b01	Non-certified permanent grasslands	4
		02	S02b02	Certified permanent grasslands	5
	c	01	S02c01	Non-certified vegetable crops	6
		02	S02c02	Certified vegetable crops	7
	d	01	S02d01	Non-certified fruit crops and berry plantations	8
02		S02d02	Certified fruit crops and berry plantations	9	
P01			P01	Maintenance of extensive meadows	
	a	01	P01a01	Semi-natural single-swath meadows – hand mowing	10
		02	P01a02	Semi-natural single-swath meadows – mechanical mowing	11
b		P01b	Semi-natural double-swath meadows	12	
P02			P02	Maintenance of extensive pastures	
	a		P02a	Pastures on xerothermic grasslands	13
	b		P02b	Lowland pastures	14
	c		P02c	Mountainous pastures	
		01	P02c01	Mountainous pastures 350-500 m a.s.l.	15
02	P02c02	Mountainous pastures above 500 m a.s.l.	16		
K01			K01	Soil and water protection	
	a		K01a	Catch crop undergrown	17
	b		K01b	Winter intercrop	18
	c		K01c	Stubble intercrop	19
K02			K02	Buffer zones	
	a	01	K02a01	2-meter buffer zones on poor soils	20
		02	K02a02	5- meter buffer zones on poor soils	21

	b	01	K02b01	2- meter buffer zones on rich soils	22
		02	K02b02	5- meter buffer zones on rich soils	23
G01	a	01	G01a01	Polish red cattle	24
		02	G01a02	Polish white-backed cattle	25
	b		G01b	Horses	
		01	G01b01	Polish Horses	26
		02	G01b02	Hucul Horses	27
		03	G01b03	Małopolski horses	28
		04	G01b04	Slaski horses	29
	c		G01c	Sheeps	
		01	G01c01	Wrzosowka sheep	30
		02	G01c02	Swiniarka sheep	31
		03	G01c03	Olkuska sheep	32
		04	G01c04	Polish mountain sheep of colourful variety	33
		05	G01c05	Colourful merino sheep	34
		06	G01c06	Uhruska sheep	35
		07	G01c07	Wielkopolska sheep	36
08		G01c08	Zelaźnieńska sheep	37	
09		G01c09	Korideil sheep	38	
10	G01c10	Kamieniecka sheep	39		
	11	G01c11	Pomorska sheep	40	

DETAILED DESCRIPTION OF MEASURES

Package: SUSTAINABLE FARMING (Code: S01)

Definition: Sustainable farming involves the use of environmentally friendly practices, which enable limitation of negative effect on environment through implementation of integrated plant protection methods and fertilization plan with nutrient balance. Such management is to enable an introduction and continuation of environmental planning, which is essential for achievement goals mentioned in Chapter VI of (EC) Reg. 1257/1999, namely promotion of agricultural practices which go beyond UGFP applied in Poland.

Goals:

To introduce and promote the environmental planning into the proper farm management;

To promote good farming practice aiming at a reduction of pollution from agricultural areas.

Minimum eligible area: a holding including 1 ha of agricultural utilised land.

Usual good farming practice:

See Annex K

Requirements for the package:

- Farm management in accordance with agri-environmental plan, mapped on the farm plan in the scale 1:5000, or other scale available;
- Observance of proper selection and plant rotation, ensuring a limitation of agrophages development, reduction of weeds and limitation of nitrogen losses. The minimum requirement is 3 plant species in rotation and the frequency of cultivating the same crop on the same field being maximum 2 years. This condition is not required for perennial plants. The share of cereals in the structure of crops on not more than 66 % of arable land.
- Preparation and adaptation of the nutrient management plan, based on the soil analysis and the annual nitrogen balance, taking into consideration an average yields in the region within the recent 5 years;
- Prohibition of sludge wastes application; (applicable for all chosen by farmer packages if the sustainable farming is not implemented)
- Limitation of fertilization of arable land with nitrogen up to 150 kg N/ha per year¹⁹, permanent grassland up to 120 kg N/ha/year;
- Maximum livestock density²⁰ of all grazing animals (cattle, sheep, goats, horses) up to 1.5 LU/ha of fodder area (grasslands and arable land under fodder crops intended for animal fodder);
- Maintenance, within the holding, of permanent grassland and all the elements of landscape, which constitute wild nature refuge, so called natural land (wetlands, hedgerows, field boundaries, peat bogs, etc.).

Level of payment:

“Sustainable farming” (Code: S01) - 160 PLN/ha per year.

Justification of aid amount:

- genetic potential of plants and the soil quality²¹ indicate that the optimal level of fertilisation is on average 170 kg N/ha, what allows the increase of Standard Gross Margin (SGM) value by 157 PLN/ha in relation to the average SGM – 1144 PLN/ha. Therefore, 20 kg N reduction of fertilisation has to be compensated by relevant amount of money;
- cost of soil analysis that is prepared every 5 years²²;
- cost of nutrient balance that is prepared every year.

¹⁹ The dose of N/ha per year always concerns a general amount of fertilizer originating from natural fertilizers, compost and mineral fertilizers.

²⁰ The table of LU equivalents is given in Annex E.

²¹ Jadczyzyn T. 2000; The principles of fertilizer recommendations. Fertilizer and Fertilization, 4:185-206.

²² The first analysis must be made before the start of the contract

Income foregone calculation of payments for Sustainable farming (Code: S01)

	Undertaken activities	Losses (PLN/ha)	Gains (PLN/ha)
	Extra costs		
1.	Soil analysis (done before the start of the commitment, every 5 years repeated) – PLN 120/5	24	
2	Cost of preparation of nutrient balance for average size of farm (150 PLN divided by 8 ha – average size of farm in Poland)	19	
	Lost income		
3	Reduction of fertilisation by 20 kg N/per ha	157	
	Cost saved		
4	Reduction of fertilisers' cost (20 N kg x PLN 1.22)		34
	Total	196	34
Income change		162	
Exchange rate PLN/EUR		4.7029	
SUGGESTED PAYMENT RATE		PLN 160	
		EUR 34.02	

Payments for that package will be a subject of the following reduction:

Area (ha)	Payments for system packages
0 – 50	100% compensation for a farm of ≤ 50 hectares
50- 100	50% compensation for the successive 50 hectares
100 – 300	25% compensation for the successive 200 hectares
above 300	5 % compensation for the successive hectares

Package: ORGANIC FARMING (Code: S02)

Definition: organic farming includes farms being in their conversion to organic farming as well as organic farms which have valid certificate issued by an authorized certification unit in accordance with the rules on organic farming, namely with the Act on Organic Farming of 20th April 2004 (O. J. of 2004, No 93, it. 898) with relevant executive regulations.

Goal: Support of organic farming development

Minimum eligible area: a holding including 1 ha of agricultural utilised land

Usual good farming practice:

See Annex K

Requirements for the package:

Farm management in accordance with agri-environmental plan, mapped on the farm plan in the scale 1:5000, or other scale available;

Conducting agricultural production in accordance with the rules stipulated in the Law on Organic Farming and implementing provisions compatible with the Council Regulations (EC) No 2092/92 and 1804/99.

Maintenance, within the holding, of permanent grassland and all the elements of landscape, which constitute wild nature refuge, so called natural land (wetlands, hedgerows, field boundaries, peat bogs, etc.). Departure is acceptable only in justified cases and on condition that minimum 3% of natural lands is to be maintained.

Level of aid for S02 package options:

The level of aid for organic farming package has been differentiated depending on the kind of crop, in division to: agricultural crops (e.g.cereals, potatoes, and oilseeds), grasslands and vegetable crops (e.g.cabbage, onions, carrots, beetroots, cucumbers, tomatoes, cauliflowers, herbs) as well as fruit crops and berry plantations.

„Non-certified arable crops – in conversion period” (Code: S02a01) – 680 PLN/ha;

„Certified arable crops” (Code: S02a02) – 600 PLN/ha;

„Non-certified permanent grassland – in conversion period” (Code: S02b01)- 330 PLN/ha;

„Certified permanent grassland ” (Code: S02b02)- 260 PLN/ha;

„Non-certified vegetable crops – in conversion period ” (Code: S02c01) -980 PLN/ha

„Certified vegetable crops ” (Code: S02c02)- 940 PLN/ha;

„Non-certified fruit crops and berry plantations – in conversion period” (Code: S02d01) – 1800 PLN/ha;

„Certified fruit crops and berry plantations” (Code:S02d02) – 1540 PLN/ha.

In case the livestock production balances with vegetal production – the level of payment amount may be increased by 20%.

Justification of aid amount:

- Lower Standard Gross Margin SGM, resulting from resignation from mineral fertilizers’ and pesticides’ application, amounts from 15% up to 45% depending on the type of production and phase of farm conversion;
- Saving in means of productions based on direct costs in conventional farms;
- Additional cost of manure application – manure spreader
- Additional costs of hand labour and technical equipment due to mechanical vegetation protection, compared with conventional farms.

Income foregone calculation of payments for Organic farming *Non-certified arable crops* – in conversion period (Code: S02a01)

	Undertaken activities	Cost (PLN/ha)	Benefit (PLN/ha)
	Income foregone		
1	20% of crop value losses PLN 2016 x 20%	332	
2	manure application – manure spreader (55PLN x 6man-workin-hours)	330	
	Savings in costs		
3	Savings in means of production amounting 13.6% of Standard Gross Margin in conventional farms (PLN 1177/ha x0.136)		156
	Additional costs		
4	Additional labour input 20 man hours x PLN 7.0	140	
5	Greater consumption of fuel due to mechanical protection against weed	34	
	Total	836	156
	Income change		680
	Exchange rate PLN/EUR		4.7029
	SUGGESTED AMOUNT OF PREMIUM (100%)		PLN 680
			EUR 144.59

Income foregone calculation of payments for Organic farming *Certified arable crops* (Code: S02a02)

	Undertaken activities	Cost (PLN/ha)	Benefit (PLN/ha)
	Income foregone		
1	15% crop value losses PLN 1659 x 15%	249	
2	manure application – manure spreader (55PLN x 6man-workin-hours)	330	
	Savings in costs		
3	Savings in means of production amounting 13.6% of Standard Gross Margin in conventional farms (PLN 1144/ha x0.136)		156
	Additional costs		
4	Additional labour input 20 man hours x PLN 7.0	140	
	Greater consumption of fuel due to mechanical protection against weed	34	
	Total	753	156
	Change input		597
	Exchange rate		4.7029
	SUGGESTED AMOUNT OF PREMIUM (100%)		PLN 600
			EUR 127.58

Income foregone calculation of payments for Organic farming *Non-certified and certified permanent grassland* (Code: S02b01 and S02b02)

	Undertaken activities	Cost (PLN/ha)	Benefit (PLN/ha)
	Income foregone		
1	Hay yield lower by 20dt x PLN 24	480	
	Savings in costs		
2	Savings in fertilization costs 87.4 kg of pure NPK ingredient		149
Total		480	149
Change input		331	
Exchange rate PLN/EUR		4,7029	
SUGGESTED AMOUNT OF PREMIUM (in conversion period 100%)		PLN 330	
		EUR 70.17	
SUGGESTED AMOUNT OF PREMIUM (with certif. 80 %)		PLN 260	
		EUR 55.28	

Income foregone calculation of payments for Organic farming *Non-certified vegetable crops – in conversion period* (Code: S02c01)

	Undertaken activities	Cost (PLN/ha)	Benefit (PLN/ha)
	Income foregone		
1	20% crop value losses PLN 8756 x 20%	1751	
	Savings in costs		
2	Savings in means of production amounting 22.3 % of Standard Gross Margin in conventional farms (PLN 6254/ha x0.23)		1438
	Additional costs		
3	Additional labour input 90 man hours x PLN 7	630	
4	Greater consumption of fuel due to mechanical protection against weed	34	
Total		2415	1438
Change input		977	
Exchange rate PLN/EUR		4,7029	
SUGGESTED AMOUNT OF PREMIUM (100%)		PLN 980	
		EUR 208.38	

Income foregone calculation of payments for Organic farming *Certified vegetable crops*
(Code: S02c02)

	Undertaken activities	Cost (PLN)	Benefit (PLN)
	Income foregone		
1	15% crop value losses PLN 8756 x 15%	1313	
2	manure application – manure spreader (55PLN x 6man-workin-hours)	330	
	Savings in costs		
3	Savings in means of production amounting 23.3% of Standard Gross Margin in conventional farms (PLN 6254/ha x0.23)		1438
	Additional costs		
4	Additional labour input 100 man hours x PLN 7	700	
5	Greater consumption of fuel due to mechanical protection against weed	34	
Total		2369	1438
Change input		939	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM (100%)		PLN 940	
		EUR 199.88	

Income foregone calculation of payments for Organic farming *Special crops in conversion period, Non-certified fruit crops and berries plantation*
(Code: S02d01)

	Undertaken activities	Cost (PLN/ha)	Benefit (PLN/ha)
	Income foregone		
1	50% crop value losses PLN 7394 x 50%	3697	
	Savings in costs		
2	Savings in means of production amounting 45% of Standard Gross Margin in conventional farms (PLN 4621/ha x0.45)		2079
	Additional costs		
3	Greater consumption of fuel due to mechanical protection against weed	60	
4	Additional labour input 17 man hours x PLN 7	119	
Total		3876	2079
Change input		1797	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM (100%)		PLN 1800	
		EUR 382.74	

Income foregone calculation of payments for Organic farming *Special crops, Certified fruit crops and berries plantation* (Code: S02d02)

	Undertaken activities	Cost (PLN/ha)	Benefit (PLN/ha)
	Income foregone		
1	45% crop value losses PLN 7394 x 45%	3327	
	Savings in costs		
2	Savings in means of production amounting 45% of Standard Gross Margin in conventional farms (PLN 4621/ha x0.45)		2079
	Additional costs		
3	Greater consumption of fuel due to mechanical protection against weed	60	
4	Additional labour input 33 man hours x PLN 6	231	
Total		3618	2079
Change input		1539	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM (100%)		PLN 1540	
		EUR 327.46	

Payments for that package will be a subject of the following reduction:

Areal (ha)	Premie za pakiety systemowe
0 – 100	100% compensation for a farm of ≤ 100 hectares
100.01 - 300	50% compensation for the successive 200 hectares
above 300	10 % compensation for the successive hectares

Package: MAINTENANCE OF EXTENSIVE MEADOWS (Code: P01)

Variant 1: Semi-natural single-swath meadows (Code: P01a)

Definition: Single-swath meadows comprise meadow moors (sedge- and moss-covered areas), moist litter meadows, and thermophilous meadows of low value as far as fodder, but of high importance due to specific type of ecosystem and rare plant species. These plant communities are important nesting and feeding places for birds (ruff, great snipe, and aquatic warbler); moreover, they significantly contribute to the increase of water retention. Traditional management of these habitats included mainly mowing once a year or more rarely, sometimes connected with extensive grazing. The majority of sites are small and prone to management neglect, therefore presently, fens are threatened with abandonment and conversion into woodland and scrub communities.

Goals:

- To retain or increase botanical diversity;

- To support bird and invertebrates species endangered with extinction.

Usual good farming practices:

See Annex K.

Requirements for the variant P01a:

- Prohibition of practices such as: ploughing-in, rolling, construction of new irrigation systems, fertilisation, sludge wastes, use of pesticides and sowing extra seeds of grass in order to keep the characteristic features of habitat and plant composition;
- Grazing is possible by livestock density up to 0.5 LU/ha;
- Date of mowing not earlier than 1 July (15th August for moist litter meadows);
- Mowing by hand or by means of light equipment and removal of hay;
- Maintenance of a proper mowing technique, e.g. from the middle to the outskirts, allowing hatching birds, their nestlings or mammals (hare, deer, fox, raccoon dog) to escape, as well as use of so called ‘shooing devices’

Level of payment:

Semi-natural single-swath meadows – hand mowing (Code: P01a01) – PLN 1030/ha

Semi-natural single-swath meadows – mechanical mowing (Code: P01a02) – PLN 400/ha

Justification of aid amount:

- Reintroduction of traditional way of management causes;
- Additional cost of manual and mechanical mowing annually;
- Use of so called ‘shooing devices’ and meadow’s mowing from the middle to the outskirts
- Additional cost concerning manual collection of hay on canvas or during winter - by means of a tractor;

Income foregone calculation of payments for *semi-natural single-swath meadows hand mowing* (Code: K01a01)

	Undertaken activities	Losses (PLN/ha)	Gain (PLN/ha)
	Additional costs		
1	Cost of mowing with hay collection: the total of PLN 1120: - manual mowing PLN 400/ha - collecting hay into haycocks PLN 150/ha - preparation for transport – arranging of haycock into stacks PLN 250 - removal of hay – PLN 320/ha	1120	
	Extra income		
2	Value of hay for bedding 20 dt/ha x PLN 4.5		90
	Total	1120	90
	Income change		1030
	Exchange rate EUR/PLN		4.7029
	SUGGESTED PAYMENT RATE		PLN 1030
			EUR 219.01

Income foregone calculation of payments for *semi-natural single-swath meadows mechanical mowing* (Code: K01b02)

	Undertaken activities	Losses (PLN/ha)	Gains (PLN/ha)
	Additional Costs		
1	Mechanical mowing once a year from the middle (2,5 h x PLN 95 /h)	237,5	
2	Removal of mown grass – mechanically self-charging cart (2h x PLN 83 /h) rake (1h x PLN 42)	208	
3	Additional cost of mowing concerning the use of shoeing devices	44	
	Extra income		
4	Value of hay for bedding (20 dt/ha x PLN 4,5PLN /dt)		90
Total		489,5	90
Income change		399,5	
Exchange rate PLN/EUR		4.7029	
SUGGESTED PAYMENT RATE		PLN 400	
		EUR 85.05	

Package: SEMI-NATURAL DOUBLE-SWATH MEADOWS (Code: P01b)

Definition: This category is targeted at semi-natural lowland and mountain meadows in wet, moist and dry habitats, which are rich in plant and associated animal life. They occur in naturally fertile habitats or in sites improved by moderate drainage and fertilisation and comprise spontaneous plant communities only, excluding those with artificially introduced species-mixtures. In lowlands and in lower mountains, of particular importance are rye-grass meadows, occurring in moderately moist habitats as well as marsh-marigold meadows in wet habitats and in the zones exposed to long-lasting floods. On sub alpine forest glades in the Carpathian region (up to 600 m a.s.l and above) the most valuable are gladiolus-bent meadows with crocuses. A lot of valuable bird species inhabit double-swath meadows, especially in the lowlands.

Management importance and existing threat:

- Mowing twice-a-year, extensive rotary use (mowing-grazing);
- Double-swath lowland meadows are targets for agricultural improvement and intensification of production – lowering of the groundwater level, change of mowing dates to earlier deadlines, ploughing and sowing with grass mixes, intensive fertilizing and grazing, and even transformation into arable area. All this leads to the decrease of local species diversity;
- Double-swath mountainous meadows suffer from management neglect and as a consequence changes of habitat features. Number of such meadows have declined markedly in recent years due to decrease of sheep herds.

Goal:

To maintain and enhance the species-richness of meadows and to protect rich fauna communities through a continuation of extensive forms of management.

Usual good farming practices:

See Annex K.

Requirements for Variant P02a:

- Prohibition of practices such as: ploughing, rolling, construction of new drainage, sludge wastes application, and sowing extra seeds of grass in order to keep the characteristic botanic diversity;
- The use of pesticides and herbicides will be prohibited. Where it is considered invasive weeds (thistle, nettle, dock) may be controlled by spot treatment with herbicide.
- Limited fertilization with nitrogen in the amount not exceeding 60 kg/ha per year and/or lime may be applied, except meadows exposed to floods;
- In the case of mowing-grazing type of use, controlled grazing by quarters (e.g. portable electric fence) or free grazing, after the first or second swath by maximum livestock density up to 1.0 LU/ha, which shall allow for avoiding the destruction of the surface of the utilized area and the decay of precious species;
- Delay of the first swath till 1st July;
- The use of so called shoeing devices, i.e. special chains fastened in front of the tractor (in front of the mowing device) and maintenance of a proper mowing technique, i.e. mowing from the middle to the outside;

Level of payment:

Semi-natural double-swath meadows (Code: P01b) - PLN 880/ha per year

Justification of aid amount:

- The reduction of fertilisation use on a typical meadow will be 60 kg of nitrogen per hectare;
- Giving up the use of practices increasing the habitat productivity and limited use of yield stimulating agents results in a lowering of yield by 40 dt/ha (extensification of production by 20 dt/ha annually and lowering of yield by 20 dt/ha per three years as a result of delayed cutting);
- Costs related to selective destruction of weed (e.g. using herbicide applicators);
- Grazing after the first or second swath, maximum livestock density 1.0 LU/ha;
- Maintenance of a proper mowing technique, the use of so called shoeing devices.

Income foregone calculation of payments for *Semi-natural double-swath meadows* (Code: K02a)

	Undertaken activities	Losses (PLN/ha)	Gains PLN/ha)
	Additional costs		
1	Reduction of yields by 40dt/ha hay, 20dt/ha resulting from delay of mowing and worsening of hay quality. Extra feed costs	960	
2	Selective noxious weed control (e.g. with the use of weed applicator).	44	
3	Additional cost of first mowing connected with the use of shoeing devices	44	

	Undertaken activities	Losses (PLN/ha)	Gains PLN/ha)
	Savings in costs		
4	Savings in fertilisation by 60 kg x 1.7 PLN		102
5	Savings in operation costs 72 PLN (1.17 -1.0 LU x PLN 1012/2 * 74%) ²³		64
	Total	1048	166
	Income change	882	
	Exchange rate PLN/EUR	4.7029	
	SUGGESTED PAYMENT RATE (100%)	PLN 880	
		EUR 187.12 EUR	

Package: MAINTENANCE EXTENSIVE PASTURES (Code: P02)

Definition: Activities include the use of low-input grazing as the main way of land management on semi-natural habitats, traditionally managed as pastures: xerothermic grasslands (Variant P02a) as well as utilized lowland and mountain land on wet and moist sites (variants P02b and P02c). Xerothermic grasslands count as the richest communities of fauna and flora in Poland, including a lot of rare species, in that numerous plants typical of steppe-zone, threatened with extinction in Poland, e.g. spring Adonis (*Adonis vernalis*), St. Bernard's lilly, various species of esparto grass. They occur mainly in highlands and rarely in lowlands and mountains, in dry lime, gypsum and loess habitats. The valuable lowland pastures, located in river valleys, on mineral soils, include, e.g. grasslands with darnel (*Lolium*) and dog's –tail grass (*Cynosurus cristatus*). In the case of mountain pastures the protection of e.g. plant community of dog's –tail grass (*Cynosurus cristatus*) and red fescue is advisable. Pastures used extensively feature high species-richness, sometimes including sedges and clusters of rushes, shrubs and trees. They have considerable landscape assets, they are valuable birds' and insects' habitats, due to numerous papilionaceous plants growing there.

Management importance and existing threat:

This package is targeted at meadows where grazing by livestock is a principal method of management.

- Extensive lowland pastures face the risk of intensification; overgrazing leads to the non-favourable transformation from the point of biodiversity of pastures and to the destruction of bird nesting places;
- Mountain pastures are threatened because of the risk of being neglected as a result of human migrations from countryside and the reduction of grazing herds. Xerothermic grasslands are also prone to wind erosion.

Goals:

- To enhance and maintain rich in plants pasture communities with valuable botanic and fauna assets, located in wet, moist and dry habitats.
- To promote positive management of pastures: in case of lowland pastures - to avoid overgrazing and the transformation into intensive pastures or arable land, whilst in case of mountain and xerothermic pastures - to re-introduce livestock management;
- To protect valuable bird habitats.

²³ Revenue – direct costs = Standard Gross Margin (SGM). SGM contains the fixed costs, which stands for 74 % of SGM (as it results from the agronomic calculation of Institute of Agricultural Economics and Food Economy).

Usual good farming practices:

See Annex K

1st Variant: Pastures on xerothermic grasslands (Code: P02a)

- Prohibition of practices such as: ploughing-in, rolling, construction of new drainage and the application of fertilisers, lime, sewage, herbicides or pesticides and sowing extra seeds grass in order to keep the characteristic features of plant composition
- Where it is considered essential to maintain the environmental interest of the land limited amount of lime may be used or invasive weeds (thistle, nettle, dock) may be controlled by spot treatment with herbicide;
- Free grazing with permanent supervision with livestock density of sheep, goats and cows up to 0.5 LU/ha.
- Provision of watering places on pastures and systematic supply of water if it is impossible to organize portable drinking bowls for the grazing animals;

Level of aid amount:

„Pastures on xerothermic grasslands” (Code: P02a) – PLN 300 /ha

Justification of premium amount:

- On neglected sites the re-introduction of store cattle /or sheep will result in extra cost associated with tending animals, labour, transport;
- Pastures where grazing is being re-introduced usually characterise low pasture quality and as a consequence low productivity of animals;
- The limiting of weed control to hand weed appliers will incur additional costs.

Income foregone calculation of payments for Pastures on xerothermic grasslands (Code: P02a)

	Undertaken activities	Losses (PLN)	Gains (PLN)
	Extra costs		
1	Water supply PLN 154/8 ha	19	
2	Costs of delivery of animals to pasture (150days x 0.5man-working-hour x PLN 7)/8 ha	66	
3	Limited weed control by means of hand appliers	44	
4	Supervision of free rearing animal (150 days x 5 man-working –hour x PLN 7/8 ha)	656	
	Extra income		
5	Income from fattening of 0.5 LU/ha x PLN 1012		506
6	Value of hay for bedding 20 dt/ha x PLN 4.5 /3		30
	Total	785	536
	Income change	249	
	Exchange rate PLN/EUR	4.7029	
	SUGGESTED PAYMENT RATE (120%)	PLN 300	
		EUR 63.79	

2nd Variant: Lowland pastures (Code:P02b)

Requirements for option: Lowland pasture with traditional grazing (Code: P02b01)

- Prohibition of practices such as: ploughing-in, rolling, sludge wastes application, construction of new drainage and sowing extra seeds in order to keep the characteristic features of plant composition;
- Limited fertilization with nitrogen from all sources in the amount up to 60 kg/ha/year of in divided doses;
- Grazing season from 20 May till 15 October. On areas exposed to floods grazing periods shall be adjusted to specific conditions, not earlier than two weeks following water descent;
- Grazing shall include cattle, horses or sheep (as well as other animals, if only it is in line with the implementation of environmental goals); livestock density limited to 1.0 LU/ha
- Only selective and local noxious weed control (e.g. using herbicide appliers);
- Where it is reasonable, horse grazing can carry on during whole year.

Level of aid amount:

„Lowland pastures with traditional grazing” (Code: P02b01) – PLN 400 /ha

Justification of premium amount:

- Lost income due to reduction of livestock density to 1.0 LU/ha
- Additional costs related to hand and selective weed control (e.g. using herbicide appliers).

Income foregone calculation for Lowland pastures with traditional grazing (Code: P02b01)

	Undertaken activities	Losses (PLN)	Gains (PLN)
	Income lost		
1.	Gross margin foregone due to limitation of livestock density (1.17LU-1LU) x PLN 1665	283	
	Additional costs		
2	Additional cost of using herbicide appliers	44	
Total		327	
Income change		327	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM (120%)		PLN 400	
		EUR 85.05	

3rd Variant: Mountainous pastures (Code: P02c)

Requirements for variant P02c

- Prohibition of practices such as: ploughing-in, rolling, construction of new drainage and the application of lime, sludge, herbicides or pesticides and sowing extra seeds in order to keep the characteristic features of plant composition; where it is considered essential to maintain environmental interest of the land, limited quantities of lime may be applied and invasive weeds controlled by spot treatment with herbicide;
- Fertilization with nitrogen from all the sources in the amount up to 60 kg/ha/year;

- Grazing shall include cattle, horses or sheep (as well as other animals if only it is agreed with an advisor and if it is in line with the implementation of environmental goals);
- Grazing season from 20 May at least 90 days;
- Provision of drinking water places on pastures and systematic supply of water if it is impossible to organize portable drinking bowls for the grazing animals;
- Rotary grazing or with permanent supervision over animals, with livestock density 1.0 LU/ha of pasture;
- Use of not more than 75% of sward depending on the type of pasture and botanic composition, the remaining 25% left out as scrap grass;
- Mowing of grass scraps in July-August and removal of biomass;
- Only selective and local noxious weed control is allowed (e.g. using herbicide appliers).

Level of aid amount:

„Mountainous pastures 350-500 m asl.” (Code: P02c01) – PLN 230/ha

„Mountainous pastures above 500 m asl.” (Code: P02c02) – PLN 560/ha

Justification of aid amount:

- On neglected sites the re-introduction of store cattle and/or sheep will result in extra cost associated with tending animals, transport, supervision of free rearing animals and setting up of enclosure to keep animals during the night in area above 500 m asl.;
- Pastures where grazing is being re-introduced usually characterise low pasture quality due to difficult mountainous condition and low agriculture quality and as a consequence low productivity of animals
- Fattening of 1LU in mountainous regions of altitude 350 till 500 m asl = 0.5 LU in lowland regions) in terms of SGM (production conditions more difficult for the reason that the growth rate of animal is lower;²⁴)
- Fattening of 1LU in mountainous regions of altitude above 500 m asl = 0.3 LU in lowland regions;
- Costs related to selective hand weed control (e.g. using herbicide appliers);
- Cost of mowing grass scraps and removal of biomass;
- The increase of agro-technical costs as well as the costs of pasture use depending on the height above sea level - by 20% as relates to areas located 350-500 m asl, by 40% as relates to the locations above 500 m asl.

Income foregone calculation for Mountainous Pastures 350-500 m asl (Code: P02c01)

	Undertaken activities	Losses (PLN)	Gains (PLN)
	Extra costs		
1	Costs of delivering animals to pasture (90d x 0,5man-workin-hours x PLN 7/8 ha)	39	
2	Water supply (PLN 185/8 ha)	23	

²⁴ Kostuch 1976. “Przyrodnicze podstawy gospodarki łąkowo-pastwiskowej w górach” (The natural basis of meadow-pastoral management in mountains), PWRiL as well as data of expert knowledge from Sheep Breeders Association

	Undertaken activities	Losses (PLN)	Gains (PLN)
3	Additional labour costs: supervision of free rearing (90 days x 6 man working-hours x PLN 7/8 ha) ²⁵	473	
4	Costs of mowing grass scraps	107	
	Additional cost of using herbicide appliers	53	
5	Extra income		
6	Fattening of 0.5 LU/ha x PLN1012		506
Total		695	506
Income change		189	
Exchange rate PLN/EUR		4.7029	
SUGGESTED PAYMENT RATE (120%)		PLN 230	
		EUR 48.91	

Income foregone calculation for Mountainous Pastures over 500 m asl (Code: P02c02)

	Undertaken activities	Losses (PLN)	Gains (PLN)
	Extra costs		
1	Additional cost of using herbicide appliers	62	
2	Water supply (PLN 215/8 ha)	27	
3	Additional labour costs: supervision of free rearing (90 d x 6 man working-hour PLN 7/8 ha)	473	
4	Additional labour costs: setting up of enclosure to keep animals during the night as a protection against wolves (PLN 245/8 ha)	31	
5	Cost of mowing grass scraps	185	
	Extra income		
5	Fattening of 0.3 LU x 1012 PLN		304
Total		778	304
Income change		474	
Exchange rate PLN/EUR		4.7029	
SUGGESTED PAYMENT RATE (120%)		PLN 560	
		EUR 119.08	

Package: SOIL EROSION AND WATER PROTECTION (Code: K01)

1st Variant: Catch crop undergrown (Code: K01a)

Definition: Stubble with supplementary crops of grasses maintained on the fields in winter prevents erosion, limits surface leaching of bio-genes from fields to waters, and facilitates the increase of the contents of organic matter in soil. Leaving stubble for winter is also significantly important for wintering birds' populations as source of feed.

²⁵ Free rearing animals is the traditional type of management

Management importance :

- Supplementing grass into growing winter crop or together with sowing spring crop prevents erosion
- Reduction of nutrient leaching to water;
- Increased organic matter in soil.

Goals:

- To improve soil culture;
- To reduce nitrogen wash from fields to surface and ground waters;
- To provide breeding and foraging opportunities for birds (eg. skylarks, corn bunting) and brown hare.

Minimum eligible area: 1 ha in total on farm, applied on the whole field.

Usual good farming practices:

See Annex K;

Requirements for package K01a:

- Sowing –in supplementary crop into growing winter crop or together with sowing summer crop. Maintenance on the fields in winter;
- Post-harvest removal of straw from the whole field in order to facilitate natural regeneration of grass and green plants;
- Use of manure, if necessary;
- Only reduced use of pesticides – for local and selective control of weeds, if appropriate;
- Grazing allowed by livestock density up to 0.4 LU/ha;
- The undergrowns has to be ploughed-in, with the exception of the no-tillage cultivation system;
- Cultivation may be re-started after 1st March;
- The use of this measure on different fields in a farm within 5 years.

Level of payment proposed:

“Catch crop undergrown” - PLN 330/ha per year

Justification of aid amount:

- Extra costs are associated with grass seed and its application;
- Income loss resulting from lower yields due to supplementary crop (catch crop undergrown);
- Savings resulting from giving up fertilization and reduction of N dose for successive crop;
- Increase of soil culture value.

Income foregone calculation of payments for *Catch crop undergrown* (K01a):

	Undertaken activities	Losses (PLN)	Gains (PLN)
	Income forgone		
1.	Lower standard gross margin from crops by 20 % x PLN 1144 (lower yields due to supplementary crop)	229	

	Undertaken activities	Losses (PLN)	Gains (PLN)
	Additional costs		
2.	Cost of grass seed (15 kg/ha x PLN 6)	90	
3	Additional cost of supplementary sowing of grass (PLN 55x1.5h)	82	
	Extra income		
4	Improvement of the value of soil culture in the following year 3% x PLN 1144		34
5	Reduction of nitrogen dose for successive crop 20 kg x 1.7		34
Total		401	68
Income change		333	
Exchange rate PLN/EUR		4.7029	
SUGGESTED PAYMENT RATE		PLN 330	
		EUR 70.17	

2nd Variant: Winter intercrop (Code: K01b) and Stubble intercrop (Code: K01c)

Definition: Winter and stubble intercrops left on the surface of the field in the period of autumn and winter until spring. On the area exposed to erosion and increased surface wash of nutrients it is advisable to undertake activities improving biological properties of soil, increasing the level of soil coverage with plants, increasing botanic diversity of regions dominated by arable fields.

Goals:

- Improved biological properties of soil;
- Increased level of soil coverage with plants – anti-erosion activities;
- Propagation of good practice aiming at the reduction of water pollution by nitrate of agricultural origin, as well as good practice leading to the improvement of soil culture.

Usual good farming practices:

See Annex K:

Requirements for Variant K01b and K01c:

- Giving up of using mineral, organic and lime fertilizers, except manure, if applicable;
- During winter, 33% of a given farm's arable land shall be covered with plants;
- Depending on the relief and cultivated crop species, sowing of a field in one of the variants: stubble intercrop (mustard, serradella, phacelia), winter intercrop (mixture of vetch and rye or rye alone);
- All intercrops have to be ploughed-in, with the exception of the no-tillage cultivation system;
- Sowing period: the deadline is 30th September;
- Cultivation activities may be re-started after 1st March.

Level of payment proposed for package K01b and K01c:

“Winter intercrop” (Code: K01b) – PLN 570/ha

„Stubble intercrop” (Code: K01c) - PLN 520/ha

Justification of premium amount:

- Costs related to the purchase of seed, and sowing-related activities;
- Loss of income resulting from the reduction of yield of successive plant by 30% (as results from agronomic knowledge);
- Savings resulting from the reduction of fertilizer doses, improvement of soil culture quality, and the reduction of N dose for successive crop;
- Additional income from green fodder yield.

Income foregone calculation of payment for *winter intercrop* (Code: K01b)

	Undertaken activities	Losses (PLN/ha)	Gains (PLN/ha)
	Income forgone		
1.	Lower standard gross margin from successive plant by 30% (1144x0,3) ²⁶	343	
	Additional costs		
2.	Seeds of mustard, serradella (or phacelia), rape, radish	143	
3.	Cost of cultivation and sowing activities (skimming + sowing)	177	
	Extra income		
4.	Savings in fertilizers 20 kg N/ha x PLN 1.7		34
5.	Increase of income due to improvement of soil culture in the following year 5% x PLN 1144		57
Total		663	91
Income change		572	
Exchange rate		4.7029	
SUGGESTED PAYMENT RATE		PLN 570	
		EUR 121.20	

Income foregone calculation of payment for *stubble intercrop* (Code:K01c)

	Undertaken activities	Losses (PLN)	Gains (PLN)
	Income forgone		
1.	30% lower Standard Gross Margin from successive plant	343	
	Additional costs		
2.	Costs of sowing-related works (skimming + sowing + ploughing)	300	
3.	Seed (vetch +rye)	120	
	Extra income		
4.	Increase of income due to the improvement of soil culture in the following year 3% x PLN 1144		34
5.	Value of green fodder 40 dt/ha x PLN 4,3		172
	Costs saved		
6.	Savings in fertilizers (reduction of N dose by 20 kg/ha x PLN 1.7)		34
Total		763	240
Income change		588	
Exchange rate PLN/EUR		4.7029	
SUGGESTED PAYMENT RATE		PLN 520	
		EUR 110.57	

²⁶ According to the agro-economic knowledge, the SGM loss from successive plant accompanying intercrop is higher than in case of the catch crop underplant (Institute for Soil Cultivation and Fertilisation)

Package: BUFFER ZONES (Code: K02)

Definition: Sod-covered 1 or 2-meter buffer zones established along water courses (mainly ditches and streams carrying water at least 9 months in a year) and small water reservoirs. Buffer zones of an average width of 5 (five) metres are established on intensive and converted meadows, along melioration ditches, streams, ponds, springs, small water reservoirs or valuable habitats, e.g. peat-bogs. The width of the zone is counted from the bank of a water course or reservoir. They are established on arable land or on intensive meadows if the reservoirs have insufficient cover or no cover at all.

Field boundaries such as sod-covered bands should be established within big fields.

Goals:

- In the case of buffer zones the main goal is to avoid surface water contamination in open water courses, carrying water at least 9 months in a year;
- The goal of establishing field boundaries is to prevent erosion of arable land and increase bio-diversity of agricultural area.

Usual good farming practice:

see Annex K;

Minimum length: 50 m

Requirements for package K02:

- Maintenance of existing buffer strips along water courses.
- The use of fertilizers and chemical pesticides is forbidden:
- Establishment of relevant buffer zone, dividing a field from the edge of ditch slope or a boundary dividing a greater part of the field through sowing a specially selected mixture of grasses.
- In order to eliminate the development of undesirable plants in the course of zone formation it will be mown;
- After reaching a target state, the zone shall be mown once a year, not earlier than 15th July;
- If a zone under protection neighbours permanent grassland, on which animals graze, it should be enclosed in order to protect slopes against destruction and direct access of animals to water;
- Establishment of field boundaries through set up of relevant width bands and sowing them with a proper grass mixture with the addition of herbs used for honey production.

Level of payment proposed:

“Buffer zones or field boundaries” for poor soils (bonitation equivalent: up to 0.85) (K02a)- PLN 1070 /ha per year

“Buffer zones or field boundaries” for good soils (bonitation equivalent: 0.86 and above) (K02b)- PLN 1580/ha per year

In relation to buffer zones or field boundaries which are linear features payment is calculated per 100 running meter in following way:

- 1) 2 m zones for poor soils (K02a01)– PLN 18 per 100 running meters;

- 2) 2 m zones for good soils (K02a02) – PLN 26 per 100 running meters;
- 3) 5 m zones for poor soils (K02b01) – PLN 46 per 100 running meters;
- 4) 5 m zones for good soils (K02b02) – PLN 64 per 100 running meters.

Justification of aid amount:

Cost concerning the purchase of seeds and zone establishment.

Lost income from buffer area calculated.

Income foregone calculation of payments for buffer zone or field boundaries for poor soils (bonitation equivalent: up to 0.85) (Code: K02a)

Undertaken activities		Gains (PLN)	
Income lost		1 ha	1 ha
1.	Loss of Standard Gross Margin from 1 ha arable land	1000	
Extra costs			
2.	Costs of seeds 30 kg x PLN 6 /5	36	
3.	Costs of cultivation-related activities (PLN 300 /5 years)	60	
4.	Mowing 154 PLN	154	
Extra income			
5.	Value of hay for bedding (40 dt/ha x PLN 4,5 /dt		180
Total		1250	180
Income change		1070	
Exchange rate PLN/EUR		4.7029	
SUGGESTED PAYMENT RATE		PLN 1070	
		EUR 227.52	

Income foregone calculation of payments for buffer zone or field boundaries for good soils (bonitation equivalent: 0.86 and above) (Code: K02a)

Undertaken activities		Losses (PLN)	Gains (PLN)
Income lost			
1.	Loss of standard gross margin from 1 ha agricultural land	1604	
Extra costs			
2.	Costs of seeds 30 kg x PLN 6 /5	36	
3.	Costs of cultivation-related activities (PLN 300 /5 years)	60	
4.	Mowing 154 PLN	154	
Extra income			
5.	Value of hay for bedding (60 dt/ha x PLN 4.5 /dt)		270
Total		1854	270
Income change		1584	
Exchange rate PLN/EUR		4.7029	
SUGGESTED PAYMENT RATE		PLN 1580	
		EUR 335.96	

Income foregone calculation of payments for buffer zone or field boundaries of different width per 100 running meter of poor and good soils (Code: K02a)

Width of buffer zone (average)	Poor soil PLN/100 running meters	Good soil PLN/100 running meters
2 m	0.02 x PLN 1140 -20% 18	0.02 x PLN 1604 – 20% 26
5 m	0.05 x PLN 1140 – 20% for 2 running meter 46	0.05x PLN 1604 – 20% for 2 running meter 64

Package: PROTECTION OF LOCAL FARM ANIMAL BREEDS (Code: G01)

Definition: Local breeds and varieties of animals are perfectly adjusted to local environmental conditions, sometimes quite harsh ones. Ecological grazing, based on local breeds, shall allow for effective management of semi-natural areas featuring poor feed resources. Local breeds are also of a great importance due to their role in the history of a region’s development, they are bound with tradition and culture of local communities. Local breeds should be propagated especially in the areas in which the tradition of their breeding is still alive. In the initial period of the programmes’ implementation all the breeds and varieties of cattle (Polish red cattle, Polish white-backed), horses (Polish horses, Hucul horses) and sheep (Wrzosowka, Swiniarka, Olkuska, Uhruska, Wielkopolska, Zelaznienska, Kamieniecka, Pomorska, Polish mountain sheep of colourful variety, Colourful merino sheep) covered with population protection breeding programmes in Poland shall be considered. Moreover, Malopolski and Slaski horses are planned for the protection.

Commercial importance and risks:

- Local breeds and varieties of farm animals deserve to be maintained and promoted in the system of extensive production as well as in organic and rural tourism farms, where their use has also non-productive functions, in particular educational ones;
- Preferred breeds and varieties are the ones, low number of which creates a serious danger of extinction.

Goals:

Protection of genetic diversity of farm animals, in danger of being substituted with high productivity breeds;

Minimum number of animals of the same breed in herd: at least 4 cows or 3 mares or 5 Olkuska ewes or 10 of ewes of the remaining breeds, entered in breeding register of farm animals of that breed.

Usual good farming practice:

See Annex K

Requirements for package G01:

- Keeping breeding documentation concerning the herd, making entries about animals in breeding registers.
- Participation at programm of local breed genetic resuorces programme;
- Cattle, horses as well as sheep of the above mentioned breeds may be introduced as supplementary to herds of other breeds or as selected herds;
- Mares should be joined with stallions of the same breed;
- Subsidies shall cover pure-breed animals; only in the case of Polish red cattle 50% share of other red breed genotype is possible.

Level of payment:

- Cattle (Code: G01a) – PLN 1080 /cow-head;
- Horses(Code: G01b) - PLN 1300 /mare-head;
- Sheep (Code: G01c) - PLN 310 /ewe-head;

Justification of aid amount:

- Income forgone resulting from worse production achivements of 1 LU of cattle;
- Additional costs due to animal breeding;
- Income resulting from purchase of breeds;
- The breed standard of Polish red cattle, included in the ‘Breeding programme of conservation of Polish red cattle genetic resources, approved for implementation by the Minister of Agriculture and Rural Development (May 2000) defines annual productivity of a typical cow of this breed at the level of 3200 kg milk. Practically milk productivity of a lot of herds included in the programme reaches 2000-3500 kg.

Income foregone calculation of payment for *cattle breeds* (Code: G01a)

	Undertaken activities	Cost (PLN/unit)	Benefit (PLN/unit)
	Income forgone		
1	Productivity results worse by 58.75% in relation to LU (58.75% x PLN 1665)	978,19	
	Additional costs		
2	Cost concerning the checking a herd’s milk production 2* PLN 50 /year	100	
Total		1078,19	
Income change		1078,19	
Exchange rate		4.7029	
SUGGESTED AMOUNT OF PREMIUM (100%)		PLN 1080	
		EUR 229.65	

Income foregone calculation of payment for *horse breeds* (Code: G01b)

	Undertaken activities	Cost (PLN)	Benefit (PLN)
	Additional costs		
1.	Summer feeding	385	
2.	Winter feeding	907	
3.	Veterinary treatment and medicines	110	
	Income forgone		
4.	Lost standard gross margin 0.7 LU x PLN 1665	1166	
	Extra income		
5.	Income from the sale of 50% from 0.80 of foal		1260
Total		2568	1260
Income change		1308	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM (80%)		PLN 1300	
		EUR 276.43	

Income foregone calculation of payment for *sheep breeds* (Code: G01c)

	Undertaken activities	Cost (PLN/unit)	Benefit (PLN/unit)
	Additional costs		
1.	Cost relating to ewe with a part of ram, lamb	177	
	Income forgone		
2.	Lost standard gross margin 0.1 LU x PLN 1665	166	
	Extra income		
3.	Income from the sale of 90% 1.1 lamb PLN 25 each		30
Total		343	30
Income change		313	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM (100%)		PLN 310	
		EUR 65.92	

Assumptions of methodology of payment calculation for agri-environmental programme

Indicators characterising average economic results of farms, applied as reference level for payment calculations in the agri-environmental programme have been calculated on the basis of:

Polish Central Statistics Office - data for 1999,2000 and 2001.

Data concerning standard gross margin for 2000 are the last data calculated in accordance with the EU regulations – thus, they have been used for calculations as well as data characteristic for income and costs of this period.

Data kept by Institute of Agricultural and Food Economy, obtained as a result of long-term own research on a representative sample of Polish farms.

EUR 1 = PLN 4.7029

Lp	Farm indicators	Data	Source of data
1	Average size of individual farm (ha)		
	Total size (ha)	7.9	GUS
	Size of utilised agricultural land (ha)	7.1	
2	Average livestock density LU²⁷ per 1 ha GPP	1.17	
3	Use of bulky feed per 1 LU/year (dt)		
	Green fodder	91	Farm accountancy
	Green fodder for hay	84	
	Green fodder for silage	13	
	Root plants and folder crops	26	
4	Average livestock density LU per 1 ha GPP²⁸ in difficult conditions	0.71	
5	Standard gross margin for 2000 per 1 ha AL (PLN)	1144	farm accountancy+
6	Standard gross margin for 1 ha AL in difficult conditions (PLN)	841	GUS
7	Standard gross margin for 1 LU (PLN)	1665	(15)
8	Standard gross margin for 1 LU while fattening (PLN)	1062	(9)
9	Average hay yield (dt/ha)	46.5	GUS

The following methodological assumptions have been made:

- The costs of work of agricultural producers and members of their families have been ignored in a situation when the cost, while implementing and conducting agri-environmental schemes, equals the cost of work saved as a result of such implementation;
- Cost of cultivations have been assumed in accordance with IBMEA;
- In packages direct costs equal 74% of standard gross margin amount.

Sources of complementary data

1. Baum R.2000: Przesłanki zrównoważonego rozwoju gospodarstw rolnych, „Roczniki naukowe SERiA”, zeszyt 1, tom 1, Wyd. SERiA, Warszawa – Poznań - Zamość, 36-41

²⁷ LU – Livestock Unit

²⁸ GPP – main fodder area

2. Jaska E. 1999. Porównanie potencjału produkcyjnego i wyników ekonomicznych gospodarstw ekologicznych i konwencjonalnych, (w Porównanie ekologicznych i konwencjonalnych gospodarstw rolnych w Polsce), Wyd. SGGW, 95-100
3. Kuś J. 1999. Efektywność różnych systemów produkcji roślinnej, Zeszyty naukowe SGGW, Wyd. SGGW, 37, 159-168
4. Kuś J. 1997: Wstępne porównanie trzech systemów produkcji roślinnej, Roczniki Akademii Rolniczej w Poznaniu, Poznań , 119-126
5. Majewski E., Łąbetowicz J., Radecki A., Skomiał J., Straszewski S. 2000. Koncepcja systemu płatności z tytułu realizacji programów ochrony środowiska w gospodarstwie rolniczym. Maszynopis.
6. Majewski E. 1996: Doświadczenia i wnioski z pilotowego programu wdrożenia Integrowanej Produkcji. Mat. konf. nt. Integrowana Produkcja w Polsce i w wybranych krajach europejskich, Wyd. Fundacja Rozwój SGGW, Warszawa:65-75.
7. Metera D., Bednarek A. 1995: Aktualny stan handlu produktami ekologicznymi w Polsce. Ekologiczne i integrowane rolnictwo w Polsce, Wyd. Fundacji Rozwoju SGGW, Warszawa:150-169.
8. Muzalewski A. 1999, 2000, 2001. Koszty eksploatacji maszyn. IBMER, Warszawa.
9. Niewęglowska G. 2000, 2001, 2002. Mały poradnik zarządzania gospodarstwem rolniczym. Wyd. IERiGŻ, Warszawa.
10. Rocznik statystyczny Rzeczypospolitej Polskiej. 1999, 2000, 2001 Warszawa, wyd. GUS.
11. Runowski H. 1999. Organizacyjno-ekonomiczne aspekty rolnictwa ekologicznego. Wyd. SGGW Warszawa.
12. Rynek owoców i warzyw. 1999, 2000, 2001. Wyd. IERiGŻ. Warszawa.
13. Rynek środków produkcji i usług dla rolnictwa. 1999, 2000, 2001. Wyd. IERiGŻ. Warszawa.
14. Ryszkowski L., Bałazy S., Jankowiak J., Hołodyńska I.; 2000: Ocena potrzeb zadrzewieniowych w Polsce i określenie zasad ich kształtowania w aspekcie programów rolno-środowiskowych, maszynopis.
15. Skarżyńska A., Augustyńska I. 2000: Koszty jednostkowe i dochodowość produkcji rolniczej w gospodarstwach indywidualnych w 1999, 2000, 2001r. Wyd. IERiGŻ, Warszawa .
16. Woś A. 1992: Rolnictwo zrównoważone. Zagadnienia ekonomiki rolnej. Z 1-3, KERR PAN, IERIGŻ, 9-21
17. Wyniki rachunkowości rolnej gospodarstw indywidualnych 1998, 1999, 2000, 2001 Praca zbiorowa Zakładu Rachunkowości Rolnej IERiGŻ, wyd. w IERiGŻ, Warszawa.

ANNEX M. Approximate composition of the forest tree species to be introduced on the agricultural land under Measure 5 of the Rural Development Plan

Soil quality class	Intended forest stand type	Composition	Nature and forest region
Poorest and extremely dry areas with VI Class soil	Dry coniferous forest (DCF)	SP 80; BI, BA, MA, and other 20	I-VI
VI Class soil	Fresh coniferous forest (FCF)	SP 60-80; BI 10-20; SO, BE, LM, HB, and other 10-20	I, IV, VI
		SP 60-80; NS, L 10-20; BI, SO, LM, HB, and other 10-20	II, III, V, VIII
V Class soil	Fresh mixed coniferous forest (FMCF)	SP 40-50; L 30; BE, CO, BI, and other 20-30	I, III, V
		SP 50-60; L 20; NS, CO, LM, and other 20-30	II, V, VI, VII
		SP 30-40; L 30; Jd, BE, CO, M, and other 30-40	VI – VIII
		SP 40-50; L 30; CO, M, LM, and other 20-30	IV
IV Class soil	Fresh mixed forest (FMF)	BE, CO, LM, M 40-50; L 30-40; SP 10-20	I, III, V, VI-VIII
		CO, NS, LM, M 30-50; L 30-40; SP 20-30	II, V-VIII
		Jd, NS, CO, BE 50-60; L 30-40; M, LM, and other 10	VI – VIII
I to III Class soil	Fresh forest (FF)	BE, CO 50-60; L 30-40; LM, M, and other 10	I, III, V, VIII
		CO, NS, HB, LM, M 50-60; L 40-50	II
		BE, Jd, CO 50-60; L 30-40; M, LM, and other 10	V-VIII
		BE, Jd, NS, M, LM 50-60; L 40-50	VI – VIII

SP – Scotch pine, NS – Norway spruce, L – European or Polish larch, Jd – common fir, CO – common oak, SO – sessile oak, BE – beech, BI – birch, BA – black alder, MA – mountain ash, LM – lime, HB – hornbeam, M – maple.

Division of Poland into nature and forest regions:

I - Baltic Region	V – Śląsk Region
II – Mazury and Podlasie Region	VI – Małopolska Region
III – Wielkopolska and Pomorze Region	VII – Sudety Region
IV – Mazowsze and Podlasie Region	VIII – Karpaty Region

ANNEX N. Payment calculation for Measure 5 Afforestation agriculture land

1) Afforestation grand for good spatial configuration

Lp	The details of costs	Forest stand (PLN/ha)	
		coniferous	broad-leaved
1	Preparation of the ground - ploughing of strips (40 PLN x 19.5 h) - deep ploughing (40 PLN x 12 h) - deep ploughing with subsoiling (40 PLN x 9.5 h) - ploughing furrows with ground loosening (40 PLN x 13.8 h)	548	548
3	Tree seedlings (coniferous 8000 x 0.29 PLN, broad-leaved 6000 x 0.45 PLN, forest shrubs 500 x 0.30)	2320	2850
4	Tree seedlings for correction in second year (20%) 1600 x 0.29 PLN, 1200 x 0.45 PLN	464	540
5	Transportation of tree seedlings and heeling in (40 km x 2 PLN, 140 PLN – unloading, loading and heeling in) / 2 ²⁹	110	110
6	Tree planting (coniferous 7 PLN x 200 man-working-hours, broad-leaved 7 PLN x 220 man-working-hours)	1400	1540
7	Making of corrections (coniferous 7 PLN x 60 man-working-hours, broad-leaved 7 PLN x 65 man-working-hours, transportation – 220 PLN/2)	530	665
Total		5372	6253
80% of costs of forest establishment		4298	5002
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM		4300 PLN	5000 PLN
		914.33 EUR	1063.17 EUR

2) Afforestation grand on slopes more than 12°

Lp	The details of costs	Forest stand (PLN/ha)	
		coniferous	broad-leaved
1	Preparation of the ground x 1.4 ² - ploughing of strips (40 PLN x 19.5 h) - deep ploughing (40 PLN x 12 h) - deep ploughing with subsoiling (40 PLN x 9.5 h) - ploughing furrows with ground loosening (40 PLN x 13.8 h)	767	767
3	Tree seedlings (coniferous 8000 x 0.29 PLN, broad-leaved 6000 x 0.45 PLN, forest shrubs 500 x 0,30)	2320	2850
4	Tree seedlings for correction in second year (20%) 1600 x 0,29 PLN, 1200 x 0.45 PLN	464	540
5	Transportation of tree seedlings and heeling in (40 km x 2 PLN, 140 PLN – unloading, loading and heeling in) / 2 ³⁰	110	110
6	Tree planting (coniferous 7 PLN x 200 man-working-hours, broad-leaved 7 PLN x	1960	2156

²⁹ Average afforested area per farm holding in 2001-2003

³⁰ Indicator of re-count

	220 man-working-hours) x 1.4		
7	Making of corrections (coniferous 7 PLN x 60 man-working-hours, broad-leaved 7 PLN x 65 man-working-hours, transportation – 220 PLN/2) x 1.4	742	917
Total		6363	7340
80% of costs of forest establishment		5090	5872
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM		5100 PLN	5900 PLN
		1084.44 EUR	1254.55 EUR

3) Protection against game species – fencing with 2-m wire fence

Lp	The details of costs	PLN/ha	
1	Fencing with 2-m wire fence: - labour 7 PLN x 100 man-working-hours - materials 2300 PLN/ha	3000	
Total		3000	
80% of costs of forest establishment		2400	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM		2400 PLN	
		510.32 EUR	

4) Premium for woodland maintenance for good spatial configuration without repellents

Lp	The details of costs	Forest stand (PLN/ha)	
		coniferous	broad-leaved
1	1-3 year old forest crop - mowing of weeds (2 a year, 7 PLN x 25 man-working-hours) - loosening a ground around tree seedlings (1 procedure 2% area , 7 PLN x 10 man-working-hours)	420	
2	4-5 year old forest crop - improvement cutting (1 procedure, coniferous 7 PLN x 44.3 man-working-hours, broad-leaved 7 PLN x 52 man-working-hours)	310	364
3	Protecting of forest against insects and fungus	27	27
4	Protecting of forest against fire	10	10
Average cost of tending measures		413	435
Suggested amount of premium (70% coniferous, 30% broad-leaved)		419	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM		420 PLN	
		89.31 EUR	

5) Premium for woodland maintenance for good spatial configuration with repellents.

Lp	The details of costs	Forest stand(PLN/ha)	
		coniferous	broad-leaved
1	1-3 year old forest crop - mowing of weeds (2 a year, 7 PLN x 25 man-working-hours) - loosening a ground around tree seedlings (1 procedure 2% area , 7 PLN x 10 man-working-hours)	420	
2	4-5 year old forest crop - improvement cutting (1 procedure, coniferous 7 PLN x 44,3 man-working-hours, broad-leaved 7 PLN x 52 man-working-hours)	310	364
3	Repellents application - labour 7 PLN x 24,3 man-working-hours/ha - plant protection chemicals (repellents) 110 PLN	280	280
4	Protecting of forest against insects and fungus	27	27
5	Protecting of forest against fire	10	10
Average cost of tending measures		693	715
Suggested amount of premium (70% coniferous, 30% broad-leaved)		699	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM		700 PLN	
		148.84 EUR	

6) Premium for woodland maintenance on slopes with more than 12° without repellents.

Lp	The details of costs	Forest stand(PLN/ha)	
		coniferous	broad-leaved
1	1-3 year old forest crop - mowing of weeds (2 a year, 7 PLN x 25 man-working-hours) - loosening a ground around tree seedlings (1 procedure 2% area , 7 PLN x 10 man-working-hours) x 1,4	862	
2	4-5 year old forest crop - improvement cutting (1 procedure, coniferous 7 PLN x 44,3 man-working-hours, broad-leaved 7 PLN x 52 man-working-hours) x 1,4	434	510
3	Protecting of forest against insects and fungus x 1,4	38	38
4	Protecting of forest against fire x 1,4	14	14
Average cost of tending measures		743	773
Suggested amount of premium (70% coniferous, 30% broad-leaved)		752	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM		750 PLN	
		159.48 EUR	

7) Premium for woodland maintenance on slopes with more than 12° with repellents.

Lp	The details of costs	Forest stand(PLN/ha)	
		coniferous	broad-leaved
1	1-3 year old forest crop - mowing of weeds (2 a year, 7 PLN x 25 man-working-hours) - loosening a ground around tree seedlings (1 procedure 2% area , 7 PLN x 10 man-working-hours) x 1,4	862	
2	4-5 year old forest crop - improvement cutting (1 procedure, coniferous 7 PLN x 44,3 man-working-hours, broad-leaved 7 PLN x 52 man-working-hours) x 1,4	434	510
3	Repellents application - labour 7 PLN x 24,3 man-working-hours/ha - plant protection chemicals (repellents) 110 PLN	348	348
4	Protecting of forest against insects and fungus x 1,4	38	38
5	Protecting of forest against fire x 1,4	14	14
Average cost of tending measures		1091	1121
Suggested amount of premium (70% coniferous, 30% broad-leaved)		1100	
Exchange rate PLN/EUR		4.7029	
SUGGESTED AMOUNT OF PREMIUM		1100 PLN	
		233.90 EUR	

8) Afforestation premium for farmer

	The details of costs	PLN/ha
1	Lost Standard Gross Margin for poor soils (bonitation equivalent: up to 0,85)	1012
2	Lost direct payment (average of 3 year)	390
Total		1400
Exchange rate PLN/EUR		4.7029
SUGGESTED AMOUNT OF PREMIUM		1400 PLN
		297.69 EUR

9) Afforestation premium for user of agricultural land

	The details of costs	PLN/ha
1	Lost Standard Gross Margin for poor soils (bonitation equivalent: up to 0,85)/4	258
2	Lost direct payment (average of 3 year)/4	100
Suma utraconych kosztów		358
Exchange rate PLN/EUR		4.7029
SUGGESTED AMOUNT OF PREMIUM		360 PLN
		76.55 EUR

ANNEX O. Functions of Paying Agency in scope of administration financial support within Rural Development Plan

(1) At the head office level:

- The calculation of the payments to be granted and the exercise of control related thereto;
- The keeping of the registers of payments granted under the Plan;
- The keeping of the registers of the holders;
- The operating of the Land Parcel Identification System (LPIS) and the Animal Identification and Registration System (AIRS);
- The transmission of data and the cooperation with the administrators of the external systems applied;
- The control by remote sensing;
- The supervision over the activities carried out by the On-the-Spot Control Office;
- The selection of applications and projects to be subjected to the on-the-spot checks, based on a risk analysis and an element of representativeness;
- The keeping of accounts;
- The drawing up of annual financial plans;
- The monitoring of the implementation of the financial plan and the drawing up of the financial reports needed;
- The recoding of the payments effected;
- The effecting of the payments authorised, in cooperation with the banks involved;
- The dealing with the appeals lodged in respect of the payments, the authorisation for which falls within the jurisdiction of regional offices (with the exception of structural pensions);
- The collection and production of the reporting material needed;
- The monitoring of the implementation procedures followed;
- The drawing up of the training programmes for employees and the organising of information campaigns for the beneficiaries;
- The keeping of the registers of the agricultural holdings/beneficiaries;
- The debt recovery;
- The internal audit;
- The supervision of the functioning of the IT system at various organisational levels at the Agency;
- The performance of the mass-printing tasks (i.e. the collection and production of the material to be printed, the organisation of the printing itself, and the distribution of the material printed).

(2) At the regional office level:

- The receipt of the applications forwarded by the County Offices;
- The carrying out of the administrative checks by means of computerised database to verify eligibility for aid;
- The drawing up and signing of contracts with the beneficiaries as well as the making of decisions and determinations related thereto;
- The issuing of decisions taken at the request of the beneficiaries in respect of the different measures under the Plan;
- The dealing with the appeals lodged in respect of the payments, the authorisation for which falls within the jurisdiction of county offices;
- The performance of on-the-spot checks;
- The calculation of the penalties to be imposed;
- The exercise of the internal control at the county office level;
- The administration of the IT system operated within the Province, which lies within the territorial jurisdiction of the Regional Office concerned;
- The supervision of the implementation of the different measures under the Plan;
- The archiving of documents on paper and in an electronic form;
- The updating of data in the registers of agricultural holdings/the beneficiaries;
- The carrying out of the information- and training-related activities for the beneficiaries.

(3) At the county office level:

- The receipt of the applications for acceptance into the Programme, submitted together with the agri-environmental, reforestation, and holding development plans, and other;
- The cooperation with the Farmer Service Points;
- The registration with the use of the office system of the documents received and the documents sent;
- The checking of the completeness and correctness of data and the entering thereof into the IT system;
- The carrying out of the administrative checks by means of computerised database to verify eligibility for aid (Measure 9);
- The archiving of documents on paper and in an electronic form;
- The preparing of summaries of payments calculated and their forwarding to the Head Office (Measure 9);
- The updating of data contained in the registers of agricultural holdings /beneficiaries;
- The giving to the beneficiaries of information on the Programmes administered and of graphic and descriptive information stored with the use of the Land Parcel Identification System;
- The carrying out of information- and training-related activities for the beneficiaries and the employees.

ANNEX P. Indicators essential for the monitoring of the implementation of the rural development plan

MEASURE 1: EARLY RETIREMENT

Product indicators:

- The number of decisions issued under the measure (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The number of the new decisions issued under the measure (broken down by newly approved applications submitted by farmers 55 to 60 years old and newly approved applications submitted by farmers 61 to 65 years old);
- The number of female and male recipients;
- The amount of expenditure committed in respect of holdings in receipt of support under the measure (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);

Result indicators:

- The number of ha of the land reassigned to agricultural uses (in which number of ha of the land transferred to the State Treasury and newly reassigned land - during the year concerned);
- The number of ha of land reassigned to non-agricultural uses (in which number of ha of the land transferred for the purposes relating to the environmental protection, number of ha of the land transferred to be afforested and newly reassigned land - during the year concerned);
- The average amount of the support granted;
- The average size of the holdings transferred (broken down by holdings taken over with a view to the enlargement of the holding of another farmer, holdings taken over entirely by a successor, holdings taken over to the State Treasury, holdings taken over for the purposes relating to the environmental protection, holdings taken over to be afforested);
- The number of ha of land transferred to farmers younger than 40;

Impact indicators:

- The average age of the persons practicing farming in Poland;
- The average area of the holdings in Poland.

MEASURE 2: SUPPORT FOR SEMI-SUBSISTENCE FARMS UNDERGOING RESTRUCTURING

Product indicators:

- The number of holdings supported under the measure (broken down by type of production and size of the holdings, year of the receipt of premium, and broken down by holdings situated in less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The number of new holdings supported under the measure;
- The number of female and male recipients;
- The amount of expenditure committed in respect of holdings in receipt of support under the measure (broken down by type of production and size of the holdings, year of the receipt of premium, and broken down by holdings situated in less-favoured

mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);

Result indicators:

- The number of ha of land in receipt of support under measure (broken down by type of production and size of the holdings);
- The number of holdings in receipt of support (broken down by the year of receiving support);
- The number of holdings in receipt of the full premium (for three years, for five years and broken down by type of production and size of the holdings);
- The number of holdings, which become economically viable (broken down by type of production and size of the holdings);
- The number of holdings, which achieved the different intermediate goals.
- The average amount of the support granted (broken down by type of production and size of the holdings);

Impact indicators:

- The share of commercial farms in the total number of holdings supported under the Plan;
- The average income of the holdings under the measure.

MEASURE 3: SUPPORT FOR LESS-FAVOURED AREAS

Impact indicators:

- The number of holdings in receipt of support, located within less-favoured mountain areas;
- The number of holdings in receipt of support, located within less-favoured lowland areas (broken down by I and II zone);
- The number of holdings in receipt of support, located within areas affected by specific natural handicaps;
- The number of holdings in receipt of support, located within areas with environmental restrictions;
- The number of holdings located within less-favoured areas of the NATURE 2000 network;
- The number of holdings in receipt of support according to number of ha of land submitted to the support under measure, broken down by the area < 50 ha; 50,01 – 100 ha; 100,01 – 300 ha; > 300 ha, and broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The number of female and male recipients;
- The amount of expenditure committed in respect of holdings in receipt of support under the measure (broken down by type of production and size of the holdings, year of the receipt of premium, and broken down by holdings situated in less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);

Result indicators:

- The number of ha of land in receipt of support under measure, located within less-favoured mountain areas;
- The number of ha of land in receipt of support under measure, located within less-favoured lowland areas (broken down by I and II zone);
- The number of ha of land in receipt of support under measure, located within areas affected by specific natural handicaps;

- The number of ha of land in receipt of support under measure, located within areas with environmental restrictions;
- The number of ha of land in receipt of support under measure, located within the NATURE 2000 network;
- The number of ha of land in receipt of support under measure, according to number of ha of land submitted to the support under measure, broken down by the area < 50 ha; 50,01 – 100 ha; 100,01 – 300 ha; > 300 ha, and broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The average amount of the support granted per holding (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The average amount of the support granted per holding, for holdings located within the NATURE 2000 network;
- The average amount of the support granted per ha (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The average amount of the support granted per ha, for holdings located within the NATURE 2000 network;

Product indicators:

- The number of inhabitants per square km, in less-favoured areas (rural areas);
- The share of the population involved in farming in the total number of inhabitants, in less-favoured areas;
- The area of land in receipt of support under less-favoured area arrangements, as against the total utilised agricultural area in Poland.

MEASURE 4: SUPPORT FOR AGRI-ENVIRONMENT AND ANIMAL WELFARE

Product indicators:

- The number of decisions issued under package S01 - „Sustainable farming”
- The number of decisions issued under package S02 - „Organic farming” (broken down by non-certified arable crops, certified arable crops, non-certified permanent grasslands, certified permanent grasslands, non-certified vegetable crops, certified vegetable crops, non-certified fruit crops and berry plantations, certified fruit crops and berry plantations);
- The number of decisions issued under package P01 - „Maintenance of extensive meadows” (broken down by variants);
- The number of decisions issued under package P02 - „Maintenance of extensive pastures” (broken down by variants);
- The number of decisions issued under package K01 - „Soil and water protection” (broken down by variants);
- The number of decisions issued under package K02 - „Buffer zones” (broken down by 2-meter buffer zones, 5- meter buffer zones, zones on poor soils, zones on rich soils);
- The number of decisions issued under package G01 - „Protection of local animal breeds” (broken down by species: cattle, horses, sheep);
- The number of beneficiaries in receipt of assistance under various combinations of packages;
- The number of new decisions issued under package S01 - „Sustainable farming”
- The number of new decisions issued under package S02 - „Organic farming” (broken down by non-certified arable crops, certified arable crops, non-certified permanent

grasslands, certified permanent grasslands, non-certified vegetable crops, certified vegetable crops, non-certified fruit crops and berry plantations, certified fruit crops and berry plantations);

- The number of new decisions issued under package P01 - „Maintenance of extensive meadows” (broken down by variants);
- The number of new decisions issued under package P02 - „Maintenance of extensive pastures” (broken down by variants);
- The number of new decisions issued under package K01 - „Soil and water protection” (broken down by variants);
- The number of new decisions issued under package K02 - „Buffer zones” (broken down by 2-meter buffer zones, 5- meter buffer zones, zones on poor soils, zones on rich soils);
- The number of new decisions issued under package G01 - „Protection of local animal breeds” (broken down by species: cattle, horses, sheep);
- The number of female and male recipients;
- The number of holdings supported under the measure (broken down by holdings situated in less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The amount of expenditure committed in respect of holdings in receipt of support under the measure (broken down by holdings situated in less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);

Result indicators:

- The number of ha of land in receipt of support under package S01 - „Sustainable farming”;
- The number of ha of land in receipt of support under package S02 - „Organic farming” (broken down by non-certified arable crops, certified arable crops, non-certified permanent grasslands, certified permanent grasslands, non-certified vegetable crops, certified vegetable crops, non-certified fruit crops and berry plantations, certified fruit crops and berry plantations);
- The number of ha of land in receipt of support under package P01 - „Maintenance of extensive meadows” (broken down by variants);
- The number of ha of land in receipt of support under package P02 - „Maintenance of extensive pastures” (broken down by variants);
- The number of ha of land in receipt of support under package K01 - „Soil and water protection” (broken down by variants);
- The number of running meters in receipt of support under package K02 - „Buffer zones” (broken down by 2-meter buffer zones, 5- meter buffer zones, zones on poor soils, zones on rich soils);
- The number of animals in receipt of support under package G01 - „Protection of local animal breeds” (broken down by species: cattle, horses, sheep);
- The number of ha of land in receipt of support under new agreements under package S01 - „Sustainable farming”;
- The number of ha of land in receipt of support under new agreements under package S02 - „Organic farming” (broken down by non-certified arable crops, certified arable crops, non-certified permanent grasslands, certified permanent grasslands, non-certified vegetable crops, certified vegetable crops, non-certified fruit crops and berry plantations, certified fruit crops and berry plantations);
- The number of ha of land in receipt of support under new agreements under package P01 - „Maintenance of extensive meadows” (broken down by variants);

- The number of ha of land in receipt of support under new agreements under package P02 - „Maintenance of extensive pastures” (broken down by variants);
- The number of ha of land in receipt of support under new agreements under package K01 - „Soil and water protection” (broken down by variants);
- The number of running meters in receipt of support under new agreements under package K02 - „Buffer zones” (broken down by 2-meter buffer zones, 5- meter buffer zones, zones on poor soils, zones on rich soils);
- The number of animals in receipt of support under new agreements under package G01 - „Protection of local animal breeds” (broken down by species: cattle, horses, sheep);
- The average amount of the support granted per ha
- The average amount of the support granted per ha under package S01 - „Sustainable farming”;
- The average amount of the support granted per ha under package S02 - „Organic farming” (broken down by non-certified arable crops, certified arable crops, non-certified permanent grasslands, certified permanent grasslands, non-certified vegetable crops, certified vegetable crops, non-certified fruit crops and berry plantations, certified fruit crops and berry plantations);
- The average amount of the support granted per ha under package P01 - „Maintenance of extensive meadows” (broken down by variants);
- The average amount of the support granted per ha under package P02 - „Maintenance of extensive pastures” (broken down by variants);
- The average amount of the support granted per ha under package K01 - „Soil and water protection” (broken down by variants);
- The average amount of the support granted per running meters under package K02 - „Buffer zones” (broken down by 2-meter buffer zones, 5- meter buffer zones, zones on poor soils, zones on rich soils);
- The average amount of the support granted per lu under package G01 - „Protection of local animal breeds” (broken down by species: cattle, horses, sheep);

Impact indicators:

- The number of ha of land on the priority areas covered by the different measures (broken down by the different zones);
- The number of ha of land on the protected areas (NATURE 2000 network, national parks, landscape parks) covered by the different measures (broken down by the different provinces);
- The area of the land covered by the environmental compensation (natural sites) (broken down by point, linear, and spatial elements);
- The number of organic farms with the balanced agricultural production.

MEASURE 5: AFFORESTATION OF AGRICULTURAL LAND

Product indicators:

- The number of decisions concerning “Maintenance premium” (in which new and broken down by applications concerning areas with favourable configuration and slopes above 12°, broken down by individual and group applications and broken down by applications concerning afforestation with repellents and without repellents);
- The number of decisions concerning “Afforestation premium” (in which new and broken down by applications concerning areas with favourable configuration and slopes above 12°, broken down by individual and group applications and broken down by farmers and owner of land);

- The number of decisions concerning “Afforestation grant” (in which new and broken down by applications concerning areas with favourable configuration and slopes above 12°, broken down by individual and group applications and broken down by coniferous and broadleaved);
- The number of female and male recipients;
- Total number of decisions issued under measure (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The amount of expenditure committed in respect of holdings in receipt of support under the measure (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);

Result indicators:

- The number of ha of land in receipt of support under “Maintenance premium” (in which new and broken down by applications concerning areas with favourable configuration and slopes above 12°, broken down by individual and group applications and broken down by applications concerning afforestation with repellents and without repellents);
- The number of ha of land in receipt of support under “Afforestation premium” (in which new and broken down by applications concerning areas with favourable configuration and slopes above 12°, broken down by individual and group applications and broken down by farmers and owner of land);
- The number of ha of land in receipt of support under “Afforestation grant” (in which new and broken down by applications concerning areas with favourable configuration and slopes above 12°, broken down by individual and group applications and broken down by coniferous and broadleaved);
- The number of ha of afforested land (broken down by type of soil and its quality class);
- The average amount of the support granted per ha under “Maintenance premium” per ha
- The average amount of the support granted per ha under “Afforestation premium” per ha
- The average amount of the support granted per ha under “Afforestation grant” per ha (broken down by coniferous and broadleaved);
- The number of ha of afforested land fencing off with 2-metre wire netting;

Impact indicators:

- The area of the afforested land (broken down by county);
- The average size of the afforested parcels;
- The share of the different tree species planted on the afforested land;
- The percentage of afforested land incorporated into larger forest stands and the percentage of afforested land forming an autonomous forest stand.

MEASURE 6: MEETING THE EU STANDARDS

Product indicators:

- Total number of decisions issued under measure (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);

- Total number of decisions issued under “Furnishing farms with natural fertilizer storage facilities” (in which new and broken down by holdings located within Nitrate Vulnerable Zones);
- Total number of decisions issued under “Adjustment of milk farms to the public health EU standard” (in which new);
- Total number of decisions issued under “Adjustment of egg-laying hen farms to the animal health and welfare EU standard” (in which new);
- The number of female and male recipients;
- The amount of expenditure committed in respect of holdings in receipt of support under the measure (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);

Result indicators:

- The number of holdings complying with EU standards, which receive the aid under the measure (broken down by schemes);
- The number and the area of the manure plates installed under the measure;
- The number and the capacity of the dung grids installed under the measure;
- The number of projects where the walls and floors in raw milk storage spaces have been financed under measure;
- The number of projects where the walls and floors in milking spaces or milking stalls have been financed under measure;
- The number of modern milking systems installed under measure;
- The number of direct-to-can milking machines purchased under measure
- The number of milk coolers purchased under measure;
- The number of wash-basin with water heater purchased under measure;
- The number of farm water intake installed under measure;
- The number of boxes with equipment modernised under measure;
- The number of boxes with equipment purchased under measure;
- The number of livestock units kept on the holdings in receipt of support under Scheme 1;
- The number of livestock units kept on the holdings in receipt of support under Scheme 2;
- The number of poultry kept on the holdings in receipt of support under Scheme 3;
- The average amount of the support granted under measure (broken down by schemes);

Impact indicators:

- The share of holdings complying with EU standards in the total number of agricultural holdings in Poland;
- The share of the holdings complying with EU standards, which receive support in the total number of agricultural holdings complying therewith in Poland.

MEASURE 7: SUPPORT FOR AGRICULTURAL PRODUCERS’ GROUPS

Product indicators:

- The number of decisions issued under measure (broken down by sectors);
- The number of newly issued decisions issued under measure (broken down by sectors);

- Total number of decisions issued under measure (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);
- The amount of expenditure committed in respect of groups in receipt of support under the measure (broken down by less-favoured mountain areas, less-favoured lowland areas – I and II zone, areas affected by specific natural handicaps, areas with environmental restrictions);

Result indicator:

- The number of groups set up as a result of the grant of support (broken down by sectors);
- The average amount of the support granted (broken down by sectors).

Impact indicators:

- The value of the production sold by producer groups;
- The share of the value of the production sold by producer groups in the value of the agricultural production sold;
- The average amount of the support granted per holdings under Agricultural Producer Group (broken down by sectors).

MEASURE 8: TECHNICAL ASSISTANCE

- Number of projects concerning studies, expertises and analyses, carried out under the measure;
- Number of projects concerning programmes of the Monitoring Committee and National Steering Committee, carried out under the measure;
- Number of projects concerning programmes of the voivodship working groups for agri-environmental programmes, carried out under the measure;
- Number of projects concerning audit of the Plan, carried out under the measure;
- Number of projects concerning administration control and field control, carried out under the measure;
- Number of projects concerning establishing and maintaining of the system of nature monitoring, carried out under the measure;
- Number of projects concerning financing wages of the persons involved in to Program, carried out under the measure;
- Number of projects concerning preparation of reports concerning the Plan's implementation, carried out under the measure;
- Number of projects concerning others expenditures related to the Plan's implementation, carried out under the measure;
- Number of projects concerning the preparation of the Plan for following years, carried out under the measure;
- Number of projects concerning Plan's evaluation carried out under the measure;
- Number of projects concerning ex-ante evaluation of the following Plan, carried out under the measure;
- Number of projects concerning the professional improvement and training for the persons involved in management, monitoring and evaluation of the Plan implementation, carried out under the measure;
- Number of projects concerning establishing and maintaining of the data filing system, carried out under the measure;
- Number of projects concerning establishing and maintaining of the monitoring system of the Plan, carried out under the measure;

- Number of projects concerning additional furnishing the Institutions responsible for Plan's implementation with the equipment necessary for the correct fulfilment of its ask, carried out under the measure;
- Number of projects concerning leasing and purchase of real property, carried out under the measure;
- Number of projects concerning support for elaboration, issuing, printing and distribution of promotion materials carried out under the measure;
- Number of projects concerning promotion and information activity aiming at informing on the contents of the support as well as on availability of support means and rules of granting support under RDP, carried out under the measure;
- Number of projects concerning information and promotion actions concerning new programming period, carried out under the measure;

ANNEX R. Findings of the public participation process concerning the Support for Agri-Environment and Animal Welfare and the list of social partners taking part in consultations of the Rural Development Plan

The public participation process concerning the *Support for Agri-Environment and Animal Welfare*.

Measure 4 of the Rural Development Plan (*Support for Agri-Environmental Schemes and Animal Welfare*) has been the subject of intense consultation and has solicited comments from many organisations which opposed changes to the implementation of this measure.

During the preparation of the new version of the Rural Development Plan (May-July 2003), the number of agri-environmental packages was reduced from 14 to 5: *Sustainable Farming* (S01), *Organic Farming* (S02), *Extensive Meadows* (P01), *Soil and Water Protection* (K01) and *Conservation of Local Farm Breeds* (G01) due to the necessity of reducing risks related to the implementation of an excessively complex programme with the use of a newly developed implementation system. The change in the implementation of the National Agri-Environmental Programme provoked many responses both on the part of farmers (future beneficiaries) and non-governmental organisations. Many letters received by the MARD included demands concerning the implementation of the following packages, which were deemed crucial in Polish conditions: *Extensive Pastures*, *Converting Arable Land into Permanent Grassland*, *Buffer Zones* and *Field Coppices*.

In general, the importance of the National Agri-Environmental Programme as the key element of CAP Accompanying Measures and the related obligation on the part of all EU member states to implement it were stressed. Moreover, the fundamental objectives of the implementation of the abovementioned packages were highlighted: the preservation of the natural values of agricultural areas, the conservation of Polish natural heritage and the (indirect) assurance of financing for measures within the scope of the Natura 2000 programme.

The demands were justified by the fact that extensive pastures are a key habitat for the Charadriiformes and enhance the species diversity of breeding birds in Poland. Due to the marginal economic significance of extensive pastures, financial support from the National Agri-Environmental Programme is necessary in order to preserve the values of these habitats. Xerothermic grasses, salt marshes and meadows, mountain pastures, village greens and other habitats constituting extensive pastures are protected under the so-called Habitats Directive and Birds Directive.

The conversion of arable land into permanent grassland is a desirable trend not only because of the adverse tendencies to “plough meadows” and reduce the natural values of such areas but also from the point of view of the higher water retention capacity of soils constituting permanent grasslands. This is significant because of the increasingly frequent floods in Poland and the need to counteract water erosion.

The most important impact of buffer zones is their contribution to increasing plant and animal biodiversity in the agricultural landscape. Moreover, zones that separate fields from watercourses form a barrier to nitrates and phosphates from agricultural sources that seep into

water systems. This is immensely important for improving the quality of water in Poland and thus fulfilling international obligations concerning the reduction of nitrate pollution from non-point sources.

Like buffer zones, field coppices enhance the biodiversity of agricultural areas and also contribute significantly to limiting wind erosion. Such coppices are also a feature of the Polish landscape with high environmental and aesthetic values, which is closely related to the promotion of tourism and farm tourism.

This initiative, as well as arrangements with the European Commission, have resulted in the addition of two packages to the Agri-Environmental Programme: *Extensive Pastures* (P02) and *Buffer Zones* (K02).

The remaining issues that were raised during the meetings and in letters concerned the availability of the programme to the largest possible group of farmers and the introduction of the largest possible number of packages for implementation in agricultural holdings. Similarly as in the case of other RDP measures, it was pointed out that the minimum farm area should be reduced to 1 ha due to the fragmentation of agricultural holdings. This suggestion was taken into account during work on the Agri-Environmental Programme. Moreover, the obligation to combine system packages with other packages within the farm was dropped.

Other suggestions received by the Ministry concerned the extension of Priority Zones. Depending on the arguments presented, these suggestions were analysed and submitted to appropriate Voivodeship Working Teams in order to consider the possibility of extending certain Priority Zones.

The public participation process concerning the National Agri-Environmental Programme was the broadest of such processes related to RDP measures; it involved the largest number of non-governmental organisations, local government offices at the voivodeship and local levels as well as the farmers themselves. The result of this process was the fullest possible consensus and at the same time publicity for the National Agri-Environmental Programme, the implementation of which is planned for the years 2004-2006.

Additionally, the public participation process established the foundations for this measure and the planned direction for its evolution during the next programming period (2007-2013) as well as enabled the formation of a broad and permanent group of persons and organisations interested in agri-environmental issues in Poland.

The list of organisations that signed the letter concerning the National Agri-Environmental Programme:

1. IUCN, The World Conservation Union, Warszawa.
2. Dolnośląska Fundacja Ekorozwoju, Wrocław.
3. Klub Przyrodników, Świebodzin,
4. Stowarzyszenie na Rzecz Ekorozwoju Agro-Group, Białystok.
5. Liga Ochrony Przyrody, Lublin.
6. Stowarzyszenie Ekologiczne EKO-UNIA, Wrocław.
7. Związek Stowarzyszeń Polska Zielona Sieć, Wrocław.

8. Ogólnopolskie Towarzystwo Ochrony Ptaków (OTOP), Gdańsk.
9. Fundacja Partnerstwo dla Środowiska, Kraków.
10. Federacja Inicjatyw Oświatowych, Warszawa.
11. Fundacja Idealna Gmina, Warszawa.
12. Fundacja Ekologiczna Ziemi Chojnickiej i Zaborskiej, Chojnice.
13. Biskupi Uniwersytet Ludowy, Chojnice.
14. Ekologiczny Klub UNESCO, Piaski.
15. Fundacja Fundusz Współpracy, Warszawa.
16. Fundacja ICPPC – Międzynarodowa Koalicja dla Ochrony Polskiej Wsi, Stryszków.
17. Fundacja na Rzecz Rozwoju Polskiego Rolnictwa (FDPA), Warszawa.
18. Fundacja Rozwoju Gminy Żelów.
19. Fundacja w Służbie Wsi, Wrocław.
20. Fundacja Wspomagania Wsi, Warszawa.
21. Instytut Melioracji i Użytków Zielonych, Falenty.
22. Krajowa Rada Izb Rolniczych, Warszawa.
23. Nidzica Fundacja Rozwoju (NIDA), Nidzica.
24. Ośrodek Promowania i Wspierania Przedsiębiorczości Rolnej, Sandomierz.
25. Polska Federacja Turystyki Wiejskiej, Warszawa.
26. Polskie Towarzystwo Botaniczne, oddział w Bydgoszczy.
27. Pomorskie Stowarzyszenie Odnowy Wsi, Budnowo.
28. Regionalne Towarzystwo Rolno-Przemysłowe „Dolina Strugu”, Tyczyn.
29. Społeczny Instytut Ekologiczny, Warszawa.
30. Stowarzyszenie na Rzecz Rozwoju Miasta i Gminy Debrno” Debrno.
31. Stowarzyszenie Ekologiczne Eko-Unia, Wrocław.
32. Stowarzyszenie mazowieckie Centrum Przedsiębiorczości, Sypniewo.
33. Stowarzyszenie Odnowy Obszarów Wiejskich „Wieś i Europa”, Kraków.
34. Stowarzyszenie PEGAZ, Karpacz.
35. Stowarzyszenie Poleskie, Włodawa.
36. Stowarzyszenie Rozwoju Regionalnego PARTNER, Bydgoszcz.
37. Stowarzyszenie Rozwoju i Integracji Wsi w Jaworach „Ogniwo” Dennica Kaszubska.
38. Towarzystwo Przyrodnicze „Bocian”, Siedlce.
39. WWF Polska, Światowy Fundusz na rzecz Przyrody, Warszawa.
40. Zachodniopomorskie Towarzystwo Ornitologiczne, Szczecin.

No.	ORGANISATION	ADDRESS
1.	Federacja Związków Pracodawców Rolnych (Federation of Agricultural Employers' Unions)	ul. Wspólna 30 00-930 Warszawa
2.	Federacja Związków Pracodawców-Dzierżawców i Właścicieli Rolnych (Federation of Unions of Agricultural Employers, Tenants and Land Owners)	Ul. Wspólna 30 00-930 Warszawa
3.	Fundacja Edukacja dla Demokracji (Foundation 'Education for Democracy')	ul. Podhale 5/30 00-252 Warszawa
4.	Fundacja Wspomagania Wsi (Foundation for Support to Village Areas)	ul. Obozowa 20 01-161 Warszawa
5.	Instytut na Rzecz Ekorozwoju (Institute for Eco-development)	ul. Nabelaka 15/1 00-743 Warszawa
6.	Komisja Krajowa NSZZ „Solidarność” (Central Committee of 'Solidarity')	Pl. Czerwony 1/3/5 53-661 Wrocław
7.	Krajowa Rada Drobiarstwa- Izba Gospodarcza w Warszawie (Polish Council of Poultry Industry – Warsaw Chamber of Commerce)	ul. Czackiego 3/5 00-043 Warszawa
8.	Krajowa Rada Izb Rolniczych (Polish Council of Agricultural Chambers)	Ul. Wspólna 30 00-930 Warszawa
9.	Krajowa Rada Spółdzielcza (National Council of Cooperatives)	Ul. Jasna 1 00-950 Warszawa
10.	Krajowe Stowarzyszenie Mleczarzy (National Confederation of Dairy Producers)	ul. Hoża 66/68 00-682 Warszawa
11.	Krajowy Związek Rolników, Kółek i Organizacji Rolniczych (National Union of Farmers, Farmers' Circles and Farmers' Organisations)	Ul. Szkolna 2/4 00-006 Warszawa
12.	Krajowy Związek Spółdzielni Mleczarskich Związek Rewizyjny (National Union of Dairy Cooperatives – Supervisory Union)	00-950 Warszawa ul. Hoża 66/68
13.	Lubuski Klub Przyrodników (Lubuski Naturalists' Club)	ul. 1 Maja 22 66-200 Świebodzin
14.	Narodowa Fundacja Ochrony Środowiska (Polish Foundation for Environment Protection)	ul. Ciołka 13 01-445 Warszawa
15.	Niezależny Samorządny Związek Zawodowy Rolników Indywidualnych „Solidarność” (Independent, Self-governing Union of Individual Farmers 'Solidarity')	Pl. Dąbrowskiego 3 00-057 Warszawa
16.	Ogólnopolskie Porozumienie Związków Zawodowych (Polish Federation of Trade Unions)	ul. Kopernika 36/40 Warszawa
17.	Ogólnopolskie Towarzystwo Ochrony Ptaków (Polish Society of Bird Protection)	ul. Hallera 4/2 80-958 Gdańsk
18.	Polska Federacja Hodowców Bydła Mlecznego (Polish Federation of Dairy Cow Breeders)	ul. Sokołowska 3 01-142 Warszawa
19.	Polska Federacja Producentów Żywności (Polish Federation of Food Producers)	ul. Nowowiejska 1/3 lok. 17 00-643 Warszawa, tel. 825 02 17
20.	Polski Klub Ekologiczny „Koalicja na Rzecz Rozwoju Obszarów Wiejskich” (Polish Ecological Club 'Coalition for Rural Development')	05-400 Otwock skr. poczt. nr 8
21.	Polski Związek Producentów Eksporterów i Importerów Mięsa (Polish Union of Meat Producers, Exporters and Importers)	ul. Chałubińskiego 8 00-613 Warszawa
22.	Polskie Towarzystwo Ochrony Przyrody „SALAMANDRA” (Polish Environment Protection Society 'SALAMANDRA')	ul. Szamarzewskiego 11/6 60-514 Poznań
23.	Polskie Towarzystwo Przyjaciół Przyrody „PRO NATURA” (Polish Society of Friends of Nature 'PRO-NATURA')	ul. Podwale 75 50-449 Wrocław

No.	ORGANISATION	ADDRESS
24.	Rada Gospodarki Żywnościowej	Ul. Czackiego 8 00-613 Warszawa
25.	Stowarzyszenie Rzeźników i Wędliniarzy Rzeczypospolitej Polskiej (Polish Association of Butchers and Meat Processors)	ul. Miodowa 14 00-246 Warszawa
26.	Związek Prywatnych Przetwórców Mleka (Association of Private Milk Processors)	ul. Wspólna 30 Warszawa
27.	Związek Zawodowy Centrum Narodowe Młodych Rolników (National Centre of Young Farmers' Union)	Ul. Nowy Świat 18/20 00-920 Warszawa
28.	Związek Zawodowy Pracowników Rolnictwa w RP, Zarząd Główny (Union of Agricultural Workers of Poland, Headquarters)	Ul. Jaracza 3/10 00-959 Warszawa
29.	Związek Zawodowy Rolnictwa „Samoobrona” (Agricultural Union ‘Samoobrona’)	Ul. Marszałkowska 84/92 lok. 121 00-514 Warszawa
30.	Zespół Koła Gospodyń Wiejskich, Krajowy Związek Rolników (<i>Society of Women in Rural Areas</i>)	Warszawa 00-006, ul. Szkolna 2/4
31.	Demokratyczna Unia Kobiet (Democratic Union of Woman)	Warszawa 00-429, ul. Rozbrat 44a
32.	Liga Kobiet Polskich (Polish Women League)	Warszawa, ul. Bracka 5