Introduction to the volume

Rural areas of almost entire Central and Eastern Europe are currently experiencing a highly complex situation. For a major part of these areas this new, and still changing situation results largely from the systemic changes accompanying the introduction of principles of market economy in the post-communist countries. The respective processes involve, in particular, the deepening spatial differentiation as to the levels of development and advancement of transformation. In addition, the economic position of the traditional rural activities has become – like virtually everywhere in Europe – quite precarious. A need arises, therefore, of searching for the new directions of development, including introduction of alternative economic functions into the rural areas.

In Spring 2002 a seminar was carried out in Warsaw, entitled *European Rural Development*, co-organised by the International Institute for Applied Systems Analysis in Laxenburg by Vienna, Polish Academy of Sciences, and the Institute of Agricultural and Food Economics in Warsaw. The representatives of the scientific as well as research-and-development institutions from different countries of Central and Eastern Europe took part in the seminar. In the course of discussions the idea was formed of establishing a scientific network, devoted to the rural problems of this part of Europe, which would thereafter grow so as to encompass the whole of Europe – the European Rural Development Network.

The present volume is the first tangible effect of the collaboration initiated. The authors of papers here contained, representing quite various scientific disciplines, consider the current state of development and the possible future scenarios for rural areas. Broad scope of problems touched, encompassing issues of water economy, protection of rural landscape, social and economic condition of the countryside, directions of agricultural development, and the role of other, alternative economic activities in rural areas makes it possible to take a comprehensive view of the contemporary countryside of Central and Eastern Europe.

Alternatives for European rural areas is the very first volume in the series published in the framework of the European Rural Development Network. We sincerely hope that this and the forthcoming volumes will contribute to a better cognition of the phenomena and processes taking place on the rural areas of Europe.

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Main problems of agriculture and rural areas in Poland in the period of transformation and integration with European Union

Abstract: *Problems currently observed in Polish agriculture have different origins. Some of them have an historical background, while others are related to systemic transformation and forthcoming accession to the European Union. Most of the problems are common for all the candidate countries and most of them are also observed in the developed economies. Identification of these problems is the main purpose of this article. Special attention is paid to natural, human and capital resources available in rural areas. Possible development paths are pointed out. The article also covers most of the opportunities that may help overcome rural development problems in Poland in the wake of forthcoming accession, and their limitations.*

Key words: *rural development, agricultural incomes, human capital, sustainable development, EU enlargement.*

Introduction

The aim of this elaboration is to present main problems of agricultural and rural areas in Poland. They are presented in the following order: historical problems, current problems that arose during the process of economic transformation, and problems that may appear as a result of the EU accession. In principle, historical problems are limited to the effects of the so-called real-socialist period. The year 1989 was selected as marking the beginning of the systemic transformation. That was when the Solidarity movement achieved electoral victory and created the first non-communist government under the leadership of Tadeusz Mazowiecki. It is also assumed that Poland will join the EU in May 2004.

The elaboration contains a general outline of certain, selected problems only. Taking into account their complex nature separate elaborations (of a research report character) would be necessary to present the features of each of them. Some of the problems introduced in the article are specific only for Poland,

while certain weaknesses are also present in other candidate countries. There are problems, though, which are common for the whole of the integrating Europe.

Historical problems

From an historical perspective, there are four key indications of peasant farming that were most important in the previous centuries. These were namely:

1. Low income of agricultural and rural population in comparison with incomes of urban population (Figure 1), combined with naturally deeper income differentiation in agriculture, which caused wider range of poverty in the countryside (in agriculture). Such a situation has been present since the 15th century, when the landed gentry were developing their farm economy, entailing the reduction of land possession by peasants farmers, and the drudgery was introduced. This resulted in the worsening of the living standards of peasant population. In the period of developing capitalism farmer incomes were choked by the worsening price relations and by agricultural overpopulation. A particularly difficult situation was observed among the unemployed rural population owning small plots or no land at all (Zegar 2000).
2. A persistent need of increase in agricultural production in order to satisfy growing demand for food and agricultural materials from the rapidly and dynamically developing cities and industry, and a persistent need of improving the level of incomes of agricultural population (the latter having turned out unfeasible, because increase of production simultaneously caused reduction of farm product prices). This problem was especially important in the period of centrally planed economy, when the demand for food was not fully satisfied. Before World War II – under the conditions of market economy – demand and supply were balanced by the price mechanism at a lower level of per capita consumption.
3. Utilization of resources, especially of labor, for the general economic development and improvement of the country's population incomes. The attempts

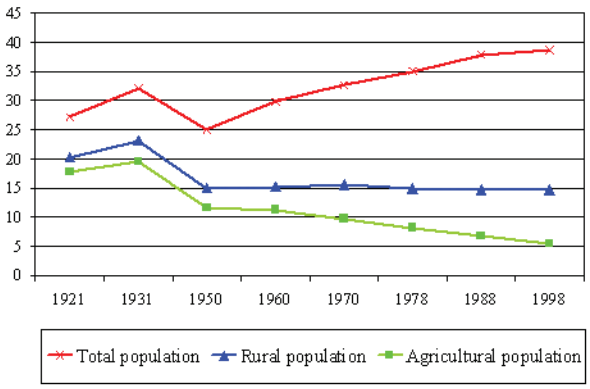

Figure 1. Rural and agricultural population in Poland
Source: *Statistical Yearbook of the Republic of Poland 2001.*

of reaching this objective were based on the two-sector model recommended for the early stages of development of industrial economies. It assumed the movement of labor from agriculture (Figure 2), featuring a lower level of labor productivity, towards industry, where there was higher labor productivity. Owing to this process the increase of welfare, creation of demand for agricultural products, and higher agricultural incomes were observed. The necessary condition was demand for labor outside of agriculture (Lewis and Jorgenson 1961; Schultz 1964; Kuznets 1996; Mellor and Johnston 1984). In case of limited external labor demand the model of intensive labor agriculture was recommended (Hayami and Ruttan 1985).

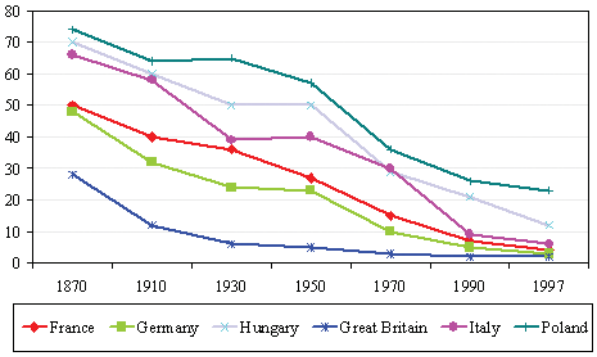

Figure 2. Employment in agriculture. Total employment in the country = 100
Source: Based on *Statistical Yearbook of the Republic of Poland*, 1990–2001.

4. The backwardness of rural areas in terms of civilization was associated not so much with lower incomes, as with worse technical and social infrastructure (education, public services). High costs of infrastructure in rural areas made the main streams of investments go to urban areas. This, in turn, resulted in the deeper differences with respect to the civilization-related facilities between villages and cities. The relatively better living conditions in the cities caused an outflow of the better educated population from the rural areas and, consequently, lower quality of the educational and health care services.

The period of systemic transformation

Transformation changed fundamentally the conditions for agricultural development: abolition, on the one hand, of the phantom of the so-called socialization of agriculture, and offering of the large areas of land for the satisfaction of the needs of private farming deepened, on the other hand, the "historical" problems of agriculture and rural areas. The supply of land from the liquidated state farming enterprises was only to a small extent absorbed by the functioning peasant farmers. However, this supply of land allowed for creation of large, several-hundred-hectares or even larger, capitalist-type private farms. The situation in the domain of agricultural incomes – gross disposable income, according to terminology of national accounts, was most dramatic. These incomes dropped in real

terms by almost 2/3 during transformation (Table 1). Moreover, after the period of the so-called shock therapy, the agricultural incomes have still been falling in real terms. The primary reasons have been the worsening relation of farm prices along with simultaneous emergence of the demand barriers for agricultural products. This did not allow for the production increase to compensate for the effects of the previous phenomena. In addition, an increase in different burdens on agriculture took place, worsening the relation of gross disposal incomes to gross value added (for example: increase of insurance cost).

Table 1. Changes of real gross production, price scissors index, gross value added and disposable income and relation of gross disposable income to gross value added of the private farming sector in 1991–2002 (1991 = 100)

Year	Gross production[a]	Gross Value Added Created[a]	Price scissors indicator	Gross Value Added (GVA) Realized[b]	Gross Disposable Income (GDI)	GDI/GVA
1991	100.0	100.0	100.0	100.0	100.0	77.6
1992	91.8	87.2	86.4	103.5	107.0	81.5
1993	96.6	102.5	84.3	111.4	117.6	81.9
1994	88.8	83.4	91.8	112.0	116.3	80.5
1995	98.3	96.7	93.5	126.5	132.2	81.0
1996	99.5	97.1	89.7	117.6	120.3	79.4
1997	99.4	99.2	86.0	111.1	110.1	76.9
1998	105.9	105.1	78.6	101.9	101.2	77.0
1999	100.2	101.7	71.9	84.0	76.4	70.5
2000	94.8	92.6	74.1	79.3	66.4	65.0
2001	100.4	105.0	72.1	85.6	73.1	67.2
2002	98.5	105.1	65.5	77.7	67.3	67.0

[a] Constant prices; [b] Value in current prices deflated with price index of goods and services purchased by farmers; [c] Own estimation.

Source: Own calculation based on data from the Central Statistical Office (GUS).

After: Zegar, 2003.

One could therefore argue in a justified manner that the problem of agricultural incomes deepened.

This fact had an impact on personal incomes of population involved in agriculture, because the decrease of agricultural incomes could not be compensated for by the appropriately rapid growth of incomes from social benefits and from the non-agricultural jobs.

Personal incomes of agricultural population per capita are by about 3 lower compared to the incomes of persons outside of agriculture. At the same time the differentiation of incomes in agriculture increased, along with the extent of poverty in the rural areas. The differentiation of incomes in agriculture comes in a natural way from the differences in the productive potential of the farms and the ability to utilize it. This applies in a particular manner to labor compensa-

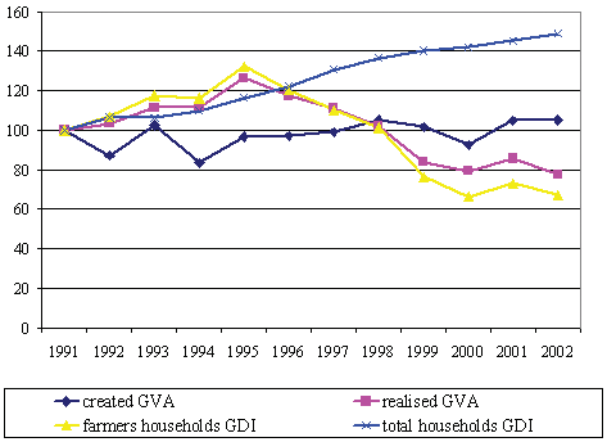

Figure 3. Changes of created and realized Gross Value Added and real disposable income in total household sector and farm households sector in years 1991–2002 (1991 = 100)
Source: Zegar, 2003.

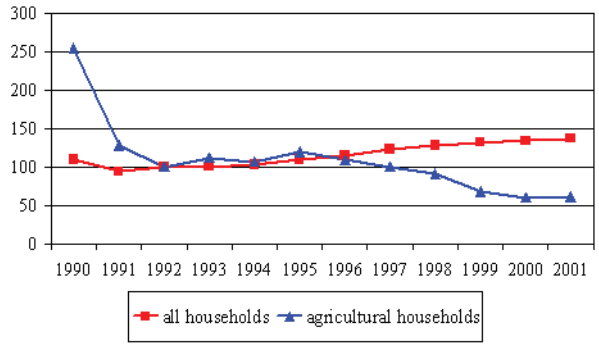

Figure 4. Dynamics of disposable incomes of the agricultural and all households (1992 = 100)
Source: Zegar, 2002, pp. 61–69.

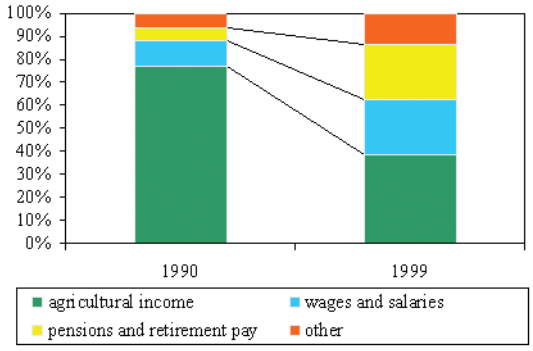

Figure 5. Structure of peasant households' personal incomes according to sources of origin in the years 1990 and 1999 (%)
Source: Zegar, 2002, Diagram 7, p. 78.

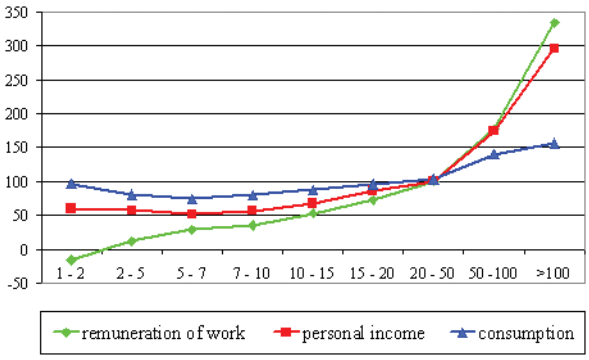

Figure 6. Differences in labor payment, personal income and consumption in population of farms with accountancy in 2001
Source: Zegar, 2003.

tion. Personal income originates also from different sources – besides agriculture – especially such as pensions, retirement pays, as well as wages and salaries earned outside own agricultural holding (Figure 5). This income in relation to one person is corrected by the number of family members. Consumption per capita shows smaller differences between agricultural households as a result of higher accumulation and investments in households with higher incomes and "consumption from capital" in the ones with lower incomes. These relations are presented in Figure 6, in which, in order to simplify the illustration, farm acreage is taken as the indicator of farm's potential.

The extent of poverty among the farmer families in comparison with other socio-economic groups is presented in Table 2.

Table 2. Percentage of persons in households with poverty according to socio economic groups and different criteria of poverty in 2001

Socio–economic groups	Social minimum	Existence minimum	Relative poverty threshold	Official poverty threshold
Total	57.2	9.5	17.0	15.0
Employees	56.0	7.3	13.3	11.6
Farmers	71.2	12.6	26.5	22.9
- part time farmers	66.8	12.2	23.1	20.5
- self employed	44.5	5.1	10.0	8.5
Pensioners and disabled	51.1	8.8	15.3	13.5
Social benefit recipients	81.2	29.4	43.5	39.7

Source: *Living conditions*..., 2002, p. 202.

As far as agricultural production is concerned, the traditional deficit in this area was replaced by surpluses; the problem of production was replaced by the problem of sale (market-demand-driven). This problem appeared in spite of the *de facto* stagnation in agricultural production. The basic reasons for such a situation were: a decrease of consumption of food products (effect of annulment of subsi-

dies and of cheap-food-policy), rationalization and reduction of waste of the farm products, as well as a bigger increase of imports than of exports of agricultural products (appearance of a negative balance in foreign trade with agricultural goods) (Figure 7).

The level of utilization of the work force of agricultural and rural population worsened as a result of the general situation on the Polish labor market. The privatization and restructuring processes in non-agricultural firms, as well as liquidation and collapse of the state and cooperative farms caused the loss of around 1 million of work places in the rural areas. These were not replaced by the newly established private firms. On the other hand, urban areas generate a limited demand for labor offered by the rural population, as they struggle themselves with the problem of unemployment (at the end of 2002 the total number of unemployed exceeded 3 million people in Poland).

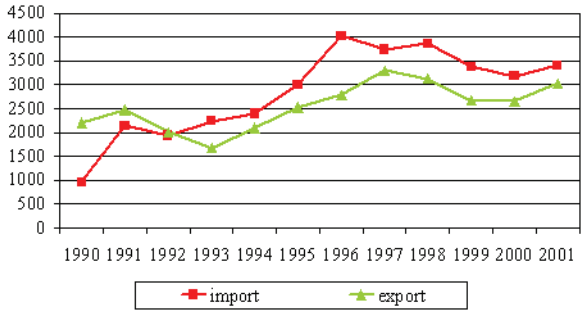

Figure 7. Import and export of agricultural products in Poland (mio USD)
Source: *Situation and Outlook...*, 2002.

The situation in agriculture has a strong impact on the entirety of the rural areas, although the position of agriculture in determining rural development is clearly diminishing. The process of transformation accelerated the latter phenomenon mainly through the development of different systems of social insurance and implementation of the idea of multifunctional development of rural areas. There has been a considerable progress in development of technical infrastructure, particularly in telecommunication; water and gas supply; sewage and liquid waste treatment. Only first steps have been made in the field of solid waste management.

However, in general, the development of villages remains far behind the development of cities, especially the larger agglomeration. The per capita personal income of the rural population, lower by as much as 30% than the income of urban population, the still difficult access of the rural population to such public goods as education, public health and cultural services, taken into account together with the model of consumption and the living standards promoted in the mass media, have a strong effect of demonstration, amplifying the feeling of depreciation among a large part of the rural population.

The process of transformation revealed new problems. We will limit ourselves in our considerations to the essential ones. The first one concerns competitiveness. In the previous political system this problem did not exist, mainly, though, because most of what agriculture produced was easily sold (with exception of fruits and vegetables). A new situation on the market, deep liberalization of foreign trade made farmers face a strong competition, not only on the foreign, but on the domestic market as well. The source of the problem lies in the fact that the effectiveness (productivity) of Polish agriculture is significantly lower than in the highly developed countries. Production is more fragmented (as the effect of agrarian dispersion and the weakly advanced processes of specialization and concentration) and producers of agricultural goods are at the stage of reestablishing their organizational structures. Similarly, we experience an inadequate infrastructure and institutional organization of the market, the support for agriculture being weaker than in the highly developed countries. One may say that the bases for competition are not equal.

Table 3. Producer Support Estimates by selected country in % of PSE

Country	1986–1988	1999–2001
European Union	42	36
Czech Republic (1)	38	19
Hungary (1)	17	18
Poland (1)	4	12
Slovak Republic (1)	35	20
OECD	38	33
Australia	9	5
United States	25	23

(1) Figures in second columns refer to the period 1991–1993
Source: *Agricultural policies*..., 2002.

The second source of difficulty is lack of stabilization of economic performance, causing excess fluctuations of production, which, in turn, brings down, in relative terms, the prices of agricultural products. Market institutions are undeveloped and the performance of agencies established for controlling main agricultural markets (like the Agricultural Market Agency, ARR) is ineffective. The uncertainty of economic circumstances (in addition to the natural uncertainty related to unpredictable climate and weather condition) has become one of the most important problems of agricultural entities and of their functioning.

Integration with the European Union

Integration of the Polish food and agriculture sector with the common EU market and the inclusion of Polish agriculture and rural areas into the Common Agricultural Policy (CAP) and the structural policy mechanisms create certain opportunities, which may help resolve the problems mentioned. At the same

time, these new conditions also bring in threats, or – to put things more mildly – additional uncertainty. It is certainly hard to predict precisely the results and effects of integration. This is why, for the purposes of this article, we will concentrate only on the "balance" of chances and threats (uncertainties) in reference to specific problems.

Concerning the income problem, integration with the EU appears to be more favorable than disadvantageous for Polish farmers. This opinion is associated with the planned coverage of Polish farmers by the direct payments, the price increases for some agricultural products, the stabilization of production and market conditions (limits and quotas), and the extension of the market for the labor-intensive so-called „boutique" products (exploitation of market niches). According to various analyses, due to the introduction of the instruments of CAP, the incomes of farmers in the acceding countries will rise above the average income observed in all sectors of the national economy (Tangerman 2001). It is, however, more realistic to expect a moderate increase of incomes due to an expected rise in agricultural prices and production costs (Floriańczyk et al. 2002).

A positive influence on incomes will be exerted by the implementation of the agro–environmental programs and the support for rural development in the framework of CAP and Structural Policy.

On the other hand, the most important threat is associated with the annulment of the possibility of improving incomes through production increase. Introduction of limits, production quotas and intensive competition on the agro-food market will create fundamental barriers to agricultural production increase. The inward opening of the Polish market will be accompanied by opening of the access to the EU-25 market, which is several times bigger. Inability of Polish producers to stand up to the new competitors will result in a higher negative trade balance of agro–food products with the EU countries. At the same time, though, the possibility of exploiting the market niches and the single, unified system of support for the export to third countries create the chances for achieving an altogether positive balance of trade. Moreover, the threat of production decrease appears to be realistic, if conditions for farm functioning and their entire environment are not harmonized. A yet different impact of direct payments on farm incomes may cause changes in farm structures, which would be not desirable from the public point of view. The recently functioning mechanism based on the scale of production, handicaps smaller farms. It also gives more incentives to the specialized, large-scale crop production farms, which is in contradiction with ecological prerequisites.

Concerning the problem of overproduction, the situation should improve due to introduction of quotas and limits on certain products. Yet, it is hard to unequivocally conclude on this issue.

Now, with respect to the use of supply of labor from the farming families we should expect positive changes as a result of:

- new stimulus for the labor-consuming ecological agriculture,
- transfers meant for the transformations in rural areas in the framework of programs of multifunctional development of rural areas,
- development of the agro-environmental programs.

As far as the problems of rural backwardness in terms of civilization are concerned, the balance between the possibilities and threats is definitely advantageous, mainly due to structural funds, initiation of implementation of the idea of SARD, and the necessity of introduction of ecological standards.

With regard to the problem of competitiveness, it is now hard to predict which factors will act in favor and which will be disadvantageous. On balance, integration should neither worsen nor improve the chances for better competitiveness of Polish agriculture.

Concerning the problem of stabilization of the economic and organizational environment one can look forward to an improvement. Implementation of the mechanisms of CAP in Polish agriculture will naturally (higher predictability of the circumstances of husbanding) drive in this direction.

The use of the chances, originating from integration with the EU, depends to a large extent on the administrative capacities of the acceding countries. Of crucial importance here are the transition periods and the abilities of using effectively the possibilities offered, especially the transfers related to EU accession. The example of the SAPARD program shows that effective use of EU resources is not easy at all. Certain problems appear in this relation, common for the countries aspiring to EU membership, associated with effective utilization of aid made available up to now. Later on this problem will get transformed into the problem of effective and efficient utilization of the instruments of CAP.

Conclusions

The countries of Central-Eastern Europe, and actually of whole extended European Union, will face in the nearest future new problems. These problems should be the subject of intensive studies, also in the framework of the research program of ERD, European Rural Development. We will shortly comment here on the five most important ones:

1. Main directions of development of European agriculture in the perspective of globalization and the ecological and socio–economic conditions. In particular, here belongs the question of the reasons for Polish agriculture to follow the way the West European countries had taken. The agriculture of the latter countries develops according to the rules established through industrialization, even if definitely gentler than in the case of American agriculture. This path of development of agriculture allowed for resolving the problem of pro-

duction deficits and assured sufficient supply of relatively cheap agro–food products for the growing population. It was realized through absorption of technical progress, specialization and concentration of production and migration of population from agriculture and countryside. Simultaneously, this process brought about new problems related to the natural and socio–cultural environments, overproduction, up to a worsening of taste and nutritional value of food products. An alternative for such agriculture is constituted by the socially sustainable agriculture, adapted to the currently observed developments in conditions for agricultural activity.

2. Allocation of agricultural production in united Europe. Significant differentiation of the natural and socio–economic circumstances of development will weigh on the shape of the new equilibrium in spatial distribution of agricultural production. The scope of the resulting re–allocation is not yet known and so are the social and economic consequences of possible changes. Taking into consideration the diversity of optima corresponding to the adopted economic and social criteria, one might expect that it would be necessary to formulate the rules of harmonization of Common Agricultural Policy and domestic policies.
3. Direction of CAP reform. We are all on the eve of an in-depth discussion concerning the changes in the Common Agricultural Policy, which can have essential significance for the acceding countries. Currently, CAP is – in an evident and understandable manner – totally subordinated to the general interest of the agricultural sectors of the EU countries. Meanwhile, Polish agriculture, for instance, lags by about 30–40 years in its development (having in mind the industrial model of agriculture) in relation to agriculture of Western Europe. It seems that the differences in the models (stages) of agricultural development of individual countries should be reflected in the modified CAP. There is also a need for a re-assessment of the model of European agriculture in the circumstances of the process of globalization.
4. Migration from agriculture and rural areas. One of the great problems of Polish agriculture and rural areas is excess labor. It seems that the historically taken way of resolving this problem through migration to cities would not be effective under the present circumstances, especially in the face of significant unemployment in towns. In this situation, side by side with implementation of the idea of multifunctional development of rural areas, it would be desirable to facilitate seasonal (periodical) foreign migration, this kind of movements having been, anyway, largely a usual practice in the second half of the 19th century. The knowledge on the possible demographic changes, including migration flows from and to the rural areas, as well as social and economic effects thereof, is as yet very limited. This defines, therefore, an important and interesting area for investigations.
5. The new possibilities of gaining incomes in connection with the CAP, structural funds, agro–environmental programs, and the multifunctional development of rural areas, as well as migration (including the inflow of the retired

and pensioner urbanites and residents from the cities) will certainly have a significant impact on the standards of living and differentiation among the rural households, and the new socio–economic order in the countryside. This problem certainly requires, as well, scientific recognition.

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Transforming the functional structure of Poland's rural areas

Abstract: *This article is devoted to changes in the functional structure of Poland's rural areas in the years 1988-1999, that is – in the period of transition from the socialist to market economy and the country's preparations for the EU accession. As the result of functional classification of rural areas carried out in 1999, it proved possible to identify ten functional classes, which can be associated into five groups (i.e. areas with an agricultural function, with equal contribution from different functions, with prevalent forestry, with prevalent tourist/rest-and-recreation function, and with prevalent non-agricultural function).*
The functional classification obtained revealed that the ten-year period brought a strengthening of the agricultural function in central and eastern Poland, while the West and parts of the South witnessed an increase in the significance of functions outside agriculture. The latter were the result of the development of new economic activities, including farms engaging in the processing of agricultural products and the rendering of different kinds of services. In areas with a prevailing agricultural function, there has in general been a decline in the significance of the market-related agriculture, and an increase of its role in the self-supply for rural inhabitants.

Key words: *Poland, functional structure, rural areas, agriculture*

Introduction

During the last ten to twenty years, Polish rural areas have been under the influence of processes and phenomena that have resulted from the need to adjust the country's economy to a new socio-economic system. The ongoing transformation in the physical development of rural areas is such that it generates or reveals different social, economic or environmental problems whose range and scale differ markedly from region to region. There is also a change in the functional structure of rural areas hitherto dominated by agriculture. The fact that this has an influence on the functional structure of Polish rural areas is attested to by the observation that employment in agriculture accounts for some 16% of the professionally active population[1], while the country's almost 2 million farms manage around 60% of the territory of Poland.

[1] The figures for the percentage of employed in agriculture vary markedly from source to source. According to the Central Statistical Office, 27% of the professionally active are in farming. In contrast, in recognising that only some of those working in agriculture do so full time, some agricultural economists say that the figure is only around 14%. In turn, in the author's opinion, the figure may be estimated at between 16 and 18%.

The task of this study has been to recognise and assess the changes in functional structure having occurred in Poland's rural areas after 1989[1], while paying particular attention to the factors stimulating the development of new economic activity outside agriculture. The latter are critical to the development of rural areas and to improving the existence of the rural population. Studies in monofunctional areas are conducive to the view that the social phenomena present are unfavourable (depopulation and ageing), as are those in the economic sphere (a decline in the profitability of production, slow development of technical infrastructure and a lack of new investments).

The processes inherent in structural change in rural areas are proceeding unevenly and in a manner that is very much dependent on the historical background. It is possible to distinguish three historical regions: 1) the Congress Kingdom of Poland (prior to World War I in the part of Poland occupied by the Russians), 2) Galicia (the Austrian part of Poland prior to WWI) and 3) Wielkopolska and Pomerania (which were in Prussian hands). To be added to the latter are the Western Lands gained (regained) by Poland after World War II. These different areas show different levels of economic and societal activity, as well as various dynamics of development. The highest levels of socio-economic activity are characteristic of the western part of the country, followed by the former Galicia and then the area once forming the Congress Kingdom (*Polska wieś...* 2002).

Research procedure

The first stage of the research entailed establishment of the contemporary picture of the functional structure of rural areas in Poland, so that it could be compared with the earlier work, done for the 1980s[2] (Stola 1982, 1984, 1992). The comparison was facilitated by the use of the same procedure and the analysis of a similar set of diagnostic features[3], characterising the basic elements of the spatial structure of rural areas (Bański and Stola 2003).

The work on the functional structure of rural areas accounted for all the parts of the country at the level of the gmina (local authority area)[4]. The primary sources of information were materials collected by the Central Statistical Office. On the basis of the earlier work, dating from 1988, and the available statistical data-

[1] The year 1989 saw the commencement of the political and economic reforms that brought an end to Poland's socialist economy.

[2] On account of the actual liquidation of the state agricultural sector after 1989, no analysis of the characteristic "share of nationalised agricultural land" was made.

[3] The work on the functional structure of rural areas in Poland done in the 1980s was mainly carried out by W. Stola. One of the most important results from this work was the map of "Functions of Rural Areas", published as a part of the National Atlas of the Republic of Poland (Atlas Narodowy Rzeczypospolitej Polskiej), 1996.

[4] Poland has now a three-tier administrative division into 2486 gminas (communes), 308 poviats (counties) and 16 voivodships (provinces).

bases, a choice was made of eight diagnostic features that would allow for a functional classification of Poland's rural areas in 1999 (Table 1).

Table 1. Diagnostic features and measures thereof selected for classification of rural areas in Poland in 1999 from the functional perspective

No.	Diagnostic feature	Measure
1.	Share of agricultural land	Percent of all land under agricultural use
2.	Labour intensity of agriculture	No. employed per 100 ha of agricultural land
3.	Commercial viability of agriculture	Percentage of farms producing for the market
4.	Level of forest cover	Percent of all land under forests
5.	Intensity of tourist management	No. of overnight accommodation places in tourist and recreational facilities per km^2
6.	Non-agricultural population	Percentage of persons working outside agriculture
7.	Employment in industry and construction	Percentage of the professionally active population employed in industry and construction
8.	Businesses outside agriculture	No. of businesses outside of agriculture per 10,000 people of productive age

Source: author's own work.

To facilitate the comparison of measure values, a normalisation process was carried out (Table 2). This entailed distinction of five class intervals for each measure, these intervals associated with a value for a class varying between 1 and 5. The assumption proceeded upon was that all measures were of equal worth from the point of view of their influence on the functional classification of units. Each gmina (local authority area) in Poland could be described by an 8-element set of variables forming a code (e.g. 1,2,4,3,5,1,3,3).

Table 2. Standardisation of measures

	Measures of features	Classes				
		1	2	3	4	5
1.	Percentage share of agricultural land	10–30	30–50	50–70	70–90	>90
2.	No. of employed per 100 ha of agricultural land	1–10	10–15	15–25	25–35	>35
3.	Percentage of farms producing for the market	0–10	10–20	20–40	40–60	>60
4.	Percentage of land under forests	0–10	10–20	20–40	40–60	>60
5.	No. of overnight accommodation places in tourist and recreational facilities per km^2	0–1	1–2	2–6	6–10	>10
6.	Percentage of persons working outside agriculture	0–20	20–40	40–60	60–80	>80
7.	Percentage of the professionally active population employed in industry	0–10	10–20	20–40	40–60	>60
8.	No. of businesses outside agriculture per 10,000 people of productive age	0–500	500–700	700–800	800–1000	>1000

Source: author's own work.

A further step was the arbitrary determination – on the basis of empirical data – of model-codes for different functional types of commune (Table 3). Such model-codes were devised by analysing more than 2000 administrative units, as well as the conclusions drawn from work of the same type carried out in the 1980s. Ultimately, some 10 functional type-models of gminas were distinguished. These do not represent a closed set, since other countries possess other identifiable functional types of new kinds that are not yet encountered in Poland. Moreover, the types presented are capable of being made more specific through separation of sub-types.

Table 3. Functional Type-models of gminas

Type-models	% of all land under agricultural use	No. of employed per 100 ha of agricultural land land	% of farms producing for the market	% of all land under forests	Overnight accommodation places on tourist premises per km^2	% employed outside agriculture	% employed in industry and construction	No. of non-agricultural businesses per 10,000 people of productive age
1 Agriculture of limited intensity and commercial viability	4	3	3	2	2	2	2	2
2 Intensive and commercially viable agriculture	4	5	5	1	1	3	2	3
3 Mixed agriculture of types 1 and 2	4	5	2	2	1	3	2	5
4 Agriculture + non-agricultural functions	3	3	3	3	3	3	3	3
5 Equal shares of different functions	1	3	2	4	1	4	3	4
6 Forestry with a share of non-agricultural functions	2	2	2	4	2	1	2	2
7 Forestry with a share of agriculture	1	4	1	4	5	3	2	2
8 Tourism and recreation with a share of forestry and agriculture	3	3	3	2	5	4	3	3
9 Tourism and recreation with a share of non-agricultural functions	3	2	2	3	1	5	5	3
10 Non-agricultural (service, residential and other) functions	3	4	3	2	2	5	2	5

Source: Bański and Stola 2003.

The last stage of work was to compare the codes for each studied unit with the code-models. If the taxonomic distance established in this way[1] – expressed as the sums of departures from code-models – was minimal and did not exceed a determined limit value, then the functional type of a given unit was recognised as belonging to the type represented by the given code-model.

[1] Taxonomic distance was calculated according to the formula:

$$D_{kl} = \sum_{j=1}^{n} \left| a_{kj} - a_{lj} \right|$$

where: D_{kl} is the taxonomic distance between the k-th unit and the l-th unit; a_{kj} is the normalised value of the j-th feature for the k-th unit; a_{lj} is the normalised value of the j-th feature for the l-th unit; n – no. of features (8)

It was thus accepted – in theory at least – that the result of the classification would be a distinction of ten functional categories of rural areas accounting together for a majority of gminas. It was also anticipated that the functional structure of certain units might be "transitional", i.e., similar to two type-models; or else quite distinct, i.e. not similar to any of the 10 type-models. In the case of this study, however, the decision was taken to include all such units to one or other of the ten types.

This functional classification of Poland's rural areas allowed distinguishing 10 functional classes, which were in turn combined together into 5 groups for the sake of the present study (Figure 1):

1) areas with prevailing agricultural function (classes 1, 2, 3, 4),
2) areas with equal shares of various functions (5),
3) areas with prevalence of forestry (6, 7),
4) areas with prevailing tourist and recreational function (8, 9),
5) areas with prevailing non-agricultural (i.e. industrial, residential or service--related) functions (10).

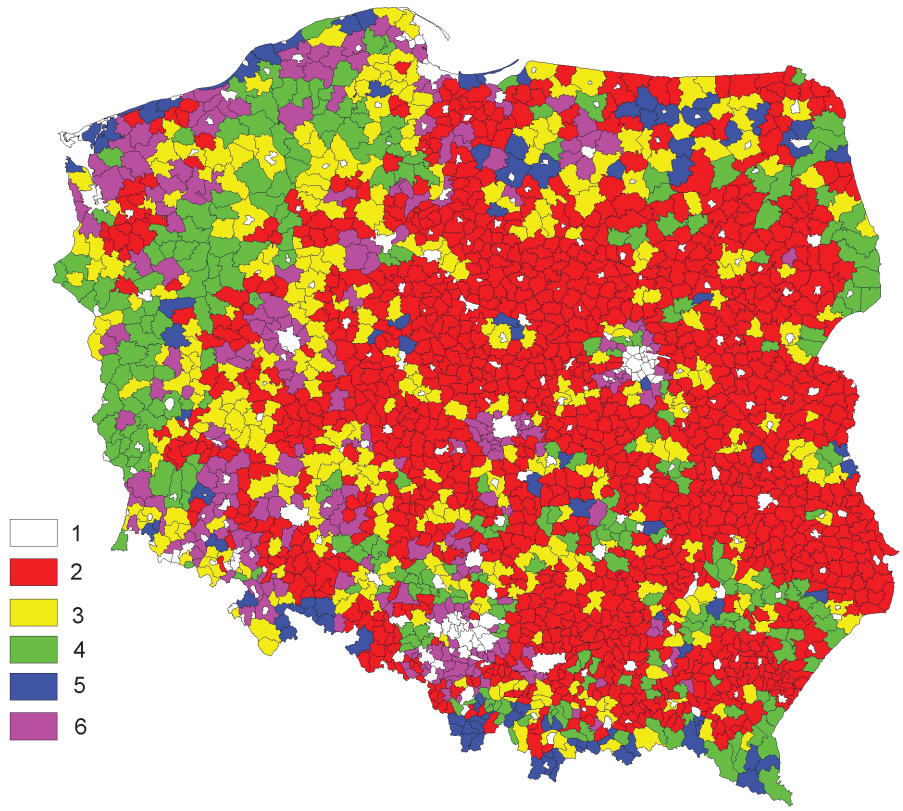

Figure 1. Functional classification of rural areas in Poland as of 1999
1 – towns and cities, 2 – prevailing agricultural function, 3 – mixed functions, 4 – prevailing forestry function, 5 – prevailing tourist function, 6 – prevailing non-agricultural functions

Gminas with prevailing agricultural functions

Polish society in general identifies rural areas with agriculture. Agricultural landscape combines with the fact that agriculture is associated with more than half of the countryside's inhabitants to ensure that the traditional concept of rural areas remains unchanged. Agriculture is still the dominant economic function, with gminas featuring it as a prevalent function forming the largest group (1238 of them). The greatest concentrations of this kind of communes exist in the East and centre of the country, however. These are mainly monofunctional areas in which other economic activities (services, tourism, residential functions and industry) are of a "trace" character.

Gminas with domination of agricultural function were divided into four types that differed in regard to agrarian structure and the level of development of agriculture, as well as the types and shares of functions that co-occur. The primary differentiation concerns the intensity of labour inputs and the degree to which production is commercially viable. The following functional classes were distinguished:

- agriculture of limited intensity and commercial viability,
- intensive, commercially viable agriculture,
- mixed agriculture with shares of classes 1 and 2,
- agriculture plus non-agricultural functions.

Gminas belonging to Class 1 (limited-input, low-viability agriculture) occur mainly in the East and centre of Poland. Farming is characterised there by traditional means of management and average or low productivity, reflecting both unfavourable natural conditions and the level of socio-economic development (e.g. education, equipment with technical infrastructure, methods of production, and demand system) that is lower than in other parts of the country. In addition, the areas in question suffer from unfavourable demographic processes manifested through depopulation and ageing of the remaining populace (Eberhardt 1989; Stasiak 1990).

When compared with Western European countries, the level of development of agriculture of eastern and central Poland can be said to be several decades behind. Luckily, it is possible to see some kind of consolation prizes in the sheer backwardness characterising Poland. The period of the so-called "post–productivism", which B. Ilbery and I. Bowler (1998) saw as being characterised by extensification, deconcentration and diversification, is something that represents a chance for Polish farming. From many points of view (extensive methods of production, the use of mineral fertilisers at one-third and of pesticides at only one-seventh of the respective levels in Western Europe, and the multi-directional nature of output) it is closer to the new prerequisites of the Common Agricultural Policy than is farming in Western Europe.

The Class 2 areas (of intensive and commercially-oriented agriculture with major inputs of labour) are generally grouped around main urban agglomera-

tions, with the agricultural function accompanied by others (most often the residential and service-related).

Agriculture in the vicinity of towns and cities is characterised by large inputs of labour and capital, as well as by a higher level of productivity and commercial viability. In general it specialises in garden production (of fruit, vegetables, flowers, etc.) and is targeted at the direct needs of the urban market (Gałczyńska 1992).

Since the time Poland's Associate status with the EU was being negotiated, an increased level of import of agriculture products, combined with rising costs of domestic output, made farmers face the ever greater problems in finding markets. Profitability has declined, as well, though there has been a development of activities outside of agriculture, which altogether contributed to the reduction of the relative significance of agriculture within the functional structure.

Competition between farming and other functions – notably the service-related and residential – is however leading to an increase in conflict where land use is concerned. The 1990s witnessed an increased dynamics of two mutually exclusive processes, as an absorptive market stimulates increased agricultural intensification and production, while the territorial and population-related expansion of towns and cities that brought this into being eats steadily into the available resources of farmland (Bański 2002). The dramatic rises in land prices at the beginning of the 1990s favoured the processes that removed land from agriculture and saw the sites in question designated for other purposes. In the areas around cities in particular, the price of land had risen as much as 10–20 times over in recent years.

The same functional class (Class 2) also includes communes with agriculture of relatively great commercial viability and intensity, reflecting major outlays of capital. This kind of farming is above all representative of the Wielkopolska, Kujawy, Vistula Delta and Silesian Lowland areas of Poland, which will in future provide the backbone of the system by which Poles are supplied with food. Agricultural functions here are associated with activities in the service for farming and processing of its output. The local farmers are better prepared than any others for competing against those in the EU, and – as their own statements make clear – they are not afraid of their future after 2004. A further confirmation of this comes with the recent results of Poland's referendum on EU accession, as the greatest proportions of proponents among rural populations were to be found right here (compared with the greatest Euroscepticism observed in eastern Poland).

Alongside gminas of Classes 1 and 2 are those of Class 3 in which we find the mixture of Class 1 and Class 2 agriculture. In terms of their functional structure, these may be considered either transitional, or more similar to one or the other of the aforementioned classes. They bridge the gap between modern and tradi-

tional farming, in that they have both highly commercial farms and ones producing solely for their own needs.

Functional class 4 (agriculture plus functions outside agriculture) represents a very specific type termed "social", albeit with a share of other functions, mainly the residential and the service-related. "Social" agriculture produces for the needs of its own people, while deriving its main income from non-earned sources (various pensions and benefits). It is present in areas with a fragmented agrarian structure and a large share of plots that are not true farms (of less than 1 ha). Gminas in this class are concentrated in the south-east of Poland.

Indeed, the rural areas of south-eastern Poland stand out for many reasons. They are characterised by the highest population densities and the greatest agrarian fragmentation, as the average farm holding varies in size between 3 and 5 ha. More than 80% of the farms there (especially in the voivodships of Małopolska and Podkarpacie) have less than 5 ha of area. Moreover, these are mostly divided into several (sometimes up to 10–20) separate plots scattered over a large area.

Gminas with equal shares of different functions

The communes included in Class 5 (with mixed functions) are characterised by the lack of clear domination of any function. They are located primarily in the North and West – in areas where the State Farms (PGRs) controlled some 3.8 million ha of land in the 1980s (or more than 75% of all farmland in these regions).

The complex functional structure of these gminas has arisen primarily on account of the development of activity outside agriculture - in services or production, or else because of a decline in the significance of productive agriculture following the closure of the State Farms (as in Pomerania, Warmia-Mazury). The former state farm land was taken over by the Agency for Agricultural Property of the State Treasury (AWRSP), or else by private agriculture which has been in a position to establish large-scale farms (Zgliński 2001). However, in the face of a lack of buyers, a large part of the AWRSP holding is currently lying fallow.

The complex functional structure of the Class-5 gminas is the effect of superposition of consequences resulting from the growth of the numbers of entities engaging in economic activity outside agriculture (including also on-the-farm activities). Unlike the East of the country, these areas have seen a recent activation of non-agricultural functions diversifying the incomes of rural households.

Gminas in which forestry prevails

The next two functional classes of rural areas (6 and 7) are, respectively, those in which there is forestry with a share of non-agricultural functions or forestry

with a share of agriculture. They feature forestry over a significant part of their area (mostly more than 40%), but are otherwise very varied from the point of view of both the structure of the co-occurring functions and the status of forestry itself.

Class 6 features forestry with a share of different non-agricultural functions ranging from the residential and tourist/recreational (as in the Bieszczady and Świętokrzyskie Mountains) through the service-related and commercial in western border regions. In contrast, Class 7 has forestry plus agriculture in the form of small-farming (as can be seen mainly in the Suwałki Lakeland and the Carpathians), or else large-scale farming on the former State Farm land.

Forests were long treated first and foremost as sources of raw materials. However, air, water and soil pollution came to threaten a considerable area – estimated at nearly a quarter of the total forest area in the 1990s. Fortunately, the situation has somewhat improved in the last few years, primarily as a result of the closure or restructuring of industrial plants, along with increased outlays on environmental protection in general. Some significance should also be assigned an increase in awareness on a part of the public that forests have important non-productive functions.

Forestry strengthens local economies if it is conceived of more broadly than in the past, i.e. not simply as a subject for clear-cutting and raw-timber production, but also as a resource that can serve important societal and environmental functions. The latter functions beyond mere production are ever better-recognised in Poland, such that the economic and social practice in forestry in the 1990s and early 2000s can be said to have taken a significant step towards the new model of the forest, termed "post-industrial" by Mather (1990).

In accordance with the *National Programme for the Augmentation of Forest Cover*, which had been in implementation since 1995, an additional area of 700,000 ha is to be afforested by 2020. At present, some 18,000 ha a year are being planted mainly on land of limited suitability for agriculture, handed over by the Agency for Agricultural Property of the State Treasury. Unfortunately, the area of private land turning into forests remains very limited, though this may change following the introduction of incentives in the form of covering the costs of planting and tending, and assistance with the development of forest infrastructure. Denmark can provide an example of this kind of favourable transformation (Jansen 1993), as can Ireland (Gillmor 1992), both being among the most deforested countries in Europe. Thanks to an appropriate "forest policy", as well as financial assistance from both the state and Brussels, these countries have been able to play host to a dramatic increase in the area under forest.

Gminas with a prevalent tourist and recreational function

The next two functional classes of rural areas (8 and 9) are the ones featuring tourism and recreation with a share of forestry and agriculture, as well as those

based on tourism and recreation with a share of non-agricultural functions. They stand out for their high level of development of tourism and recreation, and differ from each other in regard to which functions accompany the above. Thus Class 8 has also forestry and to a lesser extent agriculture (mainly that with large inputs of labour, which is self-supplying or of limited commercial viability), with gminas representative of it being located in the Carpathians, the Suwałki Lakeland and occasionally elsewhere. In contrast, in Class 9, the tourist and recreational function is generally supplemented by the functions developing outside agriculture, be these service-related or residential. This class is mostly present in coastal areas and the Mazurian Lakeland, as well as in the Sudety Mountains, and sporadically around the largest cities.

The quality of tourist services rendered in rural areas is not always satisfactory. Tourist development must be accompanied by a change in the rural economy, and above all an improvement in social and technical infrastructure, associated with increased opportunities for the obtainment of cheap loans, greater help from local government institutions and training in agro-tourism.

Nevertheless, tourism has become a realistic supplement to agriculture in some areas. The number of farms offering tourist services is increasing, so that there were 11,300 of them – with 126,400 places – by 2000. They were present in every voivodship, but mostly in the traditional holidaymaking areas.

Recreation during shorter periods of the "long weekend" type is taking on high significance in rural areas. It is naturally developing mostly near the large cities, wherever there are forests and waters. What is involved here first and foremost are the second homes that have been popular in Poland for a long time already. Perhaps unfortunately, the pressure this exerts in some areas is great enough to force the departure of agriculture from the land, which is now designated for the building of summer homes. In this context, local physical development plans are even being modified in order to accommodate such changes, while the land prices obtainable are several times higher than they would be if farming were simply to continue in the areas concerned.

Gminas with prevailing non-agricultural functions

Class 10 is specific in that it comprises gminas in which the prevailing functions (already) lie outside agriculture. Their functional structures have been shaped by the direct impact of urbanisation processes and a major growth in non-agricultural economic activity, including that pursued on farms themselves. While this kind of activity is taking on increased importance nationwide, the development is particularly marked in the West of the country.

Communes with prevailing non-agricultural functions are mostly concentrated in the North and North-west, as well as around the larger agglomerations, mainly within the urbanised gminas. Owing to a decline in the profitability of agriculture and an increase in land prices when land is designated for non-agri-

cultural purposes, there is an ever greater importance attached to residential, recreational (mainly long-weekend), service and productive functions. Attesting to this is a dynamic growth in the numbers of entities engaging in economic activity outside agriculture (Kołodziejczyk 1999). What favours this in the hinterlands of cities, for example, are the much lower labour costs than in the urban areas themselves.

Areas whose functional structure has been shaped under the direct influence of urbanisation and industrialisation processes are mainly the ones that are highly transformed from the socio-cultural and settlement points of view, as well as in terms of the state of their natural environment.

An interesting phenomenon, new to Poland, is the trend for urban inhabitants to migrate out to rural areas, to the extent that it is possible to speak of a process of suburbanisation. Areas in the immediate vicinity of cities have positive migration balances, while the people flowing into them are mainly from those cities. In general, farther away from larger urban areas, migration balance again becomes negative.

Those deciding to turn their backs on the big city, at least in terms of residence, are the wealthy and well educated. Moreover, it is by no means unusual for them to bring the seats of enterprises they run with them as they move. Such a phenomenon does offer a chance for rural areas to develop, also favouring a raising of the level of technical and social infrastructure that has to meet the more exacting requirements of the new rural residents.

Selected factors stimulating the development of new functions in rural areas

These factors may be divided into three groups, of 1) social, 2) economic and 3) technical factors. The most important of the social factors include migration, education of rural residents and age structures of their populations.

In each successive post-war year Poland's total population increased, while the numbers of rural population remained stable. The ongoing urbanisation of the country was thus associated with a steady fall in the proportion of rural population, as opposed to urban population. While 66% of Poles lived in the countryside immediately after the War, the figure was by almost 50% lower by 2000, solely as a result of the migration of the rural populace to the towns and cities. Rural areas with higher rates of natural increase than their urban counterparts were the primary source for the development of city populations.

What made this phenomenon particularly unfavourable for the rural areas was the fact that the cities were absorbing their young people (especially women), and hence those with more advanced education. The natural increase gradually fell as a result, such that areas of depopulation even appeared (with shortfalls in

numbers of women of marriageable age and a high share of the population that was past working age).

Among women, the greatest migration intensity is observed in the 20–24 age group, while in case of men it is the age bracket of 25–29 years (Witkowski 1990). The reasons for the departure from villages, most often cited, have been low income from farm work, inadequate technical and social infrastructure in rural areas, hard life in villages linked with problems of housing, social barriers, inadequate access to education and culture, and difficulties with finding a partner and founding a family.

The 1990s saw ever fewer people migrating to towns and cities, primarily as a result of an increasingly limited labour market and rising unemployment. Some areas even noted the reverse phenomenon, which is to say an increase in numbers heading out for the countryside. For the first time in several decades, the number of rural inhabitants increased, in spite of a clear fall in the rate of natural increase (Figure 2, 3). The 1990s can thus be considered to have brought a marked overall slackening in the rate at which Poland's population was concentrating in urban areas.

A similar phenomenon has been observable for years now in Western Europe and North America (Berry 1976; Boyle 1995; Boyle and Halfacree 1998; Champion 1989; Stockdale, Findlay and Short 2000; Dahms and McComb 1999). The so-called *counterurbanisation* is defined as a process of population deconcentration characterised by an outflow of people from areas of higher concentration to those of lower concentration (Berry 1976).

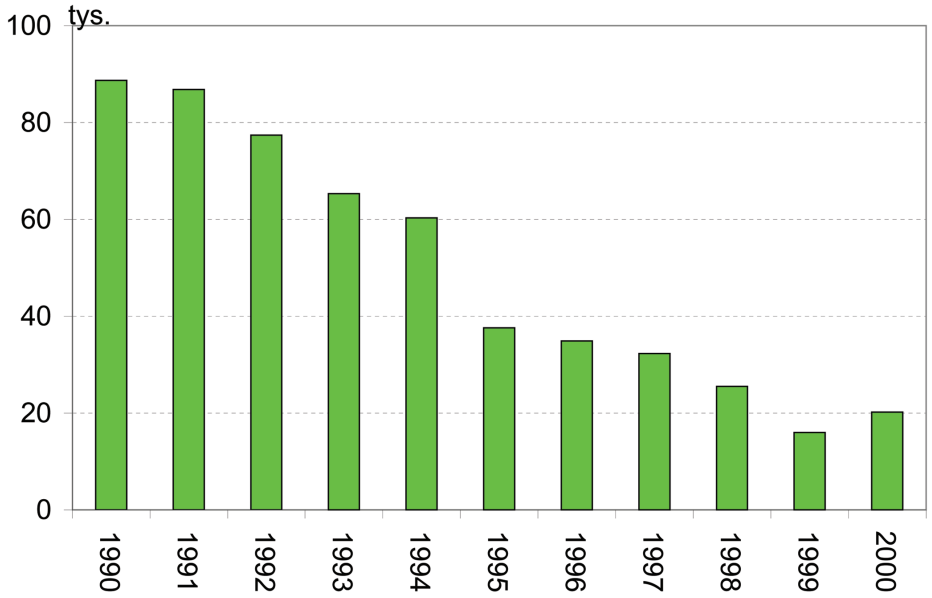

Figure 2. Birth rate of rural population

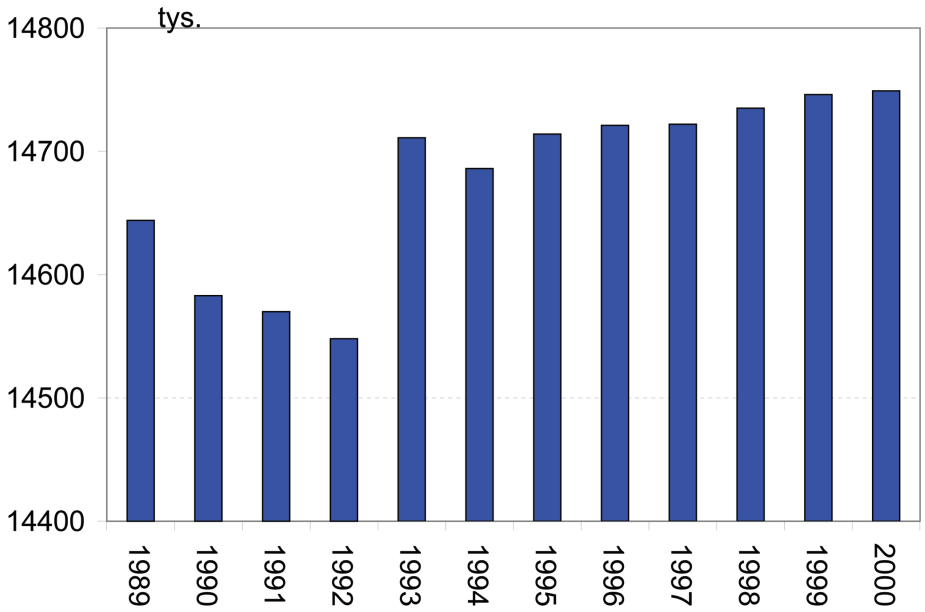

Figure 3. Changes in the number of rural population

However, while the EU version of the process putting the brakes on any further concentration of the population has resulted from a desire to remain – or to settle – in villages (where the environment is clean, access good and all the necessary social and technical infrastructure now in place), the situation in Poland has resulted from a contraction of the labour market in cities. As unemployment rose in the 1990s, the only people deciding to risk a move into town were the courageous or the successful. Equally, those losing their jobs in the urban areas were above all the newcomers from out-of-town, who were often forced to go back to the villages they had come from.

Though it has improved steadily, the level of education in rural areas remains much below that among town- and city-dwellers, with farmers being the worst-educated of all the social strata in Poland. The level of education of farmers obviously has a direct influence on the results of their work and the level of development of farms (Gałczyńska 1995). As of 2000, only 17.5% of those living in the Polish countryside and working in agriculture had completed their secondary education, while as few as 1.5% had university studies behind them. A brighter point is the fact that the progress with getting villagers educated is concentrated in the direction of the young. It is after all upon youth that the development of rural areas is going to depend. Nonetheless, only 2% of the students of higher education establishments originate currently from rural areas (H. and M. Ingham 2002)

The current educational status of country-dwellers does not encourage rural "development" in the broadest sense of the term (including the appearance of

new economic activities). This is particularly the case for areas in which agricultural functions prevail, where the level of education of the populace is very low. It would thus be hard to expect any major development of new economic activity outside agriculture there, at least in the next few years. Such developments do require not only the necessary means for investment, but also – maybe above all – an active approach, and a degree of inventiveness and ingenuity on the part of both rural inhabitants and the local authorities that seek to serve them.

A second group of elements stimulating the development of rural areas are the broadly conceived economic factors. These are of various kinds and levels, beginning with investing in local sites, through the incomes of gminas and of individuals. However, one of very important factor is financial assistance from the European Union within the framework of its assistance programmes (Bański 2002).

Of crucial significance for the effectiveness with which these programmes are implemented is their proper and purposefully selected targeting at different regions. It would seem obvious (and is the EU's stated intention) that the most weakly-developed areas should receive the aid, in order that their economic activation might encourage an evening-out of differences in levels of development that separate them from the highly-developed areas, which they lag behind. Meanwhile, the greatest number of projects associated with the assistance programmes of the EU is actually being implemented by the strong and powerful local and regional authorities. In turn, the local authority areas that are less developed in economic terms – in which dispersed agriculture of limited commercial viability predominates – find it difficult to bring together the financial means and qualified personnel necessary if creative and competitive projects are to be devised.

From among the three programmes involved (PHARE[1], SAPARD[2] and ISPA[3]), it is PHARE that is the most advanced and that has been under implementation for the longest time period. It started just after the Eastern Bloc fell apart, and the years 1990-2001 saw Poland obtain around 3 billion euros from it (around 30% of the Programme's entire budget).

A large part of the PHARE funding was directed at what might generally be termed the development of rural areas, albeit it is hard to put a figure as to just how much, since tasks with this kind of operational profile have not been separated from the others. It is, however, possible to estimate the sums designated to the development of agriculture as such. PHARE assistance in this sphere began in 1990, with a material input worth 100 million ECU in the form of fodder, mineral fertilisers, plant protection agents, etc. Through the subsequent years, until 1997, around 100 million euros were designated with a view to developing agriculture. In the following years, assistance funding was steadily switched

[1] PHARE – Poland and Hungary Assistance for the Reconstruction of Economies.
[2] SAPARD – Support for Pre-Accession Measures for Agriculture and Rural Development.
[3] ISPA – Instrument for Structural Policies for Pre-accession.

towards issues linked to European integration (the adjustment of legal regulations, institution-building, etc.). This entailed the fact that the sums involved were not as significant for rural areas as had been the case in earlier years.

Foreseen for spending in Poland in 2000 were some 484M euros, of which a great part (some 180M) was to be allocated to "social and economic cohesion" in areas hitherto little supported by the PHARE funds on account of their inability to participate.

The obtainment of assistance funding is very much dependent on one having a well-prepared and justified project. What counts in connection with this is the knowledge and innovativeness on the part of these competing for funding. It turns out that the PHARE assistance funding allocated previously has indeed shown a correlation with the level of education of gmina councillors. It is probably the characteristic that has been more important in determining the size of contracts than the actual level of need.

The ISPA Programme is a pre-accession instrument of structural policy that seeks to support developments in the fields of environmental protection and transport. Some 351 million euros were allocated from it to Poland in 2000. Part of the money goes into rural areas, especially where the transport-related projects are concerned. When it comes to environmental protection, funding is mainly going to large urban centres, with a view to wastewater management being improved there (and hence in the country as a whole).

The SAPARD Programme called into being by the Council of the European Union in 1999 had hardly been put into effect at all as of the end of 2002. This was the dual fault of the EU administration, for using complicated bureaucratic procedures, and of the Polish side (especially the Agency for Restructuring and Modernisation of Agriculture), which was not prepared for the implementation of the task. In line with assumptions, implementation of the programme was to have commenced in 2000, with agriculture and rural areas to obtain support worth 169 M euros a year.

SAPARD actually started work at the beginning of 2003. The three-year delay equates to some 500 million euros that Polish rural areas and agriculture could have made use of. In line with the principle of additionality, public and private means added on to those from the EU would have meant diverse help for the Polish countryside worth a total of 1.2 billion euros.

Again, however, the implementation of SAPARD will prove difficult in the poorly developed areas. To obtain assistance funding under it, half of project costs have to be met from one's own resources. In consequence, it can only be anticipated that most of the SAPARD funding will feed in to areas where agriculture is already in a relatively good condition.

The third group of factors stimulating the development of rural areas is made of the technical factors, among which the outfitting of rural areas in technical infra-

structure is particularly noteworthy. Poland shows marked spatial differentiation from this point of view, with a particularly distinct difference characterising urban, as opposed to rural, areas (Węcławowicz 1996). In 2000, 877 out of 880 towns and cities had mains water, 845 a sewer system, all 880 electricity and 614 – gas supply. The infrastructure of towns and cities can thus be considered relatively satisfactory, even if the technical condition is of varying quality. The backwardness of rural areas in these respects (Table 4) results above all from the dispersed nature of the settlement network and the high development costs entailed.

Table 4. Percent of dwellings with various installations in 2000

Installations	Urban	Rural
Mains water	97.6	83.1
Flush toilet	90.3	63.8
Bathroom	88.3	67.6
Mains gas	76.7	15.9
Central heating	80.8	53.3

Source: 2001 Statistical Yearbook, Central Statistical Office.

However, the last decade has brought a clear improvement in the level of equipment of rural areas with infrastructure. Construction of water pipelines, sewer systems and wastewater treatment plants has been given priority in most rural gminas.

The highest degree of backwardness as regards technical infrastructure is observed on the area stretching between central Poland and the eastern borderlands, where for example some 30–40% of small farms have neither sewerage nor a septic tank. A frequent phenomenon is thus the discharge of liquid waste directly to the ground. How does this appear against the claims that organic farming or agro-tourism offer opportunities for the development of these areas?

In the last decade there was a marked improvement with respect to the treatment of wastewater. While it is true that the number of treatment plants increased mainly in urban areas (from 566 in 1990 to 965 in 801 towns and cities in 2000), an increasing greater attention is now being given to wastewater treatment in rural areas.

Summary

The elaboration of a functional classification of Poland's rural areas in 1999 resulted in the identification of ten functional classes combined into five groups. The latter include areas with prevailing agricultural functions, with equal shares of different functions, with prevalence of forestry, with prevalence or tourist and recreational functions, and with prevalence of functions outside agriculture and/or the urbanised ones.

When the results of analysis were set against similar ones from 1988, it appeared that areas with domination of the agricultural function have seen a decline in farming production and its market-related significance. In contrast, there was an increase in its significance as regards the supply of rural inhabitants with food. From this point of view, there are major differences between the rural areas of western Poland (especially the regions of Wielkopolska, Kujawy and Silesia) and those of the East. This remains in connection, not only with the level of development of agriculture, but also with different levels of overall socio-economic development, including the level of education of the populace, the degree or urbanisation and the outfitting in infrastructure. The higher the values of respective indicators, the more rapid the development – also of activity outside agriculture – in rural areas; something which finds reflection in an increased complexity of functional structure.

The classification of rural areas carried out reveals the last ten years have been a period of quite essential transformations in functional structure. Central and eastern Poland can in general be said to have experienced a strengthening of the agricultural function, while the West and parts of the South have seen the role of functions outside agriculture grow. The latter effect reflects the development of new economic activity, including the activities conducted on farms that are now processing agricultural produce and/or are rendering services of various kinds.

The work on changes in functional structure has also pointed to the presence of factors that either stimulate or hold up the development of the areas in question. In general, it proves much easier to identify the latter, which can be grouped under the social, economic and technical headings.

The present educational status of most of the rural populace does not favour the broadly conceived development in the countryside, and in particular the development of new economic activity. This is especially true of areas with prevailing agricultural function, where the level of education of the populace is very low. It is thus hard to anticipate that these areas will see a development of economic activity outside agriculture in the near future, as the latter requires not only the necessary investment means, but also (and perhaps mainly) a degree of innovativeness on the part of inhabitants.

In terms of age structure, as well, the least favourable situation is that of the areas dominated by agriculture. They are subject to marked depopulation processes and feature high rates of increase in the numbers of people of post-productive age.

A factor stimulating the development of new functions in rural areas could be the assistance funding being funnelled in by the European Union. Unfortunately, however, most of this is going into areas in which the level of socio-economic development is already the highest. Thus, instead of the much-vaunted process, by which lagging regions are being brought closer to the average through some

evening-out process, we may in fact be seeing a further development of the disparities between different rural areas.

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Rural space and rural development in Romania

Abstract: *The rural space of Romania is characterised in terms of administrative breakdown, area and population, with reference to the NUTS classifications. This is followed by a demographic analysis of the gender and age structures, as well as migration flows. The rural-urban flows are considered, as is the employment structure in rural areas. Then, the farming sector is analysed, both with respect to its productive and factor characteristics, and the farm population features, over the period of systemic transformation. It is noted that farming intensity has gone down altogether on almost all accounts, while privatisation of farming has been overwhelming. At the same time, during the transformation, there have been disadvantageous phenomena within the farm population (decrease of average acreage). Against this background, the institutional infrastructure of the Romanian agriculture and rural economy is considered, including various ownership and association forms. It is proposed that an adequate restructuring of Romanian agriculture would require a developed and pronounced agricultural policy, as well as significant outlays.*

Key words: *Rural development, rural areas, Romanian agriculture*

Introduction

The approach to the rural development in Romania takes on a special importance, if we consider the perspective of our country's integration in the EU, and especially the fact that agriculture and the rural development are among the most difficult areas of negotiations. An analysis of the phenomena and processes produced in the period referred to as „transition" becomes necessary for the foundation of the next steps in the development of rural communities. We must not overlook the fact that Romania is an entity with an own institutional, economic, social and cultural structure. A pattern for the development cannot be borrowed, because it is not built on an empty place, it is built gradually, element by element, on a present reality, with the speed of transformation that is accepted by the society and for which there are available resources.

In recent years, rural development has acquired special importance in Romania, both at the level of political debates and of the academic disciplines. This is not at all fortuitous, as a high share of rural population and of the land area where

this population is living, as well the importance of the rural life make the rural development issue gain a special importance in our country. The rural communities in Romania have developed in the latest decade within the limits imposed by their own history and by a hesitating transition that induced particular economic and social changes.

Rural communities in Romania are confronted with a series of problems that influence their viability. These include a frail social and economic environment, local institutions that are not sufficiently active, lack of cooperation programs, aging population, high share of subsistence agriculture, low diversification of non-farm activities, deficient technical and social infrastructure, low involvement of the civil society, etc. It is quite difficult to address all these problems. A competitive rural economy, an adequate social environment and a participatory and cooperative rural society are the key factors for the development of sustainable rural communities. It is also necessary to support and encourage local initiatives with far-reaching potential effects, while making the best use of the potential existing in the rural communities.

The size and the characteristics of the rural space

The rural space in Romania, conform to the provisions of Law 2/1968[1], is composed of the administrative area of 2686 communes, corresponding to the NUTS 5 level of the statistical system of the European Union (EU). On the administrative territory of some towns and municipalities, in conformity with the same law considered urban, there are 341 localities referred to as villages, which have rural characteristics, but which are included, from the administrative point of view in urban space.

According to this definition, the rural territory has the area of 212,700 km^2, i.e. 89% of the total country's area (Table 1). This territory is inhabited by 10.19 million people, i.e. 45.4% of the total population. The density of rural population, 47.9 persons per km^2 is very low, less than half of the country's average and roughly 1/10 of the urban density.

Table 1. Rural space – basic parameters

	Total area		Total population		Density
	sq. km	%	thousands	%	persons/sq. km
Total	238391	100	22435	100	95.1
Rural	212700	89.2	10191	45.4	47.9
Urban	25691	10.8	12244	54.6	476.6

Source: *Romania's Statistical Yearbook*, 2001, National Institute for Statistics (NIS).

[1] The law defines two categories of territorial units: a) the county – administrative body, which comprises a larger territory, where different economic and social activities are grouped; b) the locality – town or commune – the administrative body corresponding to a restricted area, grouping the activities associated with the respective territorial specificity and to the existing economic and social endowment.

The commune, as a territorial administrative unit, comprises the rural population united by common interests and traditions. The average population of a commune is 3780. The majority (53.2%) of communes has between 2000 and 5000 inhabitants, corresponding, conform to the criteria of the EU, to average size. The big communes, with over 5000 inhabitants, are situated mainly around big towns and have a relatively important share of 40.1%.

A commune is composed, in turn, of one or more villages, the closeness and accessibility being the main criteria of affiliation. At the end of the year 2000, rural space in Romania comprised 13092 villages. The relatively high number of villages and the differentiation of their distribution in space are the expression of geographical diversity of Romania and the historical conditions, in which the economic, social and cultural relations within the rural space were established. The communes are also highly diversified in terms of the number of villages: the majority (55.4%) has between 1 and 4 villages and 6.2% of them have more than 10 villages. On the average there are 4.8 villages per commune. The villages show a great diversity with respect to their population: from the ones with only few inhabitants, up to villages with more than 9000 inhabitants. The average number of inhabitants per village is 778.

The NUTS 4 level units, the micro-regions, have not yet been organized in Romania. Generally, the micro-regions are formed occasionally, on the basis of voluntary partnership of some communal administrations, within the framework of some projects or programs.

The NUTS 3 level takes in Romania the form of 42 counties. At county level the share of the rural areas is variable, depending upon the relief conditions, available natural resources, area of the county, etc. In conformity with the OECD methodology for classification of rural regions, at the NUTS 3 level in Romania, rural space accounts for 99% of the territory and for 90.6% of the population. The respective indicators for the EU are 84.4% of total area and 39.5% of total population.

The Law 15/1998, regarding the regional development, created the legal basis, which led to association of the neighboring counties, making up 8 statistical regions, constituting the framework for the implementation and assessment of the policy for regional development. The development regions, termed “zones”, correspond to some groups of counties, constituted by voluntary association on the basis of a convention signed by the representatives of the county councils and of the General Council of the Bucharest municipality. The regions represent the NUTS 2 level conform to the territorial classification of the EU. The present organization of Romania’s territory comprises the following development regions: North-East, South-East, South, South-West, West, Center, and Bucharest. Their establishment gave rise to ardent debates. The main criticism points out the fact that these units were arbitrarily established, without consideration of the inter-county links. The rural areas and their populations do not have the same shares in all the eight development regions. The most extensive rural space

is in the North-Eastern region (94% of total area), and the largest rural population is in the Southern region (58.3% of the total population).

The rural development concept

Rural development was a concept used mainly in the scientific research during the last 10 years and has become an operational policy term since 1997. In that year the General Directorate for Rural Development was established within the Ministry of Agriculture and Food. This department intended to attain the following rural development objectives:

- surmounting the identity crisis of the rural areas;
- putting an end to and removal of socio-economic underdevelopment;
- elaboration of the National Plan for Rural Development with socio-economic subprograms and projects for infrastructure and environment, in conformity with the measures provided in the EU regulations for development and with the objectives of the European structural funds;
- legislation harmonization with a view to integration;
- substantiation and monitoring of rural development projects, etc.

It is worth mentioning that in the perspective of the Romanian Government rural development continues to focus upon agricultural development. Even in the SAPARD measures, out of 14 objectives 9 refer to agriculture modernization and development. However, in the concept of the present decision-makers, there is a model of Romania's regional development, in which an important part is played by the diversification of incomes and of economic activities, while the urban-rural relations occupy, if not a top, then at least an important position.

Rural social and demographic structures

Rural population in Romania is subject to a double transition, namely the demographic one, specific for a society under modernization, a society that has been trying to turn into a capitalist society for more than one decade. Rural population has declined in the last century. In 1912 rural population represented 81.5% of total population, while in 1992 only 45.7%. This process continued in the last decade; in 2000 rural population totaled 10,191 thousand persons.

The evolution of Romania's population in the last century reflects the attempts of a society that has been trying to modernize its socio-economic structures. The shrinking of rural population has not been a linear process, as it was determined by the demographic evolution of rural communities and by the main political changes in the Romanian society.

A characteristic of the rural population in the period 1912–2000 is constituted by the oscillating share of women. If we investigate the last 25 years we find out that, unlike in 1966 and 1977, in the census of 1992 the share of urban female population was higher than that of rural female population – 51.2% and 50.4%

respectively (Table 2). The share of female population in total rural population was 50.3% in 2000. Feminization operates selectively, affecting the persons over 40 years of age and becoming symptomatic with older age.

Table 2. Index of feminisation of rural population by age groups

Age group	Number of women per 1000 men in 1992	Number of women per 1000 men in 1999
0–14 years	953	957
15–39 years	862	862
40–49 years	1061	976
50–54 years	1083	1109
55–64 years	1100	1169
65–74 years	1283	1255
75 years and over	1518	1574
Rural average	1017	1015

Source: *Census of population and dwellings*, 1992 and *Romania's Statistical Yearbook*, 2000, NIS.

The population structure by sex and age is an expression of the combined effect of birth rate, death rate and internal migration rate on total rural population.

The evolution of rural population in the last two decades features a strong aging tendency: in 1999 the share of population over 60 years was equal 24.0%; while the share of population aged 0–14 years – 19.8% (Table 3).

Table 3. Evolution of rural population's age structure (%)

Age group	1966	1977	1992	1999
0–14 years	26.0	27.1	20.9	19.8
15–59 years	61.6	56.2	57.0	55.2
60 years and more	12.4	16.7	22.1	24.0

Source: *Census of population and dwellings*, 1992 and *Romania's Statistical Yearbook*, 2000, NIS.

The average mortality in the rural areas, higher than that in urban areas, had a fluctuating trend (Table 4). After 1966 an increase of death rate was noticed, a sign of rural population aging and of deterioration of rural life quality.

The strong and steady diminution of population in the rural communities, concurrent with the increase of urban population, was also the result of spatial mobility. In the last population census, in 1992, out of the total population "born in other localities than the place of present residence", most came from the rural areas. Of those, almost 4.0 million persons migrated within the same county, almost 3.4 million, i.e. 85.3%, came from the communes.

The most important migration flow with regards to volumes until 1994 had been the rural-to-urban migration; in 1997 the direction changed, as the rural-urban

Table 4. Mortality in urban and rural areas

Period	Deaths per 1000 inhabitants		Rural/Urban
	Urban	Rural	
1930–1934	17.2	20.5	+19.2
1935–1939	16.7	19.8	+18.6
1948–1957	10.4	12.4	+19.2
1958–1966	7.7	9.2	+19.5
1967–1974	8.3	10.3	+24.1
1975–1980	8.0	11.3	+41.3
1990	8.2	13.4	+63.4
1997	9.4	15.9	+69.1
2000	9.3	15.4	+65.6

Source: *Romania's Statistical Yearbook*, 2001, NIS.

migratory balance became positive, this trend appearing for the first time in the last three decades (Table 5).

A clear downward tendency in the migration flow from rural to urban area can be noticed: if in 1991 10 out of 1000 rural people left for urban areas, in 1998 this number declined to 5. Another clear tendency characterises the urban to rural flow, with the steady increase from about 3 out of 1000 urban people to 8. The rural-to-rural migration flow has quite an oscillating course; in the period 1991–1995 it increased from 4.7‰ to 7.8‰, and then declined to 6.4‰. The urban-to-urban migrations increased from 4.3‰ in 1991 to 5.9‰ in 1999.

Table 5. Structure of urban and rural internal migration flows in terms of the permanent residence change rates per 1000 inhabitants

Migration	1991	1992	1993	1994	1995	1996	1997	1998	1999
TOTAL (‰)	11.3	12.9	10.6	11.7	12.8	13.0	13.4	12.3	12.3
Rural-to-urban	10.7	9.4	6.9	6.6	5.9	5.9	5.6	4.9	4.7
Urban-to-urban	4.3	5.8	5.0	5.6	6.1	6.5	6.1	5.9	6.0
trightRural-to-rural	4.7	6.3	5.7	6.5	7.8	7.0	7.6	6.4	5.9
Urban-to-rural	2.5	3.8	3.4	4.7	5.8	6.7	7.9	7.7	8.3

Source: *Romania's Statistical Yearbook*, 1999, NIS.

The importance of rural communities as the labour reservoir for urban areas decreased, migration becoming much more selective from the demographic point of view. The net migration form rural to urban area maintains its negative values – the number of out-migrants being higher than the number of in-migrants only for the age category of 20–34 years (Table 6). This is the only demographic category in which migratory balance was negative for the countryside in the period 1989–1997.

Table 6. Net migration from rural to urban areas, by age

Age group	1989	1990	1991	1992	1993	1994	1995	1996	1997	1989--1992	1993--1997
0–14	–0.6	–5.8	–0.8	–0.4	–0.1	0.1	0.3	0.3	0.7	-1.9	0.3
15–19	–0.8	–3.4	–0.9	–0.6	–0.4	–0.2	–0.1	0.03	0.2	-1.4	-0.1
20–24	–3.0	–10.8	–4.4	–3.6	–2.6	–2.0	–1.5	-1.4	-0.9	-5.4	-1.7
25–29	–5.5	–20.9	–4.5	–3.7	–3.2	–3.0	-2.4	-2.6	-1.1	-8.7	-2.5
30–34	–2.4	–15.6	–2.3	–1.7	–1.0	–0.7	-0.4	-0.4	-0.03	-5.5	-0.5
35–39	–1.1	–6.9	–0.9	–0.6	–0.3	–0.1	0.2	0.4	0.6	-2.4	0.2
40–49	–0.3	–2.7	–0.3	–0.1	0.00	0.1	0.3	0.5	0.7	-0.8	0.3
50–59	–0.03	–1.0	–0.01	0.1	0.1	0.1	0.2	0.3	0.3	-0.2	0.2
60 and over	–0.04	–0.4	–0.04	0.01	0.01	0.01	0.02	0.1	0.04	-0.1	0.0
Total	–0.9	–5.0	–1.0	–0.7	–0.5	–0.3	-0.1	-0.04	0.1	-1.9	-0.2

Source: *Labor Market and Social Policies in Romania*, OECD, 2000.

In 1999, 52.7% of the rural-to-urban migrants were from the age group of 20–34 years. As a trend, the migration movement maintains its general character from the last decade, while decreasing both in volume and in intensity.

In 2000, about 70% of rural population were economically active (Table 7). The average participation rate of Romania's population was 58%. Rural population's participation in economic activities has several particularities, namely: active life begins quite early – by the age of 25 about 2/3 of the rural population are already active (against 1/3 in the urban area); a large part of the rural inhabitants have their active life extended to old age; about 3/4 of the rural inhabitants aged 50–64 are active, and even after 65 about half of the rural people are still active.

Table 7. Employment and activity rates

	1996	1997	1998	1999	2000
Activity rate (%)					
total	64.8	64.8	63.6	63.4	63.2
rural	69.9	71.5	70.8	71.7	72.0
Employment rate (%)					
total	60.4	60.9	59.6	59.1	58.8
rural	66.9	68.9	68.4	69.2	69.8

Source: *Romania's Statistical Yearbook* 2001, NIS.

In the rural areas, agriculture is the main economic activity, accounting for about 70% of the labor force. More than 50% of farmers are over 50 years old and about one fifth of them are over 65. Only one quarter (27.0%) of farmers are young, less than 35.

The average unemployment rate in the country was 7.4% in 2000. Of the total number of the unemployed 550,000 persons live in the urban areas (67%), while

270,000 in the rural areas (33%). The unemployment rate in the rural areas was only 5.0%, twice lower than in the urban areas.

Agriculture

The policies promoted in the transition period also resulted in unfavorable changes regarding the place of agriculture in national economy. The increase of labor force share in agriculture represents a contrary trend to that of the developed countries. It is the restructuring of the industry and construction sectors, due to which an important part of labor force was released and "forced" to return to agriculture that contributed mainly to this increase. With certain small oscillations, the fixed capital share in agriculture had a decreasing trend (Table 8). The GDP share of agriculture was determined in the first place by the strong decrease of GDP share in the other economic branches. In the 1990s Romania became the importer of agro-food products, revealing a serious under-utilization of its agricultural potential. In these conditions, an effective change of agricultural sector's position in national economy represents a necessary objective both for a modern market economy and for the EU integration.

Table 8. Place of agriculture in total economy

Year	Share of agriculture in:				
	Labour force	Fixed capital	GDP	Exports	Imports
1989	27.5	10.9	13.7	5.0	4.4
1990	29.0	8.8	21.2	1.5	13.1
1991	29.7	7.8	18.3	6.1	13.6
1992	32.1	8.4	18.6	6.7	16.0
1993	35.2	8.3	20.6	6.7	14.8
1994	35.6	8.5	19.4	6.5	9.3
1995	33.7	11.4	19.3	6.7	8.7
1996	34.6	10.4	18.8	8.7	7.5
1997	36.8	7.5	17.7	7.1	6.2
1998	37.4	5.0	15.6	5.2	8.6

Source: Calculations on the basis of *Romania's Statistical Yearbooks* 1990, 1992 and 2000, NIS.

In agriculture, private property became predominant already during the first two years of transition due to the application of the Land Law no.18/1991. Although the share of private sector in total agriculture had a continuous and constant increasing trend in this period, the radical change in the ownership structure did not have a favorable impact on the level of agricultural production (Table 9).

In the majority of seasons after 1990 crop production in the private sector was under the 1989 level, with larger or smaller variations due mainly to weather conditions. The average yields for almost all crops are modest or extremely low (Table 10). Compared with 1989, a decrease of yields is observed for wheat

Table 9. Share of private sector in agriculture (%)

Year	Share of agricultural land	Share in agricultural production
1989	12.1	51.1
1990	12.6	56.1
1991	69.8	79.3
1992	70.3	80.8
1993	69.9	84.4
1994	70.9	86.4
1995	72.1	86.1
1996	72.3	86.3
1997	70.5	89.5
1998	70.7	90.4
1999	77.6	93.3

Source: Calculations on the basis of *Romania's Statistical Yearbooks*, 1990, 1992 and 2000, NIS.

(48%), barley (51%), sugar beets and sunflower (20%). A slight increase of yields was noticed in maize (18%), field vegetables (4%) and grapes (10%).

Table 10. Evolution of average yields in the private sector

	Average yield (kg/ha)							
	1985–1989	1990	1991	1993	1995	1996	1998	1999
Wheat and rye	2914	2837	2333	2189	2957	1569	2437	2656
Maize	3122	3082	4115	2574	3176	2925	2749	3643
Sunflower	1593	1147	1248	1095	1263	1123	1063	1255
aautoSugar beets	21718	22083	23457	17314	19138	20072	19354	21608
Potatoes	14456	11536	7807	14654	12259	13878	12583	14407

Source: Calculations on the basis of *Romania's Statistical Yearbooks*, 1990, 1992 and 2000, NIS.

The period after 1989 is characterized by a considerable decrease of livestock numbers: by 48% for cattle, 44% for poultry, 36% for pigs, and 27% for sheep. In this period, an increase by 23% was noted only for horses.

In the livestock sector, the period of 1989–1999 showed a fluctuating evolution, with marked differences both among products, and from year to year. Total meat production (1594,000 tons live weight), down by 27% from that of 1989 follows a visible trend of supply decrease. This production decline resulted mainly from the decrease of livestock numbers. Milk production followed an ascending trend in this period (except for the years 1990 and 1992).

The share of the livestock sector in total agriculture was extremely low during the whole-investigated period (Table 11).

Table 11. Place of livestock production in agricultural production (%)

Year	Share of livestock production in agricultural production	Share of livestock production in the private farming sector
1989	45.6	n.a.
1990	47.0	n.a.
1991	34.1	32.2
1992	42.0	41.9
1993	37.1	35.4
1994	39.2	38.5
1995	40.4	39.1
1996	40.2	39.3
1997	37.1	36.6
1998	46.1	46.2
1999	36.5	37.6

Source: Calculations on the basis of the *Romania's Statistical Yearbooks*, 1992, 1998 and 2000, NIS
n.a. – not available.

There was a significant downward trend of yields in the transition period. The main reasons were: agricultural property fragmentation at farm level through application of the Land Law; insufficient investments in agriculture; absence of proper equipment and implements on most peasant farms; insufficient support to farmers from the state (even though agriculture was either "a stake of the future" or "a national strategic priority" in this entire period). The privatization process in Romanian agriculture did not have visible favorable effects as it was conceived and operated as a goal in itself and not as a means for making farming activities more efficient. It is obvious that the present acreage structure of land property considerably limits the possibility of conducting intensive agriculture. Agricultural land privatization seriously affected the use and integrity of irrigation and land improvement systems.

In this period, mechanization of certain agricultural activities has considerably declined, as did the application of agricultural chemicals. Thus, there has been a decrease of the numbers of: mechanical cultivators, chemical fertilizer spreaders, self-propelled combines, and mechanical sprayers and dusters. The structural deficit, meaning insufficient equipment, is aggravated by its physical and moral wear and tear. Thus, altogether 50% of existing tractors have more than eight year of service life. The existing agricultural tractors and machinery in Romania's agriculture cannot secure execution of works in the optimum periods stipulated by crop technologies. The average area of agricultural land per tractor (about 60 ha) shows the scale of the problem. It is well- known that in Romania the delay in execution of respective operations, both for winter and spring crops results in great harvest losses.

The losses induced by diseases, pests and weeds in production and post-harvest processes are also high. They are estimated to reach one third of the harvest. Pesticide use has decreased in recent years, and situation is quite similar with fertilizer use (Figure 1). A sharp rise of pesticide prices also contributed to their decreased use.

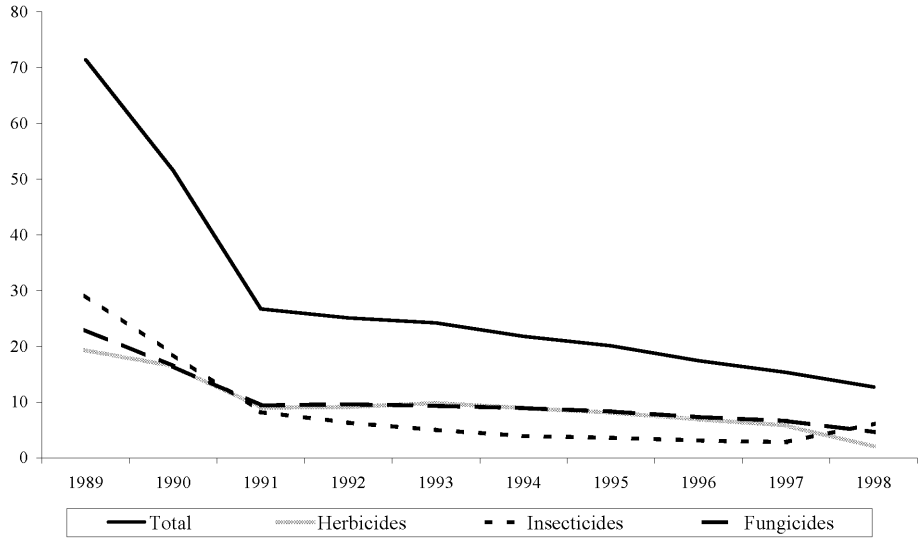

Figure 1. Pesticide use (1,000 tons, active ingredient)

At the same time, the volume of mineral fertilizers used in 1999 was smaller by about 70% than in 1990 and of the organic fertilizers – by 65%, as linked with considerable decrease of the livestock numbers.

All these aspects indicate that the future development of Romanian agriculture will require the elimination of negative aspects that accompanied agricultural land privatization. This development would be made possible by agricultural land consolidation, organized under different forms, adequate for the present conditions.

In Romania, the transition from the socialist state to market economy induced important changes at the level of main components of agrarian structure: land ownership, agricultural land use, economic and social organization, etc.

Agricultural land structure places Romania on a medium position in Europe, providing significant agricultural development possibilities. In 2000 agricultural land totaled 14730.7 thousand hectares, i.e. 61.8% of country's area. This agricultural land has the following structure: arable land 63%, vineyards and vine nurseries 2%, orchards and nurseries 2%, pastures 23% and hayfields 10%. In the period 1989–1999 the changes in the agricultural land structure show the decreases in the arable land (by 2%) orchards (20%) and pastures (5%), to the benefit of vineyards.

In terms of the cropping structure as of 1999, about 60% of arable land was under grain cereals. Among the changes having taken place in 1990-1999 were the decline of land under bean pulses (65%) and fodder crops (41%), and an increase of the area under vegetables (8%), melons and watermelons (47%) and industrial crops (47%). The decrease of the cultivated area by 10% is a very

important phenomenon of the transition period. The primary contributing factors are the reduction of arable area (92,000 ha) and the existence of non-farmed arable areas (864,000 ha in 1999), mainly due to the reorganization process in agriculture.

Beginning with 1991 two ownership types were established by the Constitution: private ownership and public ownership. At present, Romanian agriculture is characterized by a wide range of land operation forms, among which the most important are the following:

Individual farms. By the end of the year 2000, they operated on some 82% of the privately owned agricultural land. The average area of these farms is extremely small, 2.3 ha (Table 12). During 1993-2000, their number and total agricultural land area owned increased, while the average acreage remained relatively constant.

Table 12. Evolution of private farms

Year	Total number	Total agricultural area ('000 ha)	Average area (ha)
1993	3419736	7333	2.10
1994	3578234	7905	2.20
1995	3597383	8052	2.40
1996	3625758	8348	2.30
1997	3973329	8897	2.24
1998	3946121	9182	2.33
1999	4119611	9377	2.28
2000	4259933	10054	2.36

Source: Buletin informativ no.12/1994, 12/1995, 12/1996, 12/1997, 12/1998, 12/1999 and 2/2001, Ministry of Agriculture, Food and Forests.

The individual farms bear "the imprint" of the way in which de-collectivization and de-nationalization took place in agriculture in the transition period; at the same time, they were marked by the national economic evolution as a whole. Although official statistics do not provide many data on them, they can be characterized on the basis of the data collected from the field surveys conducted in the rural areas.

The conclusions drawn from these studies indicate that in the transition period agriculture at the family farm level has been to a great extent subsistence agriculture, following an economic rationality in which market economy mechanisms have operated poorly. Thus, the majority of farms represent a less organized and capitalized sector, with few development possibilities.

Labor used is mainly family labor (73.6% in 1996 and 66.3% in 2000). Yet, there are also farms using the exchange of labor between neighbors, relatives and friends (29% in 1996 and 38% in 2000), and farms hiring seasonal or permanent workers (below 1% in both 1996 and 2000).

The household head is in most cases also the landowner, and he decides on the activities to be carried out. Most of the household heads (89%) are men and more than 65 years old (63%).

The average area of the farms investigated in the three field surveys remained at a constant level (about 3 ha). The farms smaller than 3 ha take an extremely high share, over 60%. A characteristic phenomenon for the year 2000 is the twofold increase of the share of farms smaller than 1 ha compared to 1996. This seems to be a consequence of the fact that the heirs of the former owners registered in the ownership titles in the case of reconstituted land quitted the joint-ownership status.

The degree of fragmentation of land property is extremely high: there are 4–5 parcels per farm on the average. The smallness of farms and the strong land fragmentation cannot provide for functionality necessary for a competitive farming.

Cereal cultivation, requiring relatively low investment and production costs, is the prevailing activity on individual farms (88% of investigated farms cultivated cereals in 1996, 83% in 1998, and 92% in 2000). The average yields per hectare are low and far from the natural yield potential. Animal husbandry has been continuously declining; thus, in 2000, compared to 1996, it declined by 26%, although the private farming system of livestock raising has significant reserves for obtaining higher yields through modernization of farm facilities and the use of adequate technologies.

There is a high activity diversification at the farm level: more than 60% of farms cultivate three and more crop species or breed three or more livestock species. Diversification hedges farmers against risk and uncertainty; at the same time, it is characteristic of subsistence households in which self-consumption is the first priority.

Private farms are less and less attached to the agricultural inputs market. This situation is the result of the lack of financial resources, high prices of agricultural inputs and slow adjustment of the agricultural inputs market to the new land ownership structure. In 1996-2000 a decline was observed in the share of farms using certified seeds (21%), mechanization services (26%); veterinary services significantly declined while an increase was noticed only in the case of fertilizers. The degree of association of private farms with the input market is in direct relation to income and acreage. Most farms buy mechanization services (71% in 1996 and 52% in 2000). In the case of inputs for the livestock sector, which are produced and sold through the private channels, veterinary services and veterinary drugs are the most demanded.

Market sales by private farms show quite a distorted situation with respect to the rules of market economy: if in 1996, 49% of rural households sold at least one agricultural product, in 2000 this share declined to 35%. The private farming sector largely withdrew to natural economy, covering its consumption needs

increasingly from its own resources, with deep implications for the integration with the local and regional community. Most peasants sell the surplus left after covering their families' needs, family meaning either family members who have effectively worked on the farm or family members living in town. The traditional sale of production "at the marketplace" remains the prevailing form of sale (53.2% in 1996; 67% in 2000). Each producer sells his own products.

The investment behavior of investigated farms is largely characteristic for a survival, and not development, strategy. The agricultural investment taking the highest share is livestock purchase (23.9% of households bought livestock in 1996, only 13.7% in 2000). The financial resources dedicated to investments come mainly (about 65%) from the household members' own savings. The perception of bank as a lending institution is negative.

Agricultural associations. Agricultural associations appeared as a result of the concerted action of three main factors: lack of financial capital; macroeconomic background unfavorable to investing in agriculture; and a long-term lack of a legal framework for the land market. Blamed or overestimated, these organizations had an important role in the transition period. During the period 1993–2000 there has been a decrease of both the number of and the land area operated by the associations.

The agricultural associations as legal entities are private companies, their capital coming from the free contribution of associated members. Their activity consists in farming business. According to the association's statute the managing staff decides on the organizational and functional structure. The obligations of association are guaranteed by the associated members' contribution; the responsibility of each member is proportional to the contribution made to association, mainly land contribution. In this case, agricultural land is contributed only for use, the members preserving their ownership of land. Membership is quite heterogeneous. The majority lack financial resources and mechanization equipment and live in the countryside. However, there are also cases in which the members live in town. Many associations lease land on an informal arrangement basis, the respective areas ranging from tens to thousands hectares.

From the data collected during the field survey of 1998, it results that:

- 62.8% of association members consider that their association is the successor to a former agricultural co-operative, while 53% say that the association manager is a former chief of agricultural production co-operative,
- 94.6% contributed land to association,
- 42% declare that the main advantage of being association member is "the supply of mechanization services", while for 38% it is "providing an income",
- 42% consider that the main disadvantage of membership is that the obtained income is small and unstable,
- 79% of interviewed members received part of the profit obtained by association in kind, mainly under the form of agricultural products (63%),

- 40% of members know that they have the right to vote in the general meeting of association, while only 36% have already exercised this right.

The agricultural family associations[1], as non-legal entities, are established on the basis of free agreement between two or several families. Membership of association is very heterogeneous; it cannot be confined to a certain pattern: there are persons with different educational backgrounds, of different age, living in rural areas but in urban areas as well. Their main reason for associating is the lack of mechanization means. These associations establish the object of their activity and conditions by themselves. The head of association, who decides on the crop structure in conformity with owned mechanization equipment and keeps contact with suppliers and clients, manages the association.

They conduct activities in crop production, animal husbandry, certain services, etc. In some of these associations, besides their own land, leased in land is also farmed, according to informal agreements. From the data collected during the field survey of 1998, it results that in the case of family associations the main contribution of their members is also agricultural land (96%). Almost 30% declared that their association was established by a person who had his land returned. The advantage of membership in a family association is in the first place "getting an income" (51%), while on the second place it is the "supply of mechanization services" (47%). The main disadvantage of membership in such an association is considered to be that "income is not high enough" (50%).

Rural institutions

The institutional reform in Romania has lagged behind the economic reform. At present, in rural communities, an institutional crisis can be noticed, impacting upon their modernization and development. The improvement of legal framework, meant to contribute to institutional development, was initiated in 1993 and completed in 1998. There is a wide range of actors involved in rural development:

The governamental sector contains two main institutional structures with tasks in rural development. One of them is the Ministry of Agriculture Food and Forests (MAFF), the main institution responsible for the agricultural and rural development policy implementation. It has a well-developed network at the county and local level. Under its supervision, the SAPARD Agency is in charge of the technical and financial implementation of the SAPARD Programme. There are eight Regional SAPARD Offices which collaborate with the Agricultural Directorates at county level and those, in their turn, collaborate with Local Agricultural Offices.

[1] Known as Family associations were established by Law 36/1991 published in "Official Gazette" no. 97/1991.

The second institution involved is the Ministry of Development and Prognosis, the coordinating body for the regional development policy elaboration and implementation.There are eight Regional Development Agencies subordinated to this Ministry, which are non-governmental and non-profit entities. These Agencies collaborate with the the County and Local Governments, as well as with the physical and legal entities.These regional structures are under the coordination of the National Council for Regional Development.

The civil society, supposed to provide balance between government and the private sector, has a low capacity of mobilizing public opinion and influencing governmental institutions. The countryfolk in Romania are characterized by a strong individualistic behaviour, by a lack of trust in others, fear of future and risk avoidance. The civil society, in many cases, receives, directly or indirectly, funding from the state, and consequently, it supports certain interests.

The private sector – entrepreneurs, companies, banks, production associations and so on collaborate mainly at the national level with MAFF and at the regional level both with SAPARD Offices and Regional Development Agencies. At the local level they collaborate with Local Governments and Local Agricultural Centers.

The main constraints concern: centralized decision making process; lack of stable institutions (frequent changes due to political reasons); lack of clear and specific tasks; poor functioning of governmental institutions; poor cooperation among the civil society, public and private institutions; poor monitoring, evaluation and control system; lack of experience (no tradition and staff experts); low involvement of rural population; low involvement of stakeholders etc.

Rural policy

In the years 1990-1996 there was no explicit rural development policy. The development measures regarding rural communities were comprised in different sectoral strategies.The issue of rural development has acquired an important place both in the academic research and at political decision level mainly under the pressure of Romania's access to the European Union. The official approach to agricultural and rural development issues started in 1997. In 1998, The Green Paper on Rural Development was elaborated under PHARE program. This paper contains a detailed diagnosis and typology of rural areas.

The preparation of the National Plan for Agricultural and Rural Development (1999) began in 1999 and was finished by the end of 2000. This is the basic tool for rural development in Romania, comprising four main development axes: development of competitive agricultural products; improvement of agricultural and rural infrastructure; development of rural areas; development of farmers' professional training.

In 1997 the Green Paper on Regional Development was elaborated with the assistance of PHARE program. We could say that this was the beginning of decision-makers' awareness of the need and importance of the regional development policy. In 1998 the Law on Regional Development was drafted and the main regional institutions were set up. Their tasks are to promote the regional development policy objectives.

The National Development Plan and the Regional Development Plans are the main planning tools for regional policy implementation.They were drawn up between 1999 and 2001.There are seven priority axes of regional development. The agricultural and rural development represents the priority axis number four.

Beginning with 2001, when the Ministry of Development and Prognosis took over the tasks of National Agency for Regional Development, the centralisation of the regional development policy could be observed.

In the area of rural policy the main constraints identified are as follows: no clear understanding of the rural development concept and its implications; poor awareness among policy makers, civil society and rural population; lack of comprehensive rural development strategy; lack of harmonized and coordinated approach; unstable legislation and institutions; low capacity of financial instruments management.

Having in view the requirements of economic and social development of the rural communities in the context of Romania's joining the large European family, the following problems represent the main challenges: the design of a widely supported regional rural development strategy; the establishment of stable and workable institutional structure; the design and development of participatory evaluation and planning methods; strengthening of the decentralization process (larger financial autonomy); the clear and balanced distribution of responsibilities at the national and local levels; promotion of training; organization of the awareness rising campaigns; support for the spread of rural development knowledge.

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Regional future scenarios for rural space types in Austria

Abstract: *The results of this study show development paths of rural regions in Austria. The conflicts between various policy objectives in regard to agriculture, the regional economy and protection of the environment will increase further. The value, which the society attaches to the social functions of agriculture and the areas covered by it, will increase more than the value of the production of biomass. In main agricultural regions the function "production of food and raw materials" is still the most important pillar of agriculture and the regional economy. In the more densely populated districts also the functions of resource protection, spatial structuring and biodiversity are very important for society. In the mountainous districts multifunctionality appears to be a complementary phenomenon. Most important there is the function of biodiversity, but also tourism-relations in the case of developed tourist regions. In the case of eastern border regions, with special problems in regional economy the functions of agriculture and agricultural areas assume low levels. In some districts new dynamics can be observed since the opening of the borders, but in some regions there is still lack of progress. The subsidies for agriculture and regional development should depend on the different multifunctional bases of the regions.*

Key words: *rural development, multifunctionality, agriculture*

Preliminary remarks

The report is based on a study of the Federal Institute of Agricultural Economics in Vienna (Wagner and Janetschek 2001). The very different regional circumstances of the rural space in Austria have been analysed in order to obtain guidance for the design of future subsidy systems. The results of the study include contributions to discussions of an expert group on regional development.

Variety of rural regions and functions

The Federal Institute of Agricultural Economics elaborated different typologies for rural space in recent years. According to these studies three main types of regions with two subgroups in each can characterise the spectrum of rural space

types in Austria. These types can be the basis for the regionally differentiated subsidies or development programs.

Thus, the main types of rural regions are:

1. Main agricultural regions (1.A arable land type or 1.B grassland type).
2. Mountain regions (2.A prosperous type or 2.B development deficit type).
3. Border regions (3.A development deficit type or 3.B developing new opportunities type).

These six regional types have been analysed in respect of strengths and weaknesses in agricultural, ecological and general economic terms. The multifunctional approach to agricultural areas has been addressed in other research projects of the Federal Institute of Agricultural Economics and resulted in five distinct area functions:

- Production (output of food and raw materials).
- Resource protection (agriculture in relation to soil and water).
- Space structuring (space- and buffer-effects of agricultural areas, especially in the vicinity of settlement areas).
- Biotope function (in relation to biodiversity and the amenity of the landscape).
- Recreational function (potential for recreation and tourism).

The varying importance of the different functions in the various types of regions was revealed in an assessment on an ordinal scale from 0 to 2 (0 = minor importance, 1 = ordinary importance, 2 = extraordinary importance, see Figure 1 and 2).

In an assessment of this kind it becomes very clear that in the two **main agricultural regions** the production function is still the most important. The resource protection function requires restrictions mainly in the arable land type and is not so urgent in the grassland type. In the more densely settled areas the space structuring function is of high importance, and because of intensive agriculture also the biotope function and resource protection are taken into consideration more strongly. The recreational function holds only for the immediate recreation of people who live there, not for tourists.

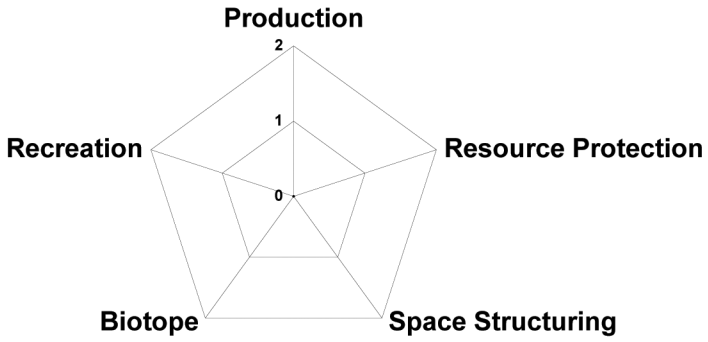

Figure 1. Functions of agricultural areas

In both types of **mountain regions** the function of production is not the most important anymore. Also the resource protection is not urgent. But the spatial structuring, the biotope and the recreational functions can be of very high importance in the prosperous mountain regions, while in the mountain regions with a development deficit only the biotope function is of higher importance.

In **border regions** with development deficits none of the five functions is very important, and problems or urgent needs occur only on a local dimension. In those border regions, where new opportunities are available, the spatial structuring function and the recreational function are of considerable importance.

Overriding trends and future challenges

In an analysis of regional development it is important to look also at the national and international conditions. At the international level the European Union is fighting for acknowledgement of multifunctionality and sustainability of agriculture and for the consideration of non trade concerns in addition to free competition on the world market. The enlargement and different agreements (e.g. with South Africa, Mexico, and the Mercosur states) broaden the market access for European agriculture. Market forecasts show that the cultivated area of grain, especially wheat and maize, will increase slightly. Rapeseed and sunflower areas will decrease slightly in short term but will increase later on. Also beef and pork consumption will increase a little in the long term but not as much as poultry.

The most important effects on Austrian agriculture are expected from EU-enlargement. The high agricultural potential of the acceding states is developing, but the competitive situation is hard to estimate. In most cases agricultural structures in Austria are at a disadvantage relative to the potential in the acceding states (grain, vegetables, meat). Thus, in the long term a loss in market shares and high pressure on producer prices are foreseen, with the consequence of further migration from agriculture to other sectors. Advantages for Austrian agriculture are expected only in the food processing industry and some quality and niche products.

Situation in the reference districts

For the more thorough analyses of the recent developments the following six exemplary reference districts have been chosen. The description below gives a short overview of the analysed indicators.

1.A Main agricultural region – arable land type: Tulln.

1.B Main agricultural region – grassland type: Ried im Innkreis.

2.A Mountain region – prosperous type: Sankt Johann im Pongau.

2.B Mountain region – development deficit type: Murau.

3.A Border region – development deficit type: Waidhofen an der Thaya.

3.B Border region – developing new chances type: Oberwart.

The reference districts differ in their population numbers (from Murau with 30.000 inhabitants to St. Johann with 78,000 inhabitants), in their employment numbers, and particularly in their share of employees in tourism related services. The share of agriculture is very high – especially in Murau and Waidhofen (38%) – and high in Ried and Oberwart (~28%). In these districts the share of inhabitants who live in agricultural households is around 33%. The change in population was positive only in Sankt Johann and Tulln, and the migration rate shows positive numbers only in Tulln. A long term prognosis expects a positive development of the population only in Tulln. In Murau and Waidhofen, featuring low population densities, the number of inhabitants will decrease further.

The regional situation of the economy is reflected in the number of unemployed persons and the run on vacancies. These indicators are positive only in Ried and Tulln. Especially in remote districts where no possibility for commuting exists, the negative balance of vacancies vs. the jobless presages the ongoing losses of population (e.g. Murau). The regional domestic product lies above the Austrian average only in the intensive tourism region of Sankt Johann. However, the districts with the lowest absolute domestic product exhibit the highest growth rates of the domestic product (Oberwart and Waidhofen).

The decrease in the number of agricultural enterprises has accelerated since the accession to the European Union in 1995. Especially hit were the enterprises with orchards and vineyards and forest enterprises – in these sectors the share of very small enterprises is high. The decrease in livestock farming and horticultural enterprises was only marginal. Since accession to the EU the number of fulltime farmers has been relatively stable while the number of part time farmers decreased strongly. The shares of full time and part time farmers in Austria are 37% and 61%, respectively. Especially in Oberwart, characterised by a high number of part time farmers, their number decreased. Nevertheless, the share of part time farmers there is still over 80%, much higher than in the other reference districts. The shares of different farm size groups decreased very strongly in the lower groups and increased in the groups above 44,000 euro of the standard gross margin. In the mountain areas the increase in the number of enterprises starts with one class below. In all the reference districts the share of young farmers declined, especially in Oberwart.

The shares of the different types of cultivated areas are relatively constant in most districts, only a slight trend towards specialisation can be noticed. In the regions with arable land it goes from grassland towards arable land, in the regions with grassland towards grassland. The development of production of different arable crops is diverse; the only significant development was a strong decrease of fallow land in 1995 (EU-program) but it has remained stable since then.

In all sectors of livestock farming the number of enterprises is decreasing, and also the number of animals, except in the mountain districts where it is relatively

constant. The concentration process is very pronounced in the pig sector in the districts of Tulln and Ried.

Results of analyses and scenarios in the reference districts

We can in general say that the different regions have followed different development paths, and that the disparities between them are always changing. The conflicts between agriculture and other social functions of agricultural areas increase, and the social functions gain relative to the production of food and raw materials.

In **Tulln (1.A main agricultural district – arable land)** agricultural production (arable land, pig husbandry) will be an important pillar of the regional economy also in the future. Specialisation, intensification and structural change in agriculture can be observed. Very important functions are the supply of food but also employment, the settlement areas and the recreational zones for the capitals, national – Vienna and local – Sankt Pölten. Because of the intensive and dense agricultural production and the vicinity of markets, good quality marketing and processing structures can be sustained. The tourism function is only possible in terms of short-distance recreation (horse keeping). Environmental problems and the potential for conflicts will increase because of the attractiveness of the region for agriculture and settlements. Thus, the resource protection function, the spatial structuring function and the biotope function will be at least equally important with production. Good opportunities exist for livestock enterprises with more than 30 hectares of arable land or special commercial farms with more than 60 hectares.

In **Ried im Innkreis (1.B main agricultural district – grassland)** the regional economic situation is relatively good and stable. Slight restructuring in the agricultural sector can be observed. Cattle husbandry is stable at a high level, and agriculture is changing slightly towards pig husbandry, with increases in arable land. Because of dense and intensive agricultural production, marketing and processing structures are well established; market opportunities across the border to Germany exist. Since tourism is of low importance, the potential for direct marketing is limited. Also in the future the function of production will dominate, and because of the trend towards pig farming and maize cropping, resource protection and biotope functions are going to increase somewhat. In a microeconomic view good opportunities exist for milk producing enterprises with the quota of more than 150,000 kg, more than 25 hectares of agricultural area and more than 25 cows – in particular.

In **Sankt Johann im Pongau (2.A mountain region – prosperous)** the regional economic situation is very favourable for a rural district because of tourism. Agriculture has only low direct economic importance (grassland and forests). In the current subsidy system the situation of agriculture appears to be stable, with good access to markets. Intraregional marketing and processing cycles seem to

be possible. The major functions of the agricultural areas are the recreational and the biotope functions. Heavy economic activities in the sector of tourism give rise to a high potential for conflicts. The spatial structuring function will be highly important due to the limited area for the Alpine settlements. Milk and meat production in combination with direct marketing and tourism or regional brands give good opportunities for agricultural enterprises.

In **Murau (2.B mountain region – development deficit)** the regional economic situation is – traditionally – unfavourable. Grassland farming and forestry are the main sectors, and in the current subsidy system they remain relatively stable. Only slight tendencies for restructuring can be observed. The regional economy is threatened by excess ageing and the negative dynamics in the number of population, as well as missing employment alternatives. Tourism exists only in small pockets but is capable of development. The major agricultural function is the biotope function; the recreational function could expand and is at a level which does not trigger considerable conflicts. Opportunities are seen in organic production of milk and meat in farm sizes above 20 hectares of agricultural area, and through participation in the enhancement of regional tourism. Wood products will become also more important in the future.

In **Waidhofen an der Thaya (3.A border region – development deficit)** the regional economic situation is unfavourable, as well. Agriculture and forestry (commercial farming, livestock farming, mixed enterprises and forestry) are the main factor in the economy. Trends towards specialisation and restructuring in agriculture can be observed. Yet, the parcel structure is unfavourable and needs reform. Tourism is only marginally important, but capable of development on a low level. The negative dynamics in the number of inhabitants and the missing employment alternatives are threatening future development. Because of restructuring, the function of production in agriculture is on the rise. This calls for devoting more attention to resource protection. Likewise, the recreational function is going to increase slightly. From the microeconomic point of view opportunities can bee seen in livestock farming with more than 20 hectares in producer co-operations, or in commercial farming with more than 50 hectares on an organic base, with expansion across the Czech border.

Also in **Oberwart (3.B border region – developing new chances type)** the regional economic situation is unfavourable but a slight positive dynamics can be observed (Objective 1 region, EU-enlargement!). The population number is at least remaining stable, and trends for restructuring of agriculture are recognizable. Special types of tourism (wellness, ecotourism) are developing and supporting the opportunities for intraregional production and direct marketing for agriculture. The function of production (commercial farming, livestock farming, continuous crop farming and forestry) features strongly, and because of ongoing restructuring the function of resource protection will gain in importance. Because of the regional dynamics also the spatial structuring function and the biotope function will increase, similarly as the recreational function. For agricul-

tural enterprises good opportunities exist, for example in continuous crop farming with more than 5 hectares and cheap foreign labour, or in commercial organic farming with vegetables on more than 30 hectares and an expansion across the border to Hungary.

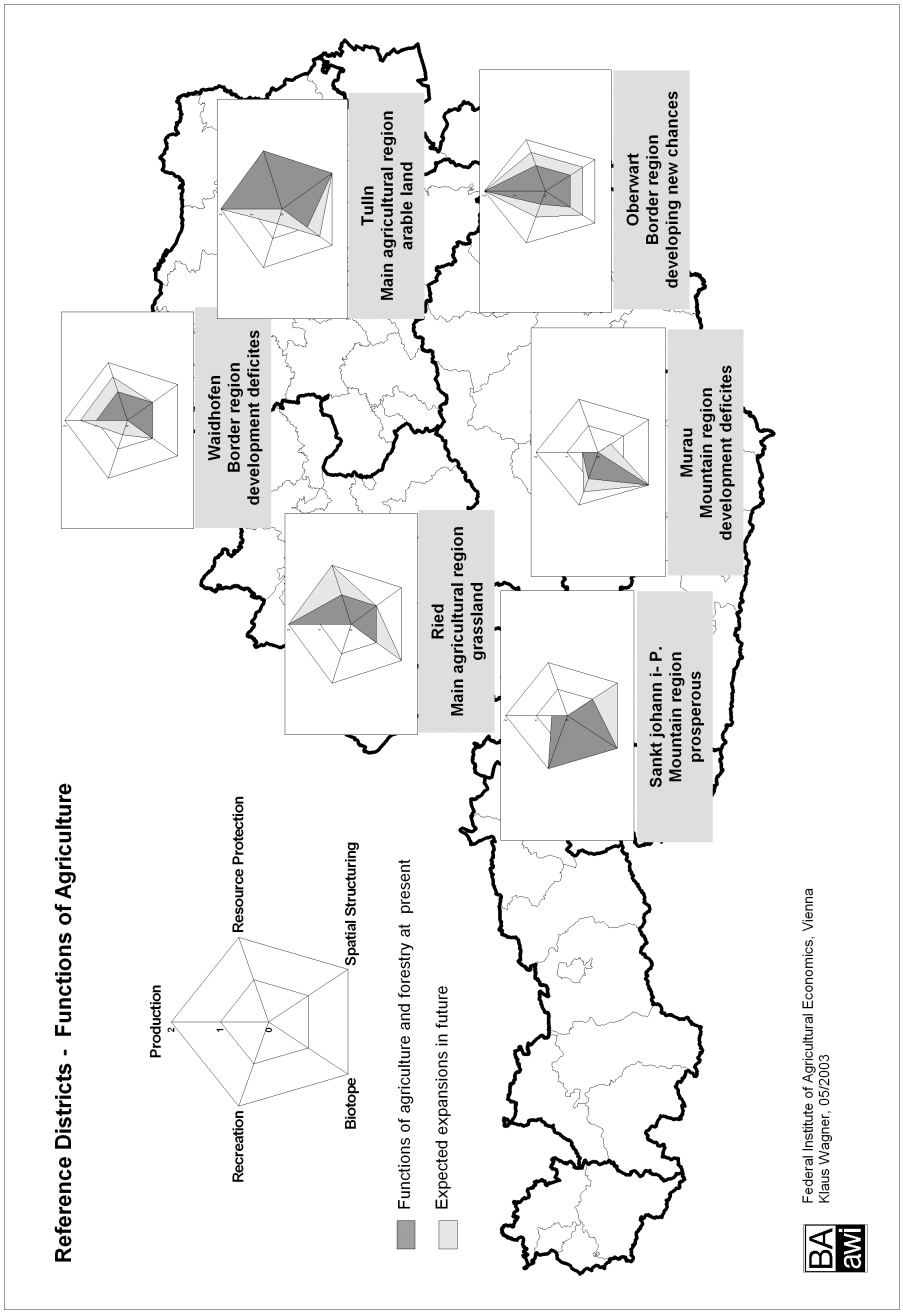

Figure 2. Recent and Future Functions of Agriculture in reference districts

Summary

In conclusion it is clear that agricultural policy and regional policy have to fit together in order to achieve synergy effects. Regional development and agricultural enterprise development are different goals but have to be looked at together for the benefit of the region. The social functions of agriculture play an increasing role alongside the function of production, which is diminishing in some rural space types. Still, certain minimum level of profitable farming enterprises should be maintained in order to provide the functions and infrastructure also for part-time farming. Thus, opportunities for expansion and intensification have to exist for farm enterprises also in regions where the function of production is losing weight.

Because of the extremely diverse regional situation in Austria it is difficult to determine from top down (at the federal level) which farm types or investments should be subsidized. This could lead to the development of mono-structured regions. A better solution could be a bottom up approach of regional programming with subsidies to achieve binding regional priorities. Under these circumstances more acceptance and appreciation for regionally diversified subsidies could be obtained. A broader scope, independent developments, responsibilities and innovations in a given framework should be possible. But also the limiting factors for the development of farm-enterprises should be recognized clearly.

Reference

Wagner, K., Janetschek, H., 2001, *Regionale Zukunftsszenarien für Österreichs Ländlichen Raum*, Agrarpolitische Arbeitsbehelfe, 7, Federal Institute of Agricultural Economics, Vienna.