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TOWARDS A SPATIAL DEVELOPMENT STRATEGY FOR THE EUROPEAN CONTINENT

PERSPECTIVES OF EVOLUTION OF RURAL AREAS IN EUROPE

European regional planning, No. 62

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PERSPECTIVES OF EVOLUTION OF RURAL AREAS IN EUROPE

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RURAL AREAS IN THE NEW POST-INDUSTRIAL SOCIETY

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Globalisation versus the identity of rural areas in Europe

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> "I am no doubt that the loss of our countryside would be universally perceived as an unprecedented catastrophe …"
>
> Henry Moore

1. Introduction

We all know that the rural areas of Europe are the product of a millennia-long evolution and as such embody civilisations and cultural assets of the greatest importance. Their importance is based on the structural differences of the settlements and landscape patterns that were generated by the immense diversity of cultures and environmental conditions across the entire continent. Consequently European countryside as a whole represents a unique heritage that deserves the highest level of attention regarding any future land-development policy.

2. The problem

On the other hand, European rural areas are currently undergoing a number of processes which, from all the evidence, lead to detrimental changes causing a loss of their basic structures. These processes present mainly in the form of two evolutions: the modernisation of agricultural production and the modification of life-style in the countryside.

In the same way that food-production technology has generated the structure and shape of the rural world in the past, so this process is perpetuated in our time. However, the consequences today are essentially different: we now have highly efficient and competitive large-scale agriculture (covering vast areas and using heavy equipment). The results are well known; the plains lose their ecological and aesthetic richness and are transformed into uniform, homogenous agricultural landscapes, while land in less productive, usually hill, areas is largely abandoned and left to revert to its natural state.

Rural areas are no longer a world apart, largely separated from the turbulent development typical of the urban scene. In addition to agriculture and forestry, new activities such as transport and energy infrastructure, industry, tourism, housing, etc. are encroaching. It is precisely this increased range of activities that is radically changing the character and appearance of rural areas. The countryside is also becoming subject to mass immigration, mainly due to a population shift from urban to rural areas. This population movement appears to disfigure traditional rural settlements as new development is often located in areas of high natural or scenic value causing visual and other types of environmental deterioration.

As briefly mentioned, a set of spatial processes contributes to radical change in the rural world which inevitably leads to a loss of its traditional identity. All over Europe, public concern about this identity is manifested by a desire to see the preservation of the structural integrity of rural areas which is a basis for their identity.

3. Identity

Identity is a product of differential features that are common to a certain social or physical entity. Throughout history, communities have forged particular identities with various ramifications. In the past, highly developed differences amongst social or territorial communities were an implicit feature, shown by differences in language (especially dialects), clothing, music, folk dances, and many other aspects of social life. However, the most obvious were those created in the material environment such as buildings, organisation of settlements and agricultural land use. Because of their conspicuous role and their long-lasting nature, these symbols of rural identity are particularly important. Identity evolves as an overall, synthesising concept of what the countryside represents as a physical, economic, social and symbolic entity. All these facets can be observed at the local, regional or national levels.

I would also like to draw your attention the typology of identities as they appear in rural areas. In doing so one must concentrate on the physicality of our subject matter and set aside social identities. If we look closer at the rural areas, we can find that they are made up of three main spatial categories:

3.1. Buildings

As is well known, the style of building used to be an outstanding spatial feature with distinctions in construction materials (local stone, brick, timber, clay, etc.) and roof materials (straw, stone slates, shingles, tiles in various forms and colours, even grass in some Nordic countries). No less important is the way the materials are used, such as the angle of inclination of the roof which is regionally typical: in areas with high rates of rainfall or snow, roofs are usually steep, and in dry climates almost or completely flat. Also windows, small or large, may have different frames and protection against the wind or sun. Last but not least, the treatment of the façade in various colours can be a marked distinction, as exemplified by the whitewashed villages of Scotland or Greece. Various auxiliary structures used directly or indirectly in agriculture, especially when situated outside the villages, such as barns, hayracks, pasture shelters, etc. could constitute a chapter by itself. The value of traditional rural architecture in providing a local or regional identity cannot be overestimated.

3.2. Settlements

Great variation in settlement organisation has evolved arising from specific conditions such as climate, bedrock, fertile soil, available water, exposure to wind or sun, communication and defence needs. The active parameters in making settlements were, as a rule, the use of easily available construction materials, implying the same style of buildings with a common orientation, distance of setting back from the road and the relation of the settlement to arable land. Cluster, linear, hilltop and other types of settlements can be found in considerable variation all over Europe, always giving the wider area a character of its own. This is the case in Alpine, Mediterranean, Nordic, Pannonian and many other regions.

3.3. Landscapes

Even more than settlements, landscapes in rural areas are a result of the synergetic effect of environmental conditions on the one hand and land use for food production on the other. Land cultivation is highly dependent on a large number of factors: soil types, solar energy, water, winds, topography, accessibility, distance from farms, density of rural population, proximity to markets and demand, competition, etc. As a consequence of such a complex dependence, highly varied systems for land cultivation have developed. These were always further diversified by new tools, growing methods, fertilisers, new plant varieties and other technological improvements. As there were many factors at work, an immense variety of landscape patterns emerged in the long history of European land cultivation. These range from the terraced vineyards and orchards in the Mediterranean, *dehesas* in Spain, chestnut groves in the highlands and vineyards of the Swiss Alps, richly patterned fields in the karstic regions of central and Mediterranean Europe, *bocage* in France, hedgerow landscapes in southern England, let alone many landscape types developed as pasturage systems all over the continent in lowlands and mountainous regions. An outstanding feature of these traditional landscapes was a well-pronounced complexity of structure. This was because of their detailed sophisticated patterns or the combination of various land systems, such as fields, orchards, vineyards, forests, etc. It is not surprising that such landscape patterns have given an especially strong imprint to their area. This was also possible because they would usually cover large stretches of land. Such an environmental evolution has made rural areas, even on a large scale, unmistakably recognisable, and has generated identities in a class of their own at local, regional, and sometimes even national level.

In addition to these anthropogenic elements, an important contribution to the diversity and uniqueness of a place is also made by natural features in combination with man-made structures. For example, streams, rivers, wetlands, stone outcrops, sinkholes, and various forms of forest and vestigial forest such as single trees, copses, avenues and plantations. In this context, rivers generally play an important role, especially in the plains where their meandering and dense bank-side vegetation strongly mark the area. Rivers are even more important because they usually generate specific land use patterns along their banks thereby affecting the settlements and the landscape.

The three basic components of a rural area (buildings, settlements and landscapes) can be characterised by the above factors. They are all important in safeguarding the specific character of our countryside; precious and indispensable to European civilisation and humanity's heritage. That they are endangered is an accepted fact; if that were not so, this conference would not have taken place.

Two questions seem relevant in this context:

- Are all these components equally endangered?
- Which of these components can be effectively protected?

4. Globalisation

Exploiting innovation in any field of human activity has always been a driving force to civilisation. It is a side-effect of competition, and the ability to absorb innovation is a prerequisite of survival and constant progress – especially in the production of goods, construction techniques and land cultivation. However, at the local level, innovations were absorbed gradually and were usually adapted to local circumstances. This certainly applied to agriculture because of limiting factors such as soil, topography, climate and water supply. Today, exploiting innovation, coupled with globalisation, takes on entirely new dimensions:

- it has become universal and affects even the smallest and most remote areas;
- it proceeds with lightning speed;
- it encourages homogenisation on a grand, even worldwide scale.

Globalisation covers almost all material aspects of our life at an increasing pace. All over the world, we drive the same makes of cars, we use the same types of household appliances, clothing is no longer a matter of national, let alone regional distinction, all technical goods and construction works bear the mark of technical standards and are therefore largely uniform. The current transformation of European rural areas is a logical and inevitable outcome of the contemporary social and economic development and is inseparable from the worldwide phenomenon of globalisation. So far the latter has presented as a series of features widely criticised as being detrimental from a cultural as well as from an ecological point of view. These are triggered by the previously mentioned urbanisation of the countryside and the modernisation of agriculture, several factors of which are listed as follows:

- abandonment of the traditional way of building and instead, the use of mass-produced materials found almost everywhere in Europe; the individual character of the area with regard to materials, colour and style is lost, and incoherent diversity takes over;
- the spatial organisation of old rural settlements is disappearing; new buildings do not fit in with the traditional pattern of the existing village and disfigure its nucleus as well as the periphery, thus breaking up the integrity of the village and the surrounding countryside. This development is partly aggravated by the construction of new, modern, larger farming facilities;
- introduction of single-crop, large-scale farming that presupposes several actions: clearing dense vegetation, a change of topography (usually levelling, filling in sinkholes and other natural depressions), elimination of wet lands and smaller water features, growing only a small variety of crops; the result being a highly uniform landscape of extremely simplified structure, low ecological value and with little interest as an experiential landscape;
- sub-division of land into new, large production units ignores the topography and departs from the empirically developed “physioplastic” landscapes that were created by a synthesis of natural topography and cultivation techniques.

Obviously, globalisation cannot be stopped especially as it is driven by powerful economic forces. But could its undesirable effects on the identity of rural areas be at least diminished? An objection could be made to this question: in that it is true that traditional identities are fading but new ones are going to develop. This cannot be denied. However, the current development implies that any new identity will be an impoverishment in cultural and ecological terms. Hence we are better advised to build the future of rural areas on tradition by properly controlling new development. Here we must bear in mind that the three components (buildings, settlements, landscapes) do not seem to offer the same possibilities for effective regulation. A growing pressure to build in rural areas will make it hard to retain the classical style and pattern of settlements, especially because of an increased housing need. Therefore, although strongly dependent on market competition and technological progress, landscapes appear to be the most promising category for preserving a satisfactory level of rural identity. This theory does not underestimate the potential of the other components, it only considers control of the rural landscape to be the most viable.

Why should this be a serious social objective? The simple reason for this lies, in my opinion, in the fact that the rural world with many cultural and natural assets is, in its widest sense also a living environment for the whole of society. It is the sphere where society will expect to encounter not only the economic, productive aspects of national life but also other, non-economic cultural values plus ecological richness. When this concept becomes a paradigm of the future of agriculture, it can expect, will deserve and also receive unreserved financial support from society.

5. Sustainability – action

The concept of sustainable development in the future life of the countryside must inevitably incorporate at least some of the following fundamental activities:

– Future development of the settlements along principles that will respect traditional construction and natural features and which, at the same time, will bring innovative contributions; this needs special attention, because an increasing number of urban activities are moving into rural areas.

– Wherever possible, attempts should be made at organising a system of land cultivation that will abandon the existing practice of creating vast and uniform regions, and instead, integrate natural components of the site, such as vegetation, topographic features, water, etc. It should also aim at an historical continuity in land use patterns. In combination, this could lead to a new type of modern agricultural landscape that would satisfy economic, cultural and ecological requirements. This aspect cannot be emphasised enough, for the landscape is most directly interconnected with the agricultural production process and will to the greatest extent determine the character of the future rural areas.

– Conservation of the outstanding settlements and landscapes as one of the most important parts of the national cultural heritage. Important though this is one must keep in mind that this measure can provide for survival of only a small fraction of our heritage.

– It is unavoidable but one must accept the fact that for various reasons a considerable amount of rural land will have to be abandoned. The major part of these areas will be left to naturalise which will, in the course of time, improve our natural ecosystems and also contribute to a new identity for rural areas.

Because of a variety of reasons it seems that a unified European policy for rural areas can be conceived only at a very general level. Each country will have to devise its own strategies for controlling these main development factors. Within this context, the following issues appear particularly relevant:

- what is the best way to achieve balance between agricultural and encroaching urban activities?
- what are the prospects for European agriculture and how will it develop in individual countries?
- what type of agriculture can survive outside areas of highly intensive production, particularly in mountain areas and the karstic regions?
- will it be acceptable to financially support unprofitable agricultural areas in order to preserve village and landscapes heritage?
- what role and in what form can the different sectors of agriculture play in terms of the economy and of contributing to a higher diversification of the countryside?
- how high does rural heritage rank in the awareness of contemporary societies and what rural policy should be adopted according to that appreciation?
- are there possible alternative strategies for rural areas, according to different economic and environmental paradigms, such as:

    - rural areas develop a spirit of globalisation and are exclusively governed by economic criteria, therefore rural heritage is left to the process of spontaneous transformation;
    - development of rural areas is widely controlled and subsidised in order to prevent a loss of their traditional identity;
    - a balanced relationship between self-supporting agriculture and forestry on the one hand and controlled, partly subsidised rural economy on the other, is attempted; the main objective being to reinforce economic viability of rural areas and preserve the most important part of their settlement and landscape heritage.

Preservation of the values under discussion seems possible only by pursuing a consistent and properly articulated policy that would depend on the following key elements:

- integrated land management;
- a viable concept of sustainable agriculture and forestry;
- a balanced population allocation policy;
- an efficient environmental control.

If I may say in conclusion, this is the only way we can efficiently face the global transformation of the countryside, perhaps the greatest spatial revolution in European history that is going to take place during one single generation. Even so, no one can guarantee the success of these efforts.

The role of agriculture in ensuring sustainable development in rural areas

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1. The importance of agriculture to the Russian Federation's economy

According to many reliable estimates, the Russian economy is currently undergoing a long-term recession and agriculture is in long-term crisis.

Russia's 210 million hectares of farmland meet only 80 per cent of the needs of its 150 million inhabitants, whereas the European Union produces enough for its 370 million inhabitants from only 140 million hectares of farmland.

Compared with Finland and Sweden, which both have similar natural and climatic conditions, only 30-50 per cent of Russia's agricultural potential is being achieved.

The importance of agriculture to the Russian national economy is clearly declining.

Table 1: The role of agriculture in some national economies (1995-96)

	States			
	Russia	**Ukraine**	**Belarus**	**Poland**
Population (millions of inhabitants)	147.5	50.9	10.9	38.5
Rural population (percentage)	27.0	32.0	31.0	–
Area of farmland (millions of hectares)	209.6	40.8	9.3	18.6
Proportion of farmland as a percentage of the whole country	12.0	68.0	45.0.	59.0
Number of inhabitants per 100 ha. of farmland (people per 100 ha)	70.0	125.0	110.0	207.0
Proportion of agriculture in gross added value (percentage)	9.2	12.7	11.0	6.3
Proportion of farmers in the working population (percentage)	14.4	22.2	19.4	25.6
Proportion of investment in agriculture compared to total investment (percentage)	3.0	8.0	9.0	–
Total exports of agricultural products (millions of US$)	3 194.0	3 065.0	378.0	2 737.0
Proportion of agricultural products as a percentage of total exports	4.0	21.0	7.0	11.0
Total imports of agricultural products (percentage)	11 443.0	1 447.0	843.0	3 955.0
Proportion of agricultural products as a percentage of total imports	25.0	8.0	12.0	11.0

Source: STAT AEI (1997), European Commission (1995), OECD (1997).

With the same rural population, investment in agriculture as a proportion of total investment has fallen from 7 to 3 per cent; the proportion of agriculture as a percentage of gross added-

value has dropped from 14-15 to 9.2 per cent. Many other important development indicators have also fallen.

At the same time, the political role of agriculture is increasing. The size of the country means that the fall in agricultural production has an impact on the development of the world agricultural market. Higher levels of unemployment and reduced self-sufficiency may exacerbate domestic political instability.

The agricultural economy is divided in two ways: firstly, between large undertakings (the former *kolkhozes* and former s*ovkhozes*) and small peasant farms which have pursued parallel but different paths; secondly between the legal economy and the underground one. The fact that the majority of the rural population has two jobs, plus the scale of undeclared barter, demonstrate that the gap between these sectors is too wide. This gap could have been reduced by genuine privatisation, but in Russia it has been a mere formality.

Moreover, during the reforms of the 1990s, certain prerequisites for the development of an agricultural market economy were created, such as liberalisation of economic activities and price-formation and the abolition of the state's monopoly of land.

As yet in Russia land and capital have been privatised in theory only. The new owners are not able to benefit from their property because income is divided according to the amount of work done instead of the proportion of the farm owned.

Formal privatisation has destroyed the relations which existed between agricultural production and processing, and agriculture has lost its influence over price-formation.

This has led to an unbalanced pattern, with agricultural production occurring in rural areas and processing and marketing being confined to urban areas. Agriculture has been left behind in the production-processing-marketing chain. Superficial privatisation has not encouraged the emergence of an entrepreneurial and commercial culture amongst people used to central planning and distribution.

The reshaping of the Soviet economy has not been successful: the management and production structures of large farms have remained unchanged and private producers make considerable use of the resources of large farms, often by stealing.

The initial hope that new private farmers would become the main producers has not yet been realised. So, all that the reforms have so far achieved for large farms has been to destroy the old supply and sales system and to liberalise prices.

In the immediate future, the agricultural market will continue to operate under the influence of three factors:

– weak economic demand from the population for agricultural products;
– reduced agricultural production;
– competition with foreign products and the threat of national products being replaced by them.

2. The role of agriculture in the development of rural areas

For several decades during the Soviet regime, in the villages – which traditionally cultivated respect for nature and had a rationale based on self-sufficiency – social groups with a market orientation were discouraged. The elderly rural population, even those who have acquired the ownership of land, no longer have the strength to cultivate it effectively, and young people are not focused on economic goals.

Global experience shows that positive and sustainable results can be achieved if the necessary linkage can be made between agricultural development and other sectors of the economy. Otherwise, development becomes increasingly unbalanced, culminating in socio-economic crises and a chronic shortage of food supplies which in turn affects the environment.

The Soviet model of industrialisation, forced co-operation and the complete nationalisation of the economy have led to an extreme division of Russia's economy into industrial and agricultural regions. This has shaped the specific role of agricultural production in rural regions.

Official statistics only partially reflect the role of agriculture in rural areas because in many rural regions farming is the only economic activity.

Communist agricultural policy required processing and trade to be located in urban areas, which explains why agriculture remains the only employer in rural areas.

During the Soviet period, a system was set up in rural areas under which farms had additional functions entirely foreign to the business of food production. These were as follows:

1. Principal source of funds for local budgets.
2. Social and communal functions (infrastructure).
3. Regional planning.
4. Main employer and source of family incomes.
5. Self-sufficiency.

Points 3 and 4 also helped to defuse conflict if there was any unemployment.

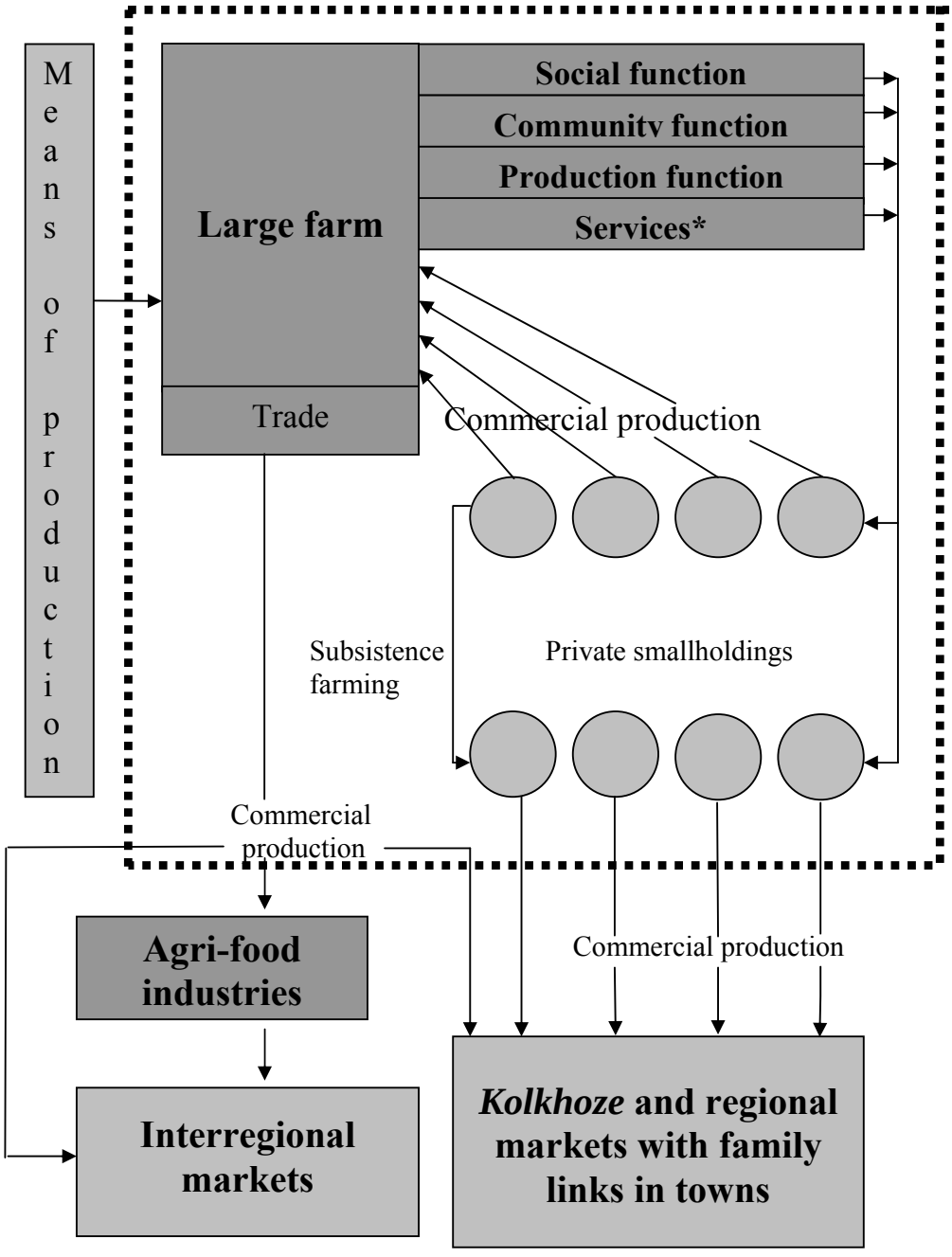
The effect of such a policy is that the socio-economic system that emerges in rural areas is based on large industrial-type farms (Figure 1).

At present, the main localities in rural areas are those in which former *kolkhozes* and *sovkhozes* were located and where virtually all rural socio-economic activity was concentrated. The remainder consists of deserted villages and private farms that have recently sprung up (Figure 2).

In rural areas since 1990, a kind of symbiosis has developed between large collective farms and private smallholdings. Here, in contrast to the disappointing economic indicators for collective farms, private smallholdings are developing quite well. Basically, most large farms have virtually ceased their commercial activities and fulfil a social service by selling half-price meat and fodder to rural populations and lending them agricultural equipment. Some of this equipment is deteriorating. Some big dairies are surviving mainly thanks to small private ones that supply them with over half their milk.

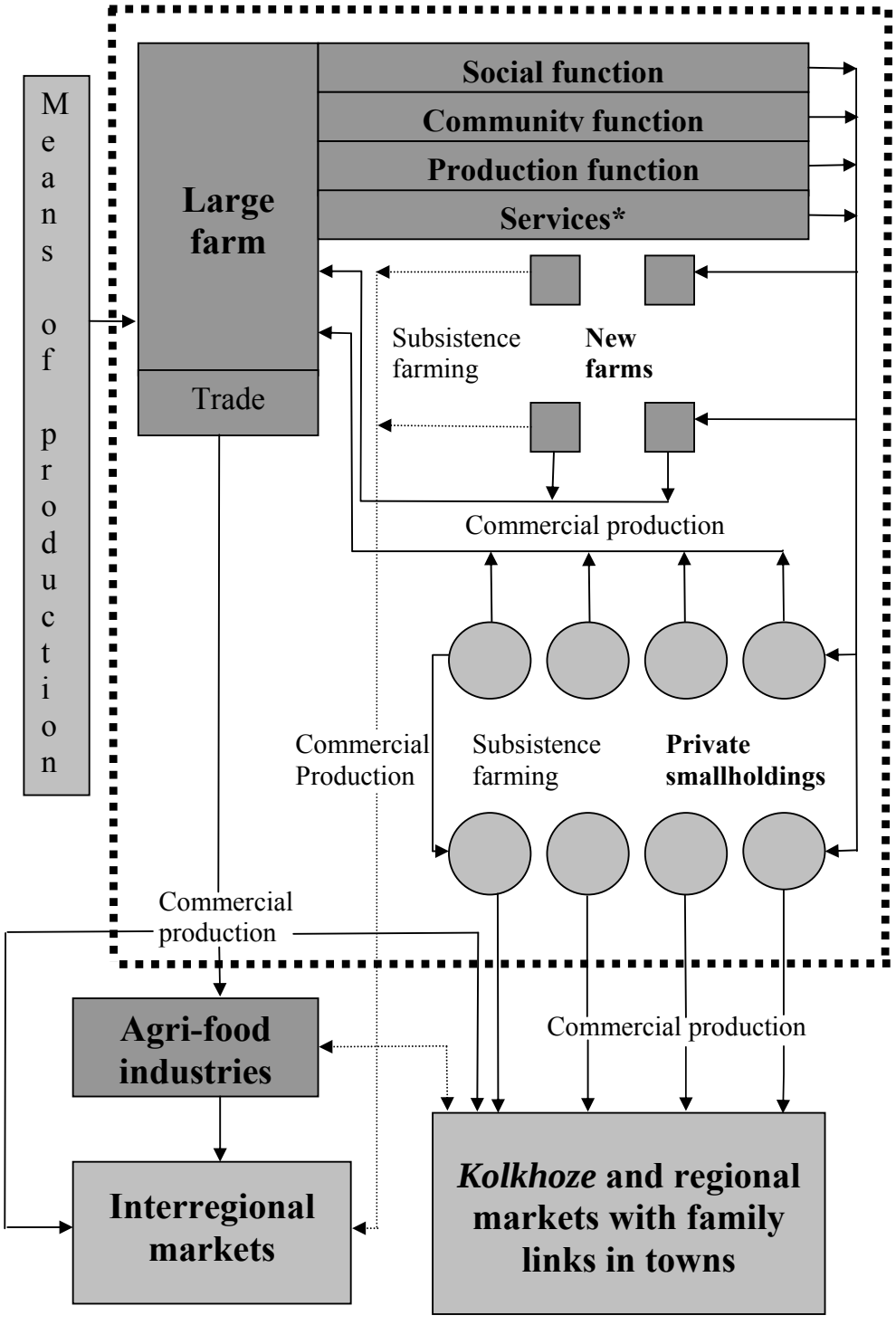
The rural population tends towards subsistence farming and is attached to its *kolkhozes*, since without them life would be more difficult: the absence of virtually free goods would force them to show economic initiative. This enables the managers of such farms to exert considerable influence over the rural population, making it frequently reluctant to contemplate reforms.

Figure 1: Socio-economic system of rural areas in the Russian Federation at the start of the 1991-92 reforms



* Provision of services, technical advice, raw materials
Source: Ugarov Alexej, 1997.

Figure 2: Socio-economic system of rural areas in the Russian Federation in 1998



* Provision of services, technical advice, raw materials.
Source: Ugarov Alexej, 1997.

The development of suburbs, especially around cities, is characterised by intensive competition for land between different landowners. Even in the absence of land laws, certain legislative efforts at regional level have resulted in the allocation of large amounts of land for the building of private houses and industrial plants.

One of the most acute problems in the development of large farms is the unclear distinction between owners of land and owners of other kinds of property.

Large farms can be divided into three groups:

- Farms in which the property relationship is clear, enabling a small number of owners to share the capital. It is in everyone's interest to improve agricultural production. Social and community service functions are transferred to autonomous local authorities. Production is greatly boosted.
- Farms (often very large ones, receiving state backing) with non-transparent property relationships, that is they elect a "consensual" board which looks the other way when its members steal goods on behalf of secondary smallholdings. Social and community services are not decentralised, and development is hampered. For instance, book-keeping is used to conceal certain indicators rather than collect the information needed to make the farm more efficient. No need is perceived to introduce effective administrative controls that would make it possible to assess losses and income.
- An intermediate group. While, in the short-term, social and community service functions are not decentralised and property relationships are transparent, the drift towards the second group is inevitable.

At present, 30 per cent of Russia's large farms are profitable. The vast majority of these belong in the first group.

The excessive concentration and specialisation of agricultural production during the soviet era has generated a number of problems in rural areas.

The major influence on the rural environment and on the reduction of agricultural production undermines the ecology linked to the socio-economic structure of rural regions.

Table 2: Changes in the levels and humus reserves of topsoil on the Russian plain over the last 100 years

Type of topsoil	Regions	Humus (percentage) and reserves (tonnes per hectare)				Loss of humus over 100 years (tonnes per hectare)	Loss of humus as an annual average (tonnes per hectare)	Loss of humus as a percentage of the initial level
		1881		1991				
		Content	Reserves	Content	Reserves			
		Topsoil of the forests-steppes						
Typical	Central part	10-13	300-330	7-10	220-300	90	0.9	23-30
Typical	South-western part	13-16	390-480	8-10	240-300	150-180	1.5-1.8	38-39
Leached	Caucasian part	7-10	221-315	4-7	150-263	67-81	0.7-0.8	20-34
Leached	Volga coast	13-16	390-480	4-7	120-210	270	2.7	56-69
		Topsoil of the steppes						
Ordinary	Central part	7-10	221-315	4-7	150-263	52-71	0.5-0.7	17-32
Ordinary	South-western part	9-11	270-330	6-8	180-240	90	0.9	27-33

Source: Brockhaus and Yefron. M -1993.

In Russia, since 1990 alone, almost 30 million hectares of farmland, including 9 million hectares of arable land, have been withdrawn from agricultural use for ecological reasons arising from the economic crisis and the use of farmland for other needs.

Data on the deteriorating quality of arable land show a sharp decline in potential. From 1970 onwards, the surface area of arable land with eroded, salty and acidic soil has roughly doubled, excessively wet and rocky soils have tripled and sandy soils have multiplied by a factor of eight. Only a third of the lost organic matter is regained. At present this land is in a catastrophic condition. Over the last thirty to forty years, the rich topsoil of the Russian plain has lost one-third of its humus reserve and the fertile layer has been reduced by 10 to 15 centimetres. This loss of natural fertility corresponds to a drop in wheat yields of between 8 and 12 quintals per hectare.

The economic crisis and the reduction of grants for agricultural production have alleviated some ecological problems in rural areas, while exacerbating others.

In the suburbs, environmental degradation has been caused by the intensive building of private houses in a way which is ecologically harmful, and by all the ensuing problems of waste disposal, diminished biodiversity, etc.

Another problem is the poor quality of some imported foodstuffs, a consequence of the population's low purchasing power and of the absence of effective state policy and controls.

All this demonstrates the extent to which agriculture has assumed a more important role in the development of rural areas, and indeed of the whole country.

3. Development prospects for rural areas: the role of agriculture

Agriculture involves economic, legal, political, cultural, moral and religious relationships that have received media attention because they centre round the reproduction of living matter. It presupposes a high degree of freedom and responsibility on the part of the people involved in these relationships.

Consequently, restoring the value of agriculture and of rural areas requires the whole complex fabric of human relations to be recreated, while taking account of the biological and climatic basis of agricultural production.

In performing these functions, agriculture plays a decisive role in rural development in Russia. In the absence of budgetary funding, there is no hope for the sustainable development of rural regions unless agriculture is made more efficient. At the same time, it is increasingly clear that the sustainable development of rural areas cannot rely solely upon agriculture. The rural economy also needs to develop other activities.

Agriculture must stimulate the development of such activities. Co-ordinated joint action will have a twofold effect on overall development.

Other activities of the rural economy, such as processing, marketing, leisure activities, etc. must be developed either in conjunction with or separately from agriculture. The practical model for rural development is based on a complex combination of various factors: state policy, human potential, agricultural development, natural resources, climatic conditions, distance from large towns, attractiveness to investment and for leisure pursuits, ecological conditions, etc.

The excessive number of functions carried out by large concerns undermines the efficiency of their management.

Checks on the time taken up by administration on farms in the second and third groups reveal that they are able to devote only a little time to their core tasks, since they are otherwise engaged with social and community problems which are their biggest loss-making areas. It is vital to sever the link between these functions and agricultural production.

This process could be speeded up if a regional or national legislative policy to divide resources between industrial and rural regions was pursued. The principle of equality of development opportunity for regions starting from unequal initial conditions needs to be applied.

The decentralisation of the social and community functions and the division of resources could have a twofold effect:

– management could deal with the farm's development problems by cutting staff numbers severely;
– new, more transparent and effective economic links and relationships would regenerate rural life.

We now have a situation in which development issues are addressed by a small, élite band of managers who are often reluctant to change their habits. For example, a farmer who opposes an all-powerful management has no chance of succeeding. This explains why rural populations and autonomous local authorities have little involvement in development planning in their areas.

New centres of development that are independent of the management of large farms must be set up in rural areas. The diversification of economic activities could be a first step towards resolving these problems.

At the same time, it is important to avoid the mass bankruptcy of former *kolkhozes* and *sovkhozes*, as this would undermine social stability and devalue resources (buildings, agricultural equipment, livestock) which could still be useful.

The lack of local resources and the state's budget deficit mean that farms must rely on themselves.

Simply restructuring farms will not be enough to ensure their long-term development. Capital must be injected by increasing the farmer's share of the price paid for the end-product.

Increasing the economic efficiency of large farms will reduce the role of secondary private smallholdings:

– it will no longer be possible to use the property of large farms free of charge;
– people working on large farms must acquire a sense of the value of work well done.

Faster development of processing activities and of infrastructure in rural regions will make it possible to make better use of agricultural raw materials and reduce wastage (which represents 25-35 per cent of production), and also to create new jobs.

4. Conclusions

Privatisation, the transition to a market economy, new legislation, a better education system and other measures – although important – are not enough to create the right conditions for development in rural areas. In order to combine high-productivity agriculture with the sustainable development of rural regions, it is very important to stabilise the macroeconomic situation, that is to increase monetarisation and improve the balance of trade and commodities.

In an uncertain political and economic climate, farmers are obliged to plan their work just a few months in advance. Stability is an essential prerequisite for regulating and using economic and administrative instruments sustainably. Only in a stable society can farmers invest in modern technology, in improving soil quality and in the natural environment.

Russia has no state strategy at Federation level that would positively shape sustainable development in the future, be suited to the Russian mentality, and serve to integrate people of different political backgrounds, religious beliefs, professional interests, age groups, etc.

Creating new social and economic relationships in rural areas is a two-way process that depends on the political preferences of a population largely conditioned by the attitude of regional and local authorities to reform.

This explains why there are no policies integrating the development of agriculture, social relations and the rural environment. This is why state action in rural areas is reduced to *ukases* and incoherent, contradictory and short-term decrees issued by the Russian President and Government. In the absence of effective state control, such decrees are often ignored by the recipients and are therefore ineffective. The decree outlining The Russian Federation's Transition towards Sustainable Development, signed by the President on 1 April 1996, was interpreted as an April Fool joke in several rural regions.

There is an urgent need for the Russian Government and Parliament to devise policies to ensure the stable development of agriculture and of rural areas as part of a regional strategy for sustainable development.

These policies need to be coherent and above all must include the following actions:

- The adoption, as rapidly as possible, of land legislation; whatever form it takes, it must be transparent. Ideally, it should allow for more private ownership of land. Indecision produces stagnation and immediately creates uncertainty both for those who would like to own land and those who are not interested. The land market could create the conditions for transferring land from owners who use it inefficiently to those who would actually work it.
- A positive and definitive solution to the land question is the key factor in increasing agricultural productivity and ensuring the sustainable development of rural areas. This would make it possible to safeguard the fertility of soils, not only for the present generation but also for future generations, and to guarantee them a high standard of living in their own area.
- Bringing about conditions for the development of autonomous local authorities, which should take over the social functions still performed by large farms. The experience of our Centre for the Sustainable Development of Rural Areas shows that it is feasible to create complex development programmes for rural areas at the level of municipalities, with the widest possible participation of local people and any other interested persons.

For the reasons explained above, it is difficult to say how long it will take to achieve real progress towards a stable society. Clearly, the Russian Federation lags a long way behind the developed countries on the path towards a “sustainable civilisation”.

Establishing the conditions in which Russia’s natural, intellectual and spiritual potential can be fulfilled offers the only hope that it can ride out the current transition rapidly.

It is vital to create national structures to promote sustainable development. An analysis of the social, economic and ecological situation and the results of the Centre’s research demonstrate that without such conditions, the majority of local initiatives would sink beneath the weight of the problems described.

Development of biotechnology and its consequences for agriculture and rural areas

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Every new technology carries risks but also the promise of benefits. This is why biologist Klaus Ammann warns against sweeping generalisations that either condemn or praise. He believes we should examine the situation carefully and distinguish the good from the bad on a case-by-case basis with the aim of promoting ecological farming for all.

The ecological questions surrounding genetic engineering

It is difficult to accept that "green" farming methods and genetic engineering cannot co-exist, since this would require us to jettison the ideologically biased slogans of both the commercial and environmental extremists.

Ecologically responsible progress can come about only as the result of dialogue between researchers, industry and consumers, but it must be a dialogue that also addresses the issues at a local level. Precedents exist: the Swiss Federal Institute of Technology is working with the International Rice Research Institute in the Philippines. The aim is to improve local strains whilst maintaining the local production structures which have been adapted and refined over centuries.

A planning strategy for the next generation is needed which is not based on rigid, preconceived goals such as the "triumph of genetic engineering" or the "victory of environment-friendly farming without new technologies". Planning should rather focus on the desire of all parties to find a solution; that is to achieve more ecologically sound farming methods for all.

This requires all parties to declare openly their own interests and to respect those of others. There should be an open dialogue and no hidden agendas. The principle of the symmetry of ignorance (experts and non-experts have different types of knowledge, yet both have equal status) must be accepted.

We should beware, however, of being too optimistic. It is precisely the ecologically relevant, genetically determined characteristics such as resistance to cold and drought that are based on interactions of genes – and these are still insufficiently understood. However, knowledge about the systemic relationships of such genetic properties is increasing rapidly.

Widespread prejudices, such as the idea that genetic engineering encourages monoculture farming and helps the seed multinationals to consolidate their billion-dollar profits, do nothing to help. This might well be the case for products that are already on the market because most of them have indeed been developed to improve farming in areas where vast

monocultures exist. However, this first generation of genetically modified plants has been designed to help intensive farming, with its high-energy input, be more ecological. Pesticide-resistant strains of cotton and maize enable millions of litres of pesticide to be saved. In the case of the new transgene soya bean, the implant of a foreign gene makes it possible to replace significant quantities of conventional herbicides with organic ones, which are broken down faster in the soil. The new strain also offers higher yields for the soya farmers and is, according to new data, also more friendly to the soil systems.

Without a doubt, in the coming years, farmers in the United States will convert almost entirely to planting transgene crops. (Since 1996, soya cultivation has increased from 400 000 to 4 million hectares).

These products have been tested more rigorously than any conventionally cultivated strains in terms of their food safety. The main object of the tests was to check toxicity and the allergenic potential of the implanted proteins (one from a common soil bacterium). It emerged that both are quickly broken down by the gastric juices which means that they do not represent any food-allergy risk. Numerous tests have eradicated all other reservations consumers may have. These new crops are regarded as very safe indeed. Nevertheless, the derivative food products should all be labelled and carefully segregated according to consumer needs. Consumers must be given the right to choose.

One could not blame researchers and developers in sitting back and being satisfied with their first success. However, a look at the research literature tells a different story. Roughly seventy different crop strains are currently being genetically modified and tested in over 3 600 field experiments on more than 15 000 individual strips of land – without any negative effects. The rate of development will increase after the painstaking preliminary tests. Soon all major global crop plants will be genetically modified. There will soon be hundreds of different transgenes in various combinations out in the fields and we need to carefully monitor what happens with mass distribution of genetically modified organisms (GMOs).

In Europe, too, we will be able to improve a large proportion of our food through targeted modifications in the production, taste and storage properties of our crops. There must be strict quality control, just as there are for conventional foodstuffs.

Nevertheless, as an ecologist I believe we should respond critically to this development and investigate in greater depth the problems of gene flow in such mass application. Newly implanted genes in modified crops could escape through cross-pollination with related wild strains. This genetic flux varies widely depending on the strain and the region; the risk is low or non-existent in Europe and North America in the case of the soya bean, maize, wheat, rye, barley and also for potatoes, tomatoes and some types of clover. In contrast, it is moderately high in the case of endive, turnip, oilseed rape, cabbage, radish and chicory. The risk is very high for carrot, alfalfa and for most species and strains of wild grass which today are subject to intensive cultivation (for lawns, sports fields and golf courses). In the last group of crops it is in fact highly probable that genes will escape, although this does not necessarily mean that there will be a negative effect on the environment.

We should refrain from undertaking such high-risk experiments until we are sure that the new types cannot cross-pollinate. This applies in particular to genetically modified rape where it has been proved that its herbicide tolerance has crossed over; that is its resistance to herbicide has passed to wild relatives through pollination. The solution has already been found in this case: strains of rape, which do not express the transgenes in the nuclear DNA of pollen have been developed. Many crop strains, which contain their useful transgenes only in the plastids (such as the chloroplasts, the bodies that contain the chlorophyll) have already been developed in the lab. Maternal inheritance thus would then make propagation of transgenes impossible because most plants do not pass on plastid genomes through the process of fertilisation, when the genomes of the pollen (male) and the egg (female) merge.

At present virtually all cultivated arable land is treated with herbicide. Most of this is still chemical in nature, which breaks down only slowly. With the help of genetic engineering, however, it is now possible to develop partial resistance (tolerance) to organic, rapidly broken-down herbicides which otherwise would be effective against all plants.

Through the intensive use of weed killers, classic agricultural practice has created herbicide-tolerant weeds long before genetic engineering became an option. In Switzerland there are already twelve known types of weed which are resistant to a chemically produced and sprayed herbicide. Since this herbicide is no longer sprayed in such enormous quantities, it is assumed that “natural” and genetically stable mutants will decline again, but it has to be admitted that nobody knows enough about such herbicide-resistant “natural” mutants. They may disappear due to the lack of selection pressure because the original strain will again outcompete the mutant. This has been proved in one case of a herbicide-tolerant mutant wild grass in Israel. A herbicide-tolerant Brachypodium sp., created solely by the intensive use of a herbicide over many years, vanished again about six years after the abandonment of the herbicide. But on the whole our knowledge is incomplete in this area. In the light of such ignorance of traditional agricultural practice one can also consider the newly emerging science of genetic engineering as a welcome marker-technique which will allow deeper and much more precise insights into these processes.

From an ecological point of view we will have to abandon the consistent and universal herbicide strategy. It can be acceptable only as a short-term solution. Leading research developers in major companies have stated that herbicide strategies are considered, in the long-term, as being a dead end. As an ecologist I can only welcome such statements.

Judging from laboratory experiments, a further problem could arise as a result of premature resistance developing in pest insects. Because of the intensive selection pressure on pests in large and widespread Bt-maize plantations they can survive only by adapting, that is by developing resistance through mutation. A new protein is created by a gene in the Bt-maize, which comes from the widespread soil bacterium *Bacillus thuringiensis* (Bt). The decay product of the Bt-protein eats into the digestive tract of the corn borer and the pest dies of hunger. This protein is also the main ingredient of an organic crop-spray which environmentally conscious farmers have been using for many years.

Resistance-formation can be counteracted only by special crop-resistance management. This was also the common response to conventionally cultivated resistance. At present, tests are being conducted to discover whether retreat areas for insects could be the solution, where conventional, non-resistant crops will be grown. Rumours that by 1996 certain insects had already developed resistance to Bt-cotton in the southern United States have proved unfounded. After careful isolation, over 200 insect samples were all revealed as not being resistant to the Bt protein.

Accumulation problems for specific proteins such as Bt-toxins can also arise where large quantities of the new proteins are ploughed into the soil together with parts of the plants themselves. It is therefore necessary to monitor this carefully over many years. This is why we must regard the initial large-scale cultivation within a holistic context. The reservation that there could be longer-term negative effects on the soil micro-fauna should not be dismissed out of hand – despite the fact that preliminary field studies show the risk to be small.

Overall, such problems need to be investigated scientifically. No researcher can afford to focus on the possible negative effects of the new genetically modified plants to the exclusion of all other agricultural practices. A much more effective approach is to make a fair comparison with conventional cultivation methods, including their disadvantages which are often far worse. It has been shown in many field tests (big and small) that transgene crops are much less harmful for beneficial (non-target) insects than spraying pesticides. A fair comparison will reveal that traditional agricultural practices such as ploughing, crop rotation and repeated spraying of all kinds of pesticides is much more damaging to beneficial insects than a progressive and careful introduction of transgenic crops, which should be closely monitored over many years to come.

The developing trends in GMO research must inevitably be linked to more ecological strategies in agriculture. We still have very many things to learn about natural, systemic resistance, about resistance genes of the plants themselves, about the structural design of the genome – and there are many more unexpected research discoveries to come.

From the ecological point of view, we should proceed from the first phase of development of single-gene GMOs which produce bacterial proteins as pesticides to more refined ways of crop development. We should introduce some kind of “precision biotechnology” which would allow us to get away from monocultures in the old sense of the word: monocultures, which are an open invitation to new pests and the trigger for an incessant war against invasions of harmful organisms.

Precision biotechnology could mean a plethora of resistance genes, each one mixed with others so that pests will have a considerably lower opportunity for new attacks. This would create a situation, similar to natural conditions, where one encounters hundreds of species within a square mile and thousands of different resistance genes. If we refrain from heavy pesticide use, beneficial insects will come back, adapt to GMOs and again lower the selection pressure, since the strategies the beneficial insects will have developed against pest insects are highly refined and vary much more than any agriculture technician could mimic.

Spatial implications of scientific and technological innovations in agriculture

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1. Introduction

Two billion human beings suffer from vitamin or mineral deficiencies, 800 million are chronically malnourished and 40 000 die from the effects of starvation every day.

And the European Union is wondering what compulsory set-aside rate to impose on its farmers.

The planning of rural areas in the Council of Europe's member states, which extend from the Straits of Gibraltar to the Kuril Islands, calls for a global analysis because reducing it to local or regional dimensions results in inappropriate policies.

Rural planning also requires an historical analysis which shows that there is an enormous variety of agricultural and regional systems. Soil and climate are the prime reason for these differences; the varying pace of technological development is another. Together these two factors result in a diversity which previously it had been possible to disregard – but no longer, given the current context of globalisation.

Against this background there is reason to hope that hunger in the world can be prevented by exporting surplus agricultural produce to the poorest countries. Given the state of scientific progress there is cause for optimism, but the gap between technical capacities and our ability to exploit them in the correct economic and social conditions is huge. In reality, the world's agriculture, and with it rural areas, are threatened by a collapse of structures that the uncontrolled pursuit of scientific and technological innovation may well exacerbate. Hence the need to consider the links between these innovations and the general problems which the world faces.

Directing the application of general advances in science and technology to agriculture is a major political imperative. It will not be sufficient to produce more, even assuming that trading conditions will preserve a balance between agricultural systems in different regions. Innovation must also enable us to produce in a better way. Agricultural innovation means – and will increasingly mean – learning to manage soil, water and air differently. Agriculture is one of the main culprits of global warming. By 2050, the world population will have roughly doubled, and the level of CO_2 is expected to do the same, along with other gases responsible for the greenhouse effect, and this might trigger disastrous climatic change. Methane from rice fields and livestock also gives cause for concern. Another problem is that maintaining biological diversity runs counter to selective breeding in order to improve yields. And what about gene technology and cloning? These examples show what is probably the major contradiction facing humanity: how to feed itself while at the same time safeguarding the planet.

There is no denying that as well as these threats, economic globalisation disrupts planning. Will the necessary reorganisation start in Europe? It is fair to say that Europe will reorganise before some other regions because it will be forced to change its policy on agriculture and rural areas. How can the European Union be enlarged in the current context, when the six countries of central and eastern Europe which are candidates for membership have more farmers than the entire Europe of the fifteen, and when farmers account for 22.5 per cent of the CEE workforce compared with 5.3 per cent in the European Union? A new awareness may of necessity emerge, promoting an innovative environment capable of halting a process that logically (as has been pointed out by, among others, Edgar Pisani, former European Agriculture Commissioner), will eventually result in 70 to 80 per cent of the European Union's agricultural production being concentrated along the coastal strip from Brittany to Denmark.

2. General issues

The scientific and technological innovations affecting agriculture are inseparable from scientific and technological progress in general. They have written history. The future depends on them.

The first innovation was agriculture itself, when man discovered his ability to plant and harvest crops. Nomadic trails were replaced by the furrows of sedentary tribes. The earth, once only lightly worn by paths, is now deeply scored with the ancient lines left by human toil. As more and more land was cleared, the fields of this primitive agriculture were extended. Man also learned to make full use of the same piece of land. Thousands of years of constant progress has resulted in modern agriculture. But that progress has been patchy. Combined with the effects of natural differences in productivity, innovation has led to a variety of farming methods.

For a long time, this diversity could be ignored. Communication difficulties and the rudimentary state of food preservation methods limited exchanges. Beyond neighbouring areas, trade was motivated only by luxury or need – gold and salt. When markets opened up, it was to compensate for shortages of a vital crop, usually wheat. Nowadays, although they cannot be regarded as utterly indispensable for a balanced diet, New Zealand kiwi-fruit, West Indian bananas, South African grapes and Israeli avocados can be found on hypermarket shelves alongside oranges, themselves no longer exclusively a Yuletide treat. Local apples and pears are simply two more varieties of fruit on sale.

This new situation is the result of a combination of innovations concerning farm production, transport and preservation methods. It expresses the impact of the general phenomenon of globalisation on agriculture, brought about by the same scientific and technological conditions; innovation increases production, diversifies it and makes trade possible. This process goes back to the beginning of mankind but its contemporary acceleration and worldwide amplification have thrown into competition different forms of agriculture, economies, territories, men and women, not all of them in the same state of preparedness or adaptability.

Hundreds of millions of human beings survive thanks to primitive farming methods. Apart from their technological backwardness, the features of these farming methods are self-sufficiency and the limitation of production to the exploitation of resources that are strictly determined, in terms of variety and quantity, by natural conditions. In many places virtually nothing but rice can be grown. Elsewhere rudimentary multi-crop systems are practised. These types of agriculture would call for a huge investment in order to economically produce more while preserving the soil and the environment as a whole. Most of these systems are incapable of doing so. But it is in those regions that the largest share of world demographic growth is taking place – even though they can already no longer manage to feed their populations. This situation is forcing mankind to search for a type of innovation that so far has escaped it: the co-existence of primitive and sophisticated methods of agriculture, with all of them striving towards the same overriding objective: feeding the world. At the same time, these innovations must avoid a situation where competition from the most productive types of agriculture leads to the disappearance of the fragile types which are, nonetheless, vital for the occupation of large expanses of land, for the livelihoods of the societies living there and, for a long time to come, for their food.

By the year 2050 the world population could almost double, from 5.5 to nearly 10 billion inhabitants. Agricultural progress ought to make it possible to feed all these mouths. But will we be able to invent and apply the required organisational methods, the complexity of which at present confounds us? The approach that has been taken is based on the free market but this only reinforces the inequalities between different types of farming. The most competitive methods prevail; their progress and profits improve their access to research and its applications. Innovation has an cumulative effect. The world market therefore serves primarily the interests of American agriculture and others such as Canada, Australia and Europe. But Europe, especially if the whole continent is taken into consideration, offers an example of the two extreme situations. Its geographical diversity results in a host of agricultural landscapes. Subsistence farming can still be found in Europe but the continent also participates in lively competition with the United States in the world food trade. This situation exposes it to conflicts of interests among its own farmers. It also means that Europe should have a better understanding of the need not to permit change without any attempt at control it.

As a well-endowed continent, Europe can thank nature for the ingredients of its fortune and its history. For Sir Leon Brittan, European Commissioner, European agriculture is far more than a factory for manufacturing food.[1] Its physical geography has given rise to the human geography that can be seen in the distribution of the population. The city, requiring agricultural surpluses, has found a favourable terrain in Europe. In a patchwork of geographical regions, each local area has at least one market-town. A process of mutual

1 Brittan L. *The Europe we need*. Hamish Hamilton, London 1994.

enhancement has been established. As towns and cities developed more numerous and more varied activities, their populations continued to grow. Under increased pressure, agriculture has integrated into its processes the innovations produced in urban laboratories. The price that agriculture has had to pay has been a reduction in its workforce, the ransom for increased productivity. But, although this has been the cause of countless human dramas, a certain balance has generally been struck. Job losses in agriculture have been made up in urban areas. Spontaneous initiatives or planning policies have even made it possible to introduce alternative activities into the countryside. Whenever that has not been possible, Europe has transferred communities to its overseas possessions, where they have introduced new forms of agriculture, either superficially as colonial farming, or pushing into virgin land. The latter, whose recent exploitation makes it particularly receptive to innovation, is now a source of fierce competition, threatening European production.

In a unified market, we can see three very different types of agriculture emerging: subsistence agriculture, now found only on the fringes in Europe; mass production agriculture, standardised on a world scale; and specialised agriculture, very prevalent in Europe.

Mass production agriculture is dominating the market. It covers major widespread commodities such as wheat, beet, rape-seed, maize, etc. Primarily it calls for crop yield innovations. As they are applied, the process marginalises similar produce grown by traditional agricultural methods. When extended to an increasing number of commodities, it spreads a standardised form of agriculture. Even strawberries are now grown in fields stretching to the horizon on the American plains. Progress is replacing local plots with a juxtaposition of vast agricultural territories. Evolution has adapted to farming methods in new countries, where cities do not emerge from the countryside. Modern methods also correspond to the aspirations of those countries that primarily need to produce more at a lower cost to feed their populations, even if that means paying the price of hazardous speculation in specialist crops. It is contrary to the spirit that prevails in the cultivation of a unique produce, in which respect for the soil and landscape takes precedence over innovation: a superior variety of grape grown in a famous vineyard cannot be switched like a variety of maize. Mass production is contrary to the spirit of systematically striving for quality which European agriculture can allow itself thanks to earlier progress and higher living standards of the majority. Europe is even now experiencing the paradoxical situation of voluntarily limiting its crop yields. For many types of produce, developing a policy of “local speciality product-labelling” is being seen as the necessary counterpoint to innovation. For rural territories with a strong identity, it is the only way of responding to the competition from the mass production practised elsewhere. Wherever the soil does not obviously dictate one or the other of these options, European agriculture will have to make a choice between the two: giving priority to quality or quantity.

But improving technologies does not eliminate all the determining factors. The control of nature, of all activities the one most sought after by mankind, is the element least easily tamed. Despite some cases of successful intervention, certain of which have been unwise, total control of soil, water and climate still confound human efforts. Within these constraints, innovation only increases the disparities. Diversity and inequality are writ larger – and more indelibly – on the destiny of agriculture than in any of other the world’s activities.

3. Innovations: global ecology versus regional economies

The imperative has not changed: that of feeding people. Renouncing for the pleasure of taste the innovations making it possible to increase yields is a luxury that only full stomachs can afford. A mankind of 10 billion souls can not afford to do this. From necessity it has to produce more, while trying to continue to grow luxury crops. Producing in a better way is also an imperative, since agriculture, and the stockbreeding inseparable from it, are making a dangerous contribution to the warming of the atmosphere that is threatening life on the planet itself. When, around 2050, the world's population will have doubled, the amount of carbon dioxide will probably also have doubled, but the availability of arable land per inhabitant will have halved, dropping from 0.3 to somewhere between 0.1 and 0.2 hectares. By that date will the greenhouse effect have begun to transform the geography of productive land? It is predicted that the Mediterranean coasts will have dried up and the granary that is Ukraine will be a dust-bowl. Low-lying fertile land, home to hundreds of millions of people, is expected to be completely submerged, not only in the Nile delta and Bangladesh but also in the London area, the Netherlands, Denmark and the Baltic regions. Sub-Arctic areas, on the other hand, might become suitable for growing crops.

Since it is now acknowledged as possible – if not probable – that planetary ecological upheaval will take place with immeasurable consequences and that a demographic explosion is now an undeniable reality, both factors are beginning to force a political re-think. Will the politicians redefine different types of agriculture and farmland? Will the fertile plains and lush pastures be used to feed the populations of the Third World? Will tulip fields still be acceptable? Increasing production on the same land surface means intensifying agriculture. Improving production in order to preserve soil, air and water quality calls, on the contrary, for more extensive modes of agriculture and makes it more difficult to strike a balance between opposing constraints. When former alliances and neglected dangers have become political obligations once again, the world will have to reconcile two quite different approaches that must be dealt with if we are to plan the future of the countryside. Scientific and technical progress will play a decisive role in any eventual scheme.

Yields will not increase unless productive technologies are extended. Sustainable development itself cannot be achieved without innovation. Some forms of innovation will be nothing short of revolution ranging from the regenerating and preserving of natural assets to those of production. Sustainable development does not mean going back to (idyllic) nature. Neither does it mean giving a free hand to intensive methods of arable farming and animal husbandry. Having been forced to think again about certain practices which innovation could change (such as soil-less agriculture), topography could be reshaped in many ways. Innovation will also trigger problems regarding sustainable development. Conflicts of interest will arise between and within territories.

The first area of innovation must be the conservation of the soil and of its productive capacity. The ancient technique of leaving land fallow has become topical again thanks to the European Union's budgetary concerns and a desire to reduce surpluses. But, in order to meet food demand, policies should instead be directed towards reconstitutive uses. The research to be conducted on this will go hand in hand with a return to the forgotten advantages of dykes, banks and hedges that protect land from wind and rain erosion while embellishing the landscape.

Reconstituting or enriching soil is not necessarily beneficial for the environment although it may be beneficial to agriculture. Soil enrichment and the crops grown on such land add considerably to the quantity of naturally emitted gases. This would appear to be responsible for CO_2 emissions ten times higher than those of fossil fuels. But the world is so complex that, in the chain of interactions, one contradiction follows on from another. While some blame fertilisers for the production of nitrous oxide, for which agriculture is by far the leading culprit, others recommend the development of intensive farming in order to trap CO_2.

While nitrates are useful for agriculture, the same is not true of certain metals whose elimination is becoming a major concern. "Our fertilisers are too natural. They should be made more chemical than they are at present, in order to turn them into purer fertilisers, devoid of heavy metals". These were the words of Jean Boulaine at the 16th World Congress of Soil Science held in Montpellier, in August 1998. He added: "Explaining that to ecologists is not easy".[1] Making city-dwellers admit that farmers should not have to pay for the elimination of heavy metals from urban sewage processed and used on the land will probably be difficult. The processing technologies that have to be applied, admittedly more costly than sophisticated, open up a new arena of conflict between townspeople and country folk.

There are plenty of others. Conflicts are numerous especially with regard to water, and settling them is complicated by its multiple and successive uses – and by the extent of pollution of agricultural origin combined with the growing scarcity of such a vital resource.

The new "green revolution" recommended by the least-favoured countries calls for the development of hydroponic crops where water, pre-enriched and parsimoniously distributed, replaces soil. It is plausible that this technology could replace some intensive practices or be used as a complement, especially in the market-gardening sector where it has already been introduced. But Europe should primarily concern itself with more rudimentary technologies in order to deal with the water shortages provoked by modern agriculture and the fact that it is in competition with other users. Wheat, so greedy for water, is drying up the groundwater in the *Île de France* region on which excessive demands are already being made by the sprawl of Greater Paris. This will tap further into the reserves of rural areas which see their water resources being drawn off without any benefit for themselves. How the water issue is handled will dictate the future of many countries or regions, for example there are dangerous conflicts of interest between Turkey and its Middle Eastern neighbours, between Hungary and Slovakia, between regions within the same state, between upstream and downstream areas. In Spain, for example, the needs of irrigated agriculture in Extremadura and Murcia puts them in conflict with the central and northern regions which want to keep their water for their own use. In Catalonia, water from the Rhone is used, but to reach Catalonia it must first cross farmland in the Languedoc-Roussillon region of France, and farmers there refuse to let that water be used to irrigate land belonging to their competitors on the other side of the Pyrenees. Perhaps instead, this water will be redirected along a canal dug in the seventeenth century to link the Mediterranean with the Atlantic so that it can irrigate the French plains along the Garonne, a river whose waters are being dried up by the monstrously thirsty maize crop. For the future, the ancestral skills of tapping, distributing and using water will have to be mastered everywhere. A major agricultural innovation, imposed by the cultivation of plants that are increasingly water-consuming, and selected after sophisticated research, is the return to the immemorial use of aqueducts! But that will not suffice.

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1 Jean Boulaine, quoted in *Le Monde* 29 August 1998.

Research must continue to focus on selecting better varieties that can transform nutritive elements even more economically. In so doing, agriculture will probably further reduce the planet's phytogenetic diversity, which required the adoption in Leipzig, in 1996 of a world plan for its preservation. Tomorrow's crop-farming, with a narrower choice of varieties, will therefore also be more exposed to attacks by pests to which, despite progress, it will remain exposed. The advent of vast areas in which single crops are grown, replacing small land plots, does away with the diversity that once protected them. Progress in processing techniques makes farm production more sensitive, both to the natural environment and to markets, even though, at the same time, it is trying to free itself from them.

Another effect of progress is greater dependency on increasingly distant and powerful suppliers. A new step has just been taken in experiments with animal cloning and the introduction of genetically modified crops. Dolly, the Scottish ewe and Marguerite, the Limousin cow, are possible precursors of the new type of selection which, after a reduction in the diversity of breeds, would lead to a reduction in individuals. Perhaps tomorrow's flocks and herds will be made up of uniform individuals. Laboratory reps. might replace cattle-dealers in the livestock markets of the future.

In the United States 320 000 km², approximately the total area of France's useable farmland, are already used for growing transgenic plants. These have now invaded the European Union even though neither the scientific nor the economic debates are over. Maize, rape-seed and beet are the first crops to which this technology has been applied but it also concerns tomatoes, potatoes and cotton, and will probably not stop there. This accentuates the trend towards concentration of ownership of the body of genetic knowledge begun by selection techniques. But it is true that no farmer would have been able to obtain, either from the traditions handed down to or from the knowledge developed by them, the productive progress that transgenic plants allow. Now it looks as if meeting world needs will be dependent upon them. The Monsanto representative was right when he pointed out that: "If we want to meet tomorrow's food needs then we have two choices. Either we turn to innovation and progress or we double the amount of arable land".[1] Is the argument strong enough, nevertheless, for man to take the risk of an uncontrolled leak of genes that might have an effect on flora and, by extension, on the whole living world? "It is impossible to predict the toxicities, competitive invasions or any other effect of transgenic plants".[2] This statement could be compared with the words of Lew Kowarski on the subject of nuclear energy, which he called "a necessary evil". But perhaps we shall also see consumers, if they are informed of the processes being used and have the means, turning away from transgenic products just as they do from irradiated food when they become aware of the techniques applied. When things are uncertain, peasant wisdom, which still remains, forces us to pay even greater attention to the advantages of labelling produce with an indication of their origin; this might well mean a commercial advantage for produce for which there are delays in introducing innovation. This is already true in the case of fruit where even authorised preservation treatments are being rejected. The most difficult and fragile types of agriculture have a greater interest than others in this quality-based approach. The geography of the land on which they are grown prevents them from competing successfully with more productive types of agriculture. Keeping a distance from certain innovations may be a way for certain European rural areas to improve their economic prospects. The territorial dynamics of agricultural innovations is a dialectic: it

1 "La question agricole, atouts et contraintes" (The agricultural question: advantages and constraints) *Revue politique et parlementaire,* No. 992 January-February 1998.

2 Jean-Marie Pelt, President of the European Ecology Institute, quoted in *Le Monde* 30 May 1996.

proposes an antithesis to the thesis of all-out innovation. Synthesis seems all the more necessary as the ecological dangers provide a justification to those who imagine that the future of rural areas lies in a maximum conversion to forest, which traps CO_2, the main greenhouse gas.

Pasturelands should not be seen merely as "green lungs"; they support extensive animal husbandry identified with sustainable development. Will they escape the threat of the reduction of cattle herds and sheep flocks for ecological reasons? This question may seem absurd to anyone for whom the epitome of sustainable development is a vision of peaceful animals grazing green grass. But it is pertinent for anyone aware of the crimes for which they are blamed. Ruminants consume far more water than wheat does, and are poor transformers of raw material. They occupy areas snatched away from cereal growing, which are more useful for feeding people. At the same time they help to consume cereal production, 20 per cent of which is used for animal feed. Upland flocks could defend themselves from this accusation better than others, but all forms – off-soil animal husbandry and upland livestock included – are open to the most serious accusation: their massive contribution to the greenhouse effect. Because of their emission of wind, from both ends, and their dung, cows and other ruminants throughout the world emit into the atmosphere 60 million tonnes of methane a year. Only marshes (115 million tonnes) and paddy fields (70 million tonnes) produce more, but the former are vital to the world's ecological balance and can scarcely be drained further and nor is it possible to see how the Asian masses could be deprived of their staple food. In Europe, livestock methane is accountable for 45 per cent of mankind's waste (30 per cent due to digestion and 15 per cent to manure). This far exceeds refuse (30 per cent) and coal-mining activities (11 per cent). Methane is not the most prevalent gas in terms of volume in the atmosphere and it provokes only 18 per cent of the greenhouse effect compared with 66 per cent from carbon dioxide, but it is more harmful because of its potential for global warming, sixty-two times that of CO_2. Therefore it is the increase in methane gas that must be most urgently combated. Since typically its life in the atmosphere is briefer than CO_2 (12-17 years compared with 50-200 years), it is only logical that the necessary efforts to reduce the greenhouse effect should be focused on it. Proposals have been made: *Time* magazine printed a two-page spread setting out the ideas put forward by the American ecologist Jeremy Rifkind who is leading a crusade to boycott beef consumption.[1] Others take a less passionate approach to this issue but pose it nonetheless. Sylvie Brunel's (Scientific Director of *Action contre la faim* – France) response to the question is economic, not ecological: "Meat consumption does not function on the principle of communicating vessels (the less I take, the more I leave you), but according to a close and constant adaptation of supply to solvable demand".[2] But that is precisely the change that the world has to make in order to feed itself and fight the greenhouse effect.

At risk to their own lives, people have taught herbivores to consume meat-based food. But they do not know how to make them digest it better. The options set out by the Commission of the European Union in its strategy for reducing methane emissions,[3] illustrate the shortcomings of research which is nonetheless vital. The main option proposed is systematically resorting to simple technologies, the easier to apply the more intensive the

1 J M Nash "The Beef against… Do cows cause global warning and human hunger?", *Time* 20 April 1992.

2 *«Manger moins de viande, une solution pour nourrir l'humanité ?»* (Eating less meat, one way to feed mankind?) *Les cahiers français* October-December 1996 issue.

3 Stabilisation and reduction of global methane emissions. 30/10/98.comm/dg11/docum 96557 en.doc.

animal husbandry: collecting manure inside closed buildings, installing digesters, preparing concentrated food as a substitute for grass. Perhaps one day livestock will be raised not in fields but in enormous sheds specially installed on the outskirts of the cities so that waste can be processed and, for economic reasons, transport costs reduced. This model, currently condemned because of its impact on the local environment, might become necessary in order to protect the global environment, unless the biogenetic research under way succeeds in replacing the "mad cow" with what is already being called the "turbo cow".

The extreme case that this example illustrates should make us think about the unexpected interactions arising from the contradictions in mankind's progress and the risks resulting from human inability to control them. Along with other examples, it pleads for a determined effort to look for new ideas, one of the main aspects of which should concentrate on applying scientific progress to land use planning. Most of the new technologies that might, in the coming decades, supplement existing ones which deserve to be maintained and even strengthened, are already in the laboratory. They should be listed so that their foreseeable effects can be studied and so that the effect of their absence can also be assessed. We are on the threshold of an era when people must not only produce more but also produce differently, and we should be taking an interest in a new category of adaptive innovations for use alongside innovations aimed at quantitative progress. The future of farming and farmland alike lies in the laboratory.

4. The disorder of development

Globalisation is imposing on Europe's rural areas a clutch of general problems resulting from insufficient mastery of the scientific and technological processes which has allowed progress to take place, with the result that:

– the fundamental unity of landscapes has been shattered;
– policies have been locked into a circle of impossibilities.

The primitive organisation of sedentary societies was characterised by the imposition on one territory of habitat, economic activity and the regulation of social life. This principle was perpetuated until the nation state came into existence. Nowadays, economic activities are being globalised, social regulation is being divided between states eager to preserve their powers that are now being disputed by supranational organisations, big companies, banks and speculators. Only habitat, in the context of an area denoting identity and hostile to change, retains its restricted dimension. Unities are being broken up but no fresh unity is taking its place in a world heading for dead-ends beyond which abysses can be glimpsed. Billions of people aspire to the living conditions of the most favoured who can respond only partially and only by becoming less favoured themselves since "extending the North's means of development to the whole of the planet would kill the Earth".[1] Claims to the right to food and the difficulty in satisfying them are glaring examples. Is it possible to leave regulation – currently lacking and which alone might make it possible to reconcile the planet's imperatives, the demands of the poorest and the interests of the richest – to the invisible hand of the market? Those who defend this idea reduce to mere economics a debate with infinitely larger dimensions. Ozone in the atmosphere cannot be set down in the columns of accounting sheets. It is not possible to make a linear comparison between the failure of Soviet communism and the excellence of the opposite model and its ability to meet future

1 B Cassen in *Le Monde diplomatique,* June 1992.

challenges. If Stalin's heirs had won, globalisation would exist nonetheless. It does not essentially have anything to do with the register of political and economic systems. It calls for another approach. It reveals the agricultural challenge as one of the world's main priorities and highlights Europe's special position, although it is divided as to which approach to take.

Europe has experienced difficulties in integrating different types of agriculture at different levels of development into a centralised planning system. The obstacles to restructuring and the risks involved in opening them up to the market have been discovered. The unification under way in the European Union and the associations between it and its nearby partners present, on a regional scale, the worrying picture of what might result from the disorganised confrontation of different types of agriculture on the global scale. In five years, the clash between types of agriculture with different structures and at different levels of development has reversed trading patterns. The countries of central and eastern Europe have stopped producing surpluses and now face shortages. Is it possible to establish a system allowing borders to be opened? The dual inertia in agricultural economy and in planning of land use stands firmly in the way of this requirement. When he chaired the Study Group preparing the Intergovernmental Conference on the Amsterdam Treaty, Carlos Westendorp denied that: tomorrow's Europe would become homogeneous in terms of agriculture, regions, security, etc. But without homogeneity, in Europe as elsewhere in the world, it is impossible for the market to operate fairly.

At the Council of Europe's Pan-European Conference on Regional/Spatial Planning, held in Poznań, in 1997, a Polish speaker faced the facts: "The countries of eastern and central Europe have a choice between traditional and relatively inefficient policies which tend to even out the differences between regions, and policies for efficiency that could lead to strong economic growth, root-and-branch economic reconstruction and rapid technological progress at the cost of regional polarisation". If that were to be the case, it may be feared that a rural area with less competitive agriculture and with more limited development and restructuring capacities would become a formidable powder keg. The conflagration would be twofold. First, internally, areas would suffer from the two extremes, with on one hand a certain number of mostly urban territories adapted to current needs, and on the other hand rural territories unable to catch up in terms of modernisation. Second, in relation to Europe, where the different levels and different types of agriculture already seem to be a major obstacle preventing most applicants from joining the European Union.

Inclusion of the ten countries of central and eastern Europe will increase the population of the European Union from 370 to 500 million inhabitants. This 30 per cent increase would be matched by an increase in 34 per cent of area but only 9 per cent of GDP. The farming area will increase by half, from 120 to 200 million hectares but, because of labour intensity, the ratio of the active population occupied by farming will increase by an even greater amount. The candidate countries alone account for more farmers than the whole of the fifteen current member states, respectively 9.5 million and 8.2 million people. They represent 22.5 per cent of the workforce in those countries compared with only 5.3 per cent in the current European Union. In the European Union, farmers cultivate 21 hectares per capita whereas their central and eastern European counterparts farm only 9 hectares. The technological gap is the main reason for these differences. This can be seen, in reverse, in the ratio of the active population employed in agriculture: ranging from less than 8 per cent of the active population in Slovenia, Hungary and the Czech Republic (similar percentages to those in the European Union) to 27 per cent in Poland and 34 per cent in Romania. Participation in the single market will force several of these states to step up productivity considerably, and to restructure and

introduce non-agricultural activities. Otherwise, the predicted polarisation, already evident, will be inevitable. Further east, the same problems arise: the rate of the active population involved in agriculture in Russia is 13 per cent, in Ukraine and Belarus 19 per cent. In Moldova and the Federal Republic of Yugoslavia the percentage is as high as 35 per cent. It is 13 per cent in Croatia, 22 per cent in Armenia, 30 per cent in the former Yugoslav Republic of Macedonia, 45 per cent in Turkey and 55 per cent in Albania. Only exceptionally do these high rates reflect special agricultural vocations, as is the case in Moldova. As a general rule, they are disturbing indicators of low agricultural productivity. These indicators should prompt Europe to adapt its rural territories; perhaps not enough thought has been given to their diversity and the rural economy has been tackled in too abstract a way. Care should be taken not to make the same mistake with scientific progress.

Rural areas are faced with four possibilities for developing their agriculture which are mutually reconcilable to varying degrees:

- Innovation for maximum production which calls for the best commercial competitive conditions. But while this is in the interest of farmers it is not necessarily in other people's interests nor is it necessarily adapted both to local or general environmental constraints and the functioning of the agricultural economy. We only need to think of the environment in Brittany that has achieved an extraordinary agricultural revolution while paying the price of serious environmental damage; the green algae bloom along its beaches due to nitrates used on farms is not exactly a tourist attraction. As for the economy, we only need to refer to the budgetary debates on the European Union Common Agricultural Policy to which, in the future, new producers might add further surpluses.
- Rejection of innovation or voluntary limitation thereof. Only a favoured territory can take this approach. But even rich areas may be subject to economic crises.
- The difficulties of agriculture offset by working on other productive soil-based activities: forestry, farming of industrial or energy crops. The former is a long-term approach and often puts the seal on agricultural decline. The latter require innovations not directly dependent on agriculture in the traditional sense. They are to be considered as non-agricultural innovations for which soil becomes the medium. Curiously, this is reverting to old land uses, still to be found in certain parts of the world, Europe included, where the soil supplies firewood or raw materials. But the reverse is also true, since industry can dispense with natural products, for example synthetic perfumes which have ruined producers of specialised plants and precipitated the decline of rural areas where such plants are grown.
- Instead of using the soil, using the landscape, mainly for tourism and leisure activities. Trapping CO_2 may then become part of production and not just the by-product of transforming a landscape into a nature reserve.

In the absence of a system founded on the first three of these guidelines, the only other possibility is local conversion to other activities – this might be a felicitous solution with regard to the fourth option as when land is abandoned the population usually leaves in droves.

In this context, mountain areas should receive particular attention. The area that they would represent in the enlarged European Union and the risks of competition with the particularly fragile areas of some of the current fifteen member states creates special problems. They constitute an enormous population reservoir because of technological backwardness and delays in the adaptation of agriculture. But there are doubts that, in the future, if the population is "drained" into the cities, that Warsaw, Bratislava, Sofia or Istanbul will have the capacity to take in all the migrants. It is also doubtful whether, justified though it may be, the priority which the European Union wishes to give to rural development would achieve the required level of results in the creation of non-agricultural activities there. Upland territories currently represent something like one-third of the European Union's total area. Following further enlargements, that proportion might be brought close to 50 per cent. Europe cannot neglect the economic and ecological future of half its territory, nor the people living there. These people will try to leave rural areas if they are unsuccessful in their search for an activity to replace that lost as the result of the modernisation of agriculture – or because that activity becomes impossible when natural conditions allow only a limited progress.

The very title of the Ljubljana conference: Towards a Spatial Development Strategy for the European Continent, suggests a heightened awareness of the danger of continuing to pursue major policies without concern for their territorial impact. Thanks in particular to its European Regional/Spatial Planning Strategy and Regional/Spatial Planning Charter, the Council of Europe has worked in that direction. The objection will be made that these are not binding documents but paradoxically that is why they are important. They do not dictate the arrangements for land use nor do they fix the location of infrastructures on a given scale, instead they set out the principles that their signatories undertake to respect. Instead of a Utopian approach to regional or spatial planning these principles call for a joint approach, that of "territorial cohesion", in order to avoid the reverse: the "destructuring of territories". Innovation in agriculture is one of the areas where this principle should be stated with the greatest vigour, in order to combat the non-egalitarian effects that it engenders. It is desirable that, under the aegis of the Council of Europe, further progress in this direction be made.

The Congress of Local and Regional Authorities adopted a report drafted by Mr Kieres of Poland, and Mr Savy of France, on The New Perspectives for Territorial Planning in Greater Europe, with which I was involved. That report proposed in principle the need to reconcile the free market and regional/spatial planning; no territory, even in liberal economies, can function without a minimum of organisation. From this rule it follows that the market must be regulated when it causes existing organisations to fall apart; all the more so when it leads to the co-existence of famine and food surpluses and when it is an obstacle to unification in Europe.

Everyone acts according to his or her interests and means. The reduction of competitiveness is the goal of all farmers. Public-expenditure cuts and lower prices are further incentives for that. The trade battle will grow fiercer demanding further innovation. The richest and those with the best land will be the most successful, and the cost will be the risk of more surpluses. Because these insurmountable obstacles are in opposition to each other, they will not drive Europe and the world into the senseless but theoretically possible situation alluded to by the experts in the Bruges Group: "It is not an exaggeration to say that 70 to 80 per cent of the volume of European agriculture could, by the year 2010, be concentrated on the English Channel coast from Rouen to Rotterdam, extending towards Brittany to the west and

Denmark to the east".[1] Nevertheless the aforementioned problems send the future of agriculture down that road. In the furrows of agriculture are traced the lines of a worrying future. The consequences of the difficulties facing agriculture of all kinds will be more serious than those facing other activities as it is not a matter of relocation restricted to an industrial site but relocations of crops extending right across a whole territory, which will decline as a result. It is possible to relocate a workshop but not a plot of land – and the whole world is at stake.

The progress which has led to globalisation is reshaping the entire world. The challenges call for resolute measures to be taken. Some experts have already grasped the principle of organising the gradual passage between unequal economies, and we hope that it will impose itself before disorder inevitably sets in: This is neither attacking the desire for unification nor for the free market, the principles of which are now universally accepted, but on the contrary it is favouring them in order to implement the necessary transitions.

5. Conclusion

After millennia of history, humanity is organising itself into a single whole and, despite unprecedented growth in its population, seems capable for the first time of feeding itself. But the processes by which it was accomplished escapes its grasp. Mankind controls neither its effects on the organisation of societies nor those which it exercises on the ecological equilibrium of the planet itself. No danger can be ruled out.

In the absence of a satisfactory economic and political organisation, we can expect a continuation with extremely unequal results of the efforts of most types of agriculture to produce more, either out of vital necessity or to offset lower prices due to already over-abundant production. Affected by the spread of the progress and further innovations, the paradoxes, contradictions and dangers already facing the world are bound to be accentuated.

Europe, already facing the new-world geography of industries, must also reorganise an agricultural territory which covers the bulk of its area. As the result of its very variety, it cannot contain these problems by means of a uniform vision. On the other hand, this diversity, along with its political diversity, puts Europe in a better position than other large regional groupings to seize the need for international co-operation of all kinds. In other words, the blueprint of a world economic order, which also means improving control over scientific innovation and globalisation.

For itself, primarily, and subsequently for the world's sake, Europe must promote the notion of a progressive rapprochement between different agricultures at different levels. Europe must propose an effective system to protect the weakest when they are unable to rise to a sufficient level, help others to reach that level by means of tailored innovations, make it possible – without destroying the environment – for the strongest types of agriculture to supply staple food lacking elsewhere, ensure that the economic system makes it possible, without abuses, for some land to be used for specialised produce, and carry out the necessary conversions both for other land uses and for industrial activities or services unrelated to the land itself. This is a huge programme to be achieved under the imperious constraint of

1 *Agriculture, un tournant nécessaire*. *L'Aube poche*. Paris 1996; Preface by Edgar Pisani, former European Agriculture Commissioner and former French Agriculture Minister, and Bertrand Hervien, adviser to the current Minister, both leading members of the Bruges Group, bringing together European agriculture experts of many nationalities.

ecology and that of societies under threat of demographic explosion. Maintaining tariff and trade duties, using these as buffers between unequal economies, is the only strategy that makes solutions more than a vain hope. It could be claimed that free trade leads to the best results for industry but this is not the case in agriculture where this would entail the general disorganisation of the world's territories as well as exposure to major ecological disaster, even less easy to control than that brought about by industrial or urban waste.

The World Trade Organisation will not succeed in resolving the problem of hunger. The United Nations Food and Agriculture Organisation (FAO) would be better placed to do so but it does not have the powers enjoyed by the European states and their institutions working together. In terms of innovations, disorders and the potential benefits of progress, they must face their responsibilities vis-à-vis their citizens and their territories, and vis-à-vis the world.

Integration of biological and landscape diversity objectives into the agricultural sector in Europe

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1. Introduction

The aim of agricultural activity until recently was to provide food and fibre supplies for human communities. The role of farmers in the protection of nature and the natural environment, their influence on the availability of water in their regions, and in their role in many other activities important for sustainable development of rural areas has not been reflected in the development policies of all countries. Increasing environmental problems in various parts of the world prove that neglect of ecological and sociological aspects of economic development leads to conflicts endangering not only the economic system, but also living standards. Realisation is slowly increasing that agriculture and forestry cannot be treated as secondary to other sectorial activities in shaping the development of the countryside. Recognition of increasing threats to the environment such as ground-water pollution, water and wind erosion, desertification and a decrease in biodiversity, forced the administration of the European Union (EU) to change the Fifth Action Programme on the Environment (5EAP) in order to address growing problems of rural-area deterioration. Environmental issues are also incorporated into the new Common Agricultural Policy (CAP) of the European Union.

On the basis of recent developments in landscape ecology it seems that many threats to the rural environment could be mitigated by maintenance of agricultural landscape diversity. Integration of agriculture with protection of landscape diversity could not only ensure more efficient control of threats to the environment but also enhance biodiversity protection. Before expanding this theory I will focus on the reasons for the incorporation of environmental issues into agricultural policies of the European Union as well as Central and Eastern European Countries (CEEC).

2. Threats to the environment caused by agriculture in the European Union

The main objective of the CAP was to ensure agricultural self-sufficiency for countries suffering food shortages after the second world war. To fulfil this goal the CAP was proposed at the end of 1950s and started to operate in the late 1960s. The main features of the CAP were high guaranteed prices fixed each year for selected items such as cereals, beef and milk products. These characteristics of the CAP were later limited by imposed quotas and lowering of guaranteed prices. Other mechanisms included grants for land improvement, tariff barriers for agricultural products, low-interest loans for investment, well-organised extension of research services, etc. Thus, a protectionist policy encouraged intensive agricultural technologies, which resulted in a substantial increase of production. For example, the average yields of wheat for all countries of the European Union rose in the period from 1975 to1991 rose from 3.2 tonnes per hectare to 4.9 tonnes per hectare, that is by 53 per cent. During the same period the increase of wheat in the CEECs amounted to only 18 per cent (Stanners and Bourdeau 1993) although, as in the west, great differences between countries were observed. The average production of wheat in Poland was only 23 per cent less than the average for the total European Union, but the difference was much higher if one compares yields per hectare with leading European Union wheat producers such as the Netherlands (7.0 tonnes per hectare), and France, Belgium, the United Kingdom, Denmark and Ireland where the average wheat production was about 6.0 tonnes per hectare (Stanners and Bourdeau 1995).

The success of the CAP had led to two constraints: one economic and the other concerning environmental problems. The advances in agricultural technology led to over-production and storing of surpluses which became a burden on the European Union economy. The annual rate of increase in agricultural production rose by 2 to 3 per cent in the mid-1980s while the rate of consumption increase was equal to about 0.5 per cent (Laude 1996). To address this situation production extensification measures were introduced such as: production quotas, set-aside programmes, lower tariff barriers, etc. Other economic obstacles followed: a decrease in agricultural incomes from 1988 to 1991, conflict between guaranteed high cereal prices for producers which discriminated against consumers, that is cattle-breeders who started to look for cheap feeds such as cereal substitutes imported from outside Europe. Tariff barriers for agricultural commodities attracted subsidies from the European Union budget for export of surpluses that in turn put a burden on the taxpayer (Laude 1996). As well as this, the problem of subsidies for agriculture started the arguments at the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) conference, now replaced by the World Trade Organisation (WTO).

These and some other economic problems forced reforms of the CAP in 1992. The price protection mechanisms were reduced while the emphasis was put on decoupling support for farmers from that of production by tying profit levels in with market demands. The environmental concerns to some extent are taken into account in the new CAP. The CAP is on the verge of recognising that improved environmental performance could lead to more economical agriculture. The negative environmental effects of the CAP are now well understood.

Intensification of agriculture increased environmental threats throughout the European Union. The CAP-supported enlargement of farm-size was related to more efficient use of labour, time and equipment as well as to lower costs needed for the cultivation of large fields not segmented by shelterbelts, open drainage ditches, etc. This trend resulted in increasing environmental problems. For example, in France the average farm-size increased from 19 to 28 hectares in the period 1970 to 1990. In the same period the average farm-size in the United Kingdom increased from 54 to 68 hectares, in West Germany from 13 to 18 hectares and in Belgium from 8 to 15 hectares (Stanners and Bourdeau 1995). As a result of farm consolidation and mechanisation of cultivation, 22 per cent of hedgerows in the United Kingdom were eliminated by the mid-1980s (Mannion 1995). The disappearance rate of wetlands in the European Union, omitting Portugal, amounted to 0.5 per cent annually since 1973 (Baldock 1990). In Denmark from 1954 to 1984, 27 per cent of small water reservoirs disappeared (Bülow-Olsen 1988). Diffuse pollution of ground water started to appear in regions of intensive agriculture in all the European Union countries (OECD 1986). In Germany, in 1985 for example, more than 50 per cent of private water supply systems and 8 per cent of public water works were contaminated with NH_4 NO_3 above World Health Organisation standards (Kauppi 1990). High concentrations of nitrates exceeding 50 mg per litre of soil solution were detected in Germany, northern France, middle-eastern England, north-western Spain, northern Italy, and Austria. Very high nitrate concentrations were detected in Denmark, the Netherlands and Belgium (Stanners and Bourdeau 1995). So, at the end of 1980s it appeared that modern intensive agricultural practices had brought with them threats to the environment and that the CAP of the European Union should be changed by introduction of more environmentally friendly technologies. This is practical proof that agriculture cannot be considered only in terms of plant or animal production and economy, but that the environmental aspects of these activities should be taken into account. It is an important lesson that should be used in agricultural development programmes in the central and eastern European countries.

Recognition of these increasing environmental problems forced the administration of the European Union in 1996 to change the Fifth Action Programme on the Environment. The use of economic instruments to control environmental threats caused by agricultural practices was proposed by the European Union in a new CAP. Some measures to promote extensive production methods, set-aside of land, codes of good agricultural practice, and others were proposed. But the integration of environmental concerns into agricultural practice is still confronted by many obstacles.

3. Main environmental threats to rural development in the CEECs

The threats to the rural environment are caused both by external (that is by industrial contaminants) and internal factors generated by the side-effects of cultivation or animal husbandry. The drive to develop heavy industry, with its related urbanisation without taking into account environmental protection has resulted in deterioration of rural areas, although the rate of degradation varies greatly from region to region. In the Czech Republic among the areas that suffered most are northern Bohemia, large areas surrounding Prague and others, making up a total of about 40 000 km^2 of polluted land (Blue Book 1990).

3.1. Air pollution

Without supplementing the known cases of pollution with examples from other countries, one has to point out that efforts to curb air pollution during the transformation period resulted in a decrease of dust and gas pollutants in some of the CEECs. Thus, in Poland dust pollutants decreased from 2 225 000 to 432 000 tonnes, that is by 81 per cent and gas pollution by 9 per cent over the period 1975 to 1995 (GUS 1996). Economic crises, which caused a decrease in industrial activity had the same effect in many countries as active pollution control. The industrial emissions of sulphur and nitrogen oxides led to progressive acidification of soils, which affected agricultural production. Soil acidification is usually brought about by a number of natural processes. However, acid rains containing nitrogen and sulphur anions markedly increase the acidification process in soil. Excessive acidification of soils has negative effects not only on the agricultural productivity but also distorts the ionic equilibrium of soils allowing migration of toxic agents such as aluminium and manganese ions in soil solution. This process increases the problems of diffuse or non-point of source pollution in rural areas.

3.2. Water pollution

Similarly, an intensive application of fertilisers, pesticides and large quantities of liquid manure bring about problems of diffuse pollution which degrade ground and surface water in rural areas. Diffuse pollution of ground water in agricultural landscapes has not yet been surveyed in the CEECs. In some countries health inspections of water in farm wells showed high levels of nitrates and other pollutants. For example, in rural areas of Poland in 1995 as many as 54 per cent of all farm wells and 40 per cent of public wells in rural areas were classified as supplying water which was not up to sanitary norms. Besides that, the studies of Bartoszewicz (1994) Misztal et al. (1990) and Zerbe et al. (1994) indicate increasing diffuse pollution. When intensive cultivation is taking place in areas with sandy soils, nitrate pollution of ground water is expected, as was found in many areas of the Czech Republic, the Slovak Republic, Hungary, Ukraine and Belarus (Stanners and Bourdeau, 1995). Thus, although there is no ground-water chemistry monitoring system in the CEECs, one can assume that diffuse pollution of ground-water reservoirs in rural areas is becoming a serious problem for sustainable development of the countryside.

3.3. Soil erosion

The problem of soil erosion is another widespread environmental threat in rural areas, although its intensity varies greatly between particular CEECs. Soil erosion is high when fields are not covered by vegetation and are located on a slope. Crop rotation patterns strongly influence the erosion rate. In the pursuit of high yields many areas in Ukraine were tilled and high doses of fertilisers, heavy tractors, harvesters and other equipment were used, and large uniform fields with one cultivar were formed. Crop rotation was simplified due to the belief that chemicals and mechanisation could sustain soil fertility and assure high production. Arable fields are deep ploughed which causes intensified erosion. The water regime is tight and the central as well as southern parts of the Ukraine suffer water deficits (Voloshyn et al. 1992). Under such conditions about 500 million metric tonnes of soil are annually washed out by the erosion. Together with soil, 1 million tonnes of nitrogen, and 24 million tonnes of humus are lost. About 33 per cent of Ukrainian land is losing soil fertility because of erosion processes (Medvedev and Bulygin 1996).

Intensive erosion rates have also been registered in parts of the Czech and Slovak Republics, in western Romania and in many places in Bulgaria (Lynden Van 1994). In Poland erosion is not a very serious environmental problem. Nevertheless the high variability of meteorological conditions over time occasionally creates erosion problems, especially in uplands and mountainous areas (Ryszkowski 1993).

3.4. Water shortage

Another serious environmental threat in some CEECs is an increasing shortage of water in rural areas. Poland, like the eastern part of Germany (Brandenburg province) and Hungary, is the most water-stressed country in central and eastern Europe (Ryszkowski 1994). The mean annual precipitation for the whole country is equal to about 600 mm. Symptoms of water deficit are most evident in the central Polish lowlands where the mean of low runoff is below 2 litres per second per km^2. The area of water deficits amounts to 120 000 km^2 that is 38 per cent of total area of the country (Kleczkowski and Mikulski 1995). The increasing water deficits have a negative impact not only on agriculture development but also on the possibility of effective protection of natural resources. The threats caused by water shortages are not as spectacular as air pollution impacts and are not well recognised in Poland's environment protection programmes. But during dry years water deficits evoke problems in many farms located in the central lowlands, the western part of which is the corn-belt of Poland.

3.5. Soil salinisation

The last example of environmental threat concerns soil salinisation. In Hungary about 1.1 million hectares are affected by salinisation. Of this area about 460 000 hectares are already salt-affected. The salt-affected soils developed under semi-arid conditions along the Danube river valley, the northern Tisza river and along the Koros and Berettyo rivers. This is because of the interplay of natural processes and man's activities such as irrigation, deforestation and overgrazing. Similar threats are noted in Romania along the Danube plains, the Black Sea shore and the Moldovan plains as well as in the Ukraine (Baazy and Ryszkowski 1996).

3.6. Population density

Environmental degradations are related to density of population, the type of technologies used for production, education and raising the standard of living and other factors. The developing countries have not enough funds to take effective care of the environment; a poor farmer is looking to survive, not for environmental quality. Thus, in countries with a low gross domestic product (GDP) per person one can expect greater neglect of environmental problems than in countries that have reached a certain level of prosperity. It was shown that in respect of some air pollutants, a positive correlation is observed between the increase of GDP per capita and the pollution up to a certain level of national income (about 5 000 US$ per person, Rabinowicz 1997) but this is reversed at higher levels (Andersson et al. 1995). Among the CEECs, the Czech Republic and Slovenia have a GDP per person exceeding 8 000 US$, whereas in Hungary, Estonia, Poland, Slovakia and Latvia it varies between 5 000 and 8 000 US$. Thus, one can expect that the control of environmental deterioration is less efficiently managed in the CEECs with low income per capita than in the seven countries having GDP per capita above 5 000 US$. One has to bear in mind that the economic crisis linked to the transformation of the country into a market economy had temporary side-effects.

For example there was a decrease in fertiliser or pesticide use (in Poland, according to a national survey of agriculture, in 1996 about 8 per cent of small farms did not use fertilisers at all, because of the expense) and an abandonment of cultivated fields. This could obscure the relationship between income and diffuse pollution problems. The relationship between the GDP and control of environmental deterioration is also modified by the pattern of land use and density of population and land configuration. Leaving out of the equation the population of the European part of Russia with an average density of 28 inhabitants per km^2, the least populated country is Estonia (35 inhabitants per km^2) while the highest densities appear in the Czech Republic (131 inhabitants per km^2) and in Moldova (130 inhabitants per km^2). Albania, Hungary, Poland, Slovakia and Serbia-Montenegro population densities lie between 102 and 123 inhabitants per km^2. In other CEECs population densities range between 42 and 100 inhabitants per km^2. In the majority of the countries in question the population size will not increase in the near future as the annual population-change rates show a decrease or are stabilised. A small increase is observed in Slovenia 0.1 per cent, Poland 0.2 per cent and Serbia-Montenegro 0.3 per cent (Brown 1996).

4. Integration of agriculture with protection of the natural environment

Forests and grasslands perform important protective functions in landscapes. They control erosion and diffuse pollution, modify microclimatic conditions, influence local distribution of precipitation, prevent floods and ameliorate other factors. Only one example of the modifying effects exerted by landscape plant-cover will be given here. It has been shown that shelterbelts (mid-field rows of trees or small afforestations), riparian vegetation, and stretches of meadows control ground water pollution (Peterjohn and Correll 1984, Ryszkowski and Bartoszewicz 1989, Bartoszewicz and Ryszkowski 1996, Haycock et al. 1997). Ryszkowski and Bartoszewicz (1989) showed that mid-field afforestation very effectively controls nitrate migration within ground water as well as lowering concentrations of phosphate, calcium and magnesium when ground water is passing through soil within reach of tree root systems. Similar effects were observed when water passed under meadows bordering a river (Ryszkowski and Bartoszewicz 1989). All those studies indicate that the diffuse pollution of ground water could be effectively controlled in an agricultural landscape with a dense network of afforestations and grasslands (Ryszkowski 1992). Thus, in landscapes having a mosaic structure of plant-cover a higher dose of fertilisers can be applied than in homogenous landscapes composed only of arable fields. This conclusion has very important consequences for programmes of sustainable development for the countryside. This was recognised in Recommendation No. R (94) 6 of the Committee of Ministers to member states of the Council of Europe for a sustainable development and use of the countryside with a particular focus on the safeguarding of wildlife and landscapes. Among the recommended actions for environmental protection in rural areas is a proposal to design landscapes with shelterbelts, hedges, stretches of meadows, ponds and other elements that control the non-point of source of pollution. This resolution is a good example of the incorporation of results of recent ecological studies into a policy for safeguarding the countryside.

Agriculture is frequently considered as a threat to biodiversity. But it was found that in a mosaic landscape composed of small cultivated fields, shelterbelts, stretches of meadow, small ponds and other semi-natural elements, there was a richer diversity of plant and animal communities than in a uniform landscape composed of large fields devoid of various non-agrarian elements (Ryszkowski 1994a, Karg and Ryszkowski 1996). Therefore, regarding some plant and animal communities, the impoverishment of the biota due to intensive farming could be mitigated by altering the structure of the landscape through the introduction

of a network of shelterbelts, meadows, small ponds and other places of refuge for many species. These findings have an important bearing on the protection of biodiversity in the rural areas and should provide the basis of discussion for a pan-European biological and landscape diversity strategy. In mosaic landscapes the reconciliation of biodiversity protection with agriculture development is to some extent feasible: the semi-natural habitats of the agricultural landscape provide a refuge for plant and animal life and enhance survival of many species.

In order to develop an agricultural policy of integrating production with the environment as well as biodiversity protection, emphasis should be put on the multifunctional role of the farmer as producer, a steward of the countryside and a manager of natural resources. Development of an integrated agricultural policy is a major challenge for the agricultural sector in the coming years. This option for CAP development will be in accord with changes introduced into Fifth Action Programme for the Environment adopted by the European Commission in January 1996. The integration of environmental considerations into all areas of the economy should be a predominant aim of the European Union environmental policy if sustainable development is to be achieved (Stern 1996). Recent developments in ecology provide useful information to this end.

In order to increase production and save energy farmers simplify plant-cover structure both within cultivated fields (by selection of genetically uniform cultivars and by weed elimination) and within the agricultural landscape (by the elimination of hedges, meadows, wetlands and small ponds). Animal life in cultivated fields is also impoverished (Ryszkowski 1985, Karg and Ryszkowski 1966). Farmers directly interfere with matter cycling in agro-ecosystems by the inputting of fertilisers, pesticides, etc. or indirectly by altering the water systems and decreasing the capacity for soils to hold chemical compounds. In addition, agricultural activity often leads to a decrease of humus content. More powerful equipment not only causes increased impact on soil structure but also land surface levelling and modification of drainage systems, etc. which in turn brings changes in the geomorphologic characteristics of the terrain. These effects of farming result in the development of a simpler network of interrelations between the components of agro-ecosystems. As a consequence of this simplification the links between agro-ecosystem components are altered, so that there is less connection between local cycles of matter. Therefore increased leaching, erosion, volatilisation and escape of chemical compounds from agro-ecosystems should be expected (Ryszkowski 1992, 1994a).

Many environmentally significant effects of agriculture intensification are connected with the impoverishment or simplification of agro-ecosystems. However, in order to obtain high yields farmers must eliminate weeds, control pests and diseases, ensure that nutrients are easily accessible only for cultivated plants during their growth, increase mechanisation efficiency, etc. Therefore, agricultural activity aimed at ever increasing yields leads inevitably to the simplification of the agro-ecosystem, which in turn causes further environmental hazards. Such ecological analysis leads to a conclusion of major significance for the sustainable development of rural areas. By applying intensive means of production, farmers cannot prevent such threats to the countryside as leaching, erosion, volatilisation of various chemical compounds, etc. that cause an increase of diffuse pollution of ground and surface waters, and evolution of greenhouse gases (N_2O, CO_2). It must be clearly said that although farmers can moderate the intensity of these processes through proper selection of crops and tillage techniques, they are not able to eliminate them entirely. A more efficient control of environmental dangers evoked by agriculture could be achieved by structuring the

agricultural landscape with various non-productive components such as hedges, shelterbelts, stretches of meadows, riparian vegetation, small ponds and so on. Therefore, any action to maintain or increase landscape diversity is important not only for aesthetic and recreational reasons, but even more so for environmental protection, as well as for the protection of living resources in the countryside.

The above considerations lead us to conclude that activities aimed at optimisation of farm production and the countryside as well as biodiversity protection should be carried out in two different but mutually supportive ways. The first one involves action within the cultivated areas. The object is to maintain a high level of storage capacity in the soil and to preserve or improve its physical, chemical and biological properties. Remedies include agro-technologies, which increase humus resources or counteract soil compaction, and rely on differentiated crop rotations. An important effect of humus augmentation would be improved water-storage capacity, more intensive ion absorption, etc. Integrated methods of pest and disease control and the correct dose of mineral fertilisers adapted to crop requirements and to the chemical properties of the soil reduce to some degree non-point of source pollution. The effectiveness of these techniques, which could be called methods of integrated agriculture, depends on good agricultural knowledge.

The second component of a possible integration programme of farm production and environmental protection is the management of landscape diversity. This consists of such differentiation in the rural landscape so as to create various kinds of the so-called "bio-geochemical barriers", which restrict dispersion of chemical compounds in the landscape, modify water cycling, improve microclimate conditions and ensure refuge sites for living organisms. Inclusion of these ecological guidelines into the integrated agricultural policy will help to develop new, environmentally friendly agro-technologies capable of balancing intensive production with the natural systems' ability to absorb the side-effects of agriculture without being damaged. By conserving the resilience capacities of the environment, farmers will increase their ability to compete. Jacques Delors, former president of the European Commission, showed in the so called White Paper (1993) that improved environmental performance in an industry could increase its competitiveness in the world market. Adopting ecological guidelines for sustainable development will also help to save the CEECs' agriculture from the mistakes of the CAP, which led to serious environmental problems within the European Union.

In conclusion it can be stated that the size of the country, its population, structure of land use forms, economic prosperity, and technologies of production form an important setting for understanding the options for development of rural areas in the CEECs and the European Union. An analysis of the system relative to all the processes in rural-area development should be undertaken in order to formulate an eco-policy for agriculture development. The overriding need is for a new agricultural policy, one that reflects the environmental, demographic, economic, social, and cultural aspects of rural areas. Such a policy requires the re-definition of currently existing concepts. The emphasis on production increase and its economic protection without much respect for processes and other interests should be changed to a more holistic attitude that includes environmental issues. The heart of the dilemma at national level is the failure of economics to suggest efficient ways for the incorporation of environmental costs into proposals for rural area development.

The diversification of activities in rural areas be it on-farm or off-farm will be a key issue for implementation of the multifunctional role, which the farmer should take on in implementing a new integrated agricultural policy. Attainment of this goal will call for a higher standard of living in the CEECs and for a change in education and support services, both in the European Union and in the CEECs. Thus, in the CEEs an increase in the farmer's profits is of the utmost importance for sustainable development of rural areas.

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Perspectives of evolution of rural areas in Europe

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1. Introduction

By way of introduction, I need to explain about the work of the Countryside Commission and related organisations in the United Kingdom.

The Countryside Commission is a government funded agency with responsibilities for promoting and advising on the conservation of the landscape in England and on its enjoyment by the public. There is a separate government agency in England concerned with biodiversity – English Nature, and government agencies in Wales and Scotland concerned with both landscape and biodiversity issues – the Countryside Council for Wales and Scottish Natural Heritage.

The integration of biological and landscape diversity objectives into the agricultural sector in Europe is fundamental to all our interests and the four agencies have been working together to try to influence European policy development in this area. Much of what I will be saying represents a shared view between the agencies.

2. Agriculture, landscape and biodiversity

Europe's landscapes and Europe's biodiversity are rich and extremely diverse. Agriculture is the main land use of rural areas. It has been a major influence in creating and maintaining the landscapes we enjoy today and the wide range of habitats and species they contain. This is because much of the landscape resource and many habitats are the by-product of land management activities. Low intensity and sustainable agricultural practices have given us many of our finest landscapes and richest areas in terms of their biodiversdity. A characteristic of these sustainable agricultural practices is that they provide multiple benefits – food and fibre, a high quality environment and local employment.

The post-second world war imperative to produce more food has been highly damaging to our landscapes and biodiversity. Intensification of production was the name of the game, encouraged in the European Union by livestock headage payments and arable crop price support under the Common Agricultural Policy (CAP). This directly led to the fragmentation of landscapes and habitats or to loss of diversity.

In the United Kingdom the characteristic moorland and heathland vegetation of upland areas has been extensively damaged by overstocking with sheep, while in the lowlands species-rich pastures have all but disappeared except in nature reserves. Everywhere, more intensively managed farmland no longer supports the density of birdlife or the abundance of once common plants.

Similar trends can be found all over Europe, coupled with new problems of neglect and land abandonment in some areas. However, these trends have been less extreme outside the European Union and outside the influence of the CAP.

The emergence of food surpluses in the 1980s and the need for costly intervention led to the beginnings of CAP reform. The 1992 reforms, also known as the MacSharry reforms after the Agricultural Commissioner of the day, were a significant advance with the specific recognition of the need to sustain environmental resources alongside agriculture.

The agri-environment measures implemented under Regulation 2078/92 were compulsory. They have been widely welcomed but their impact has been marginal as they must compete with mainstream agricultural support payments which still favour intensive farming practices.

Furthermore, funding for such measures is still small, at just 3.6 per cent of the total CAP spending, and the measures have been applied in widely different ways in different member states. In some states they have covered the whole of the territory while in others they have been targeted. The management requirements have also varied, from little more than simple good farming practice in some schemes to the requirement for more stringent environmental management in others.

Table 1 shows estimated agri-environment spending in 1997 in each member state and the percentage of the agricultural area under agreements.

Table 1: Agri-environment programme expenditure and uptake (1997)

Member state	Expenditure (million ecus)	Percentage utilised agricultural area
Belgium	3	1
Denmark	17	3
Germany	428	37
Greece	13	-
Spain	72	2
France	287	19
Ireland	134	18
Italy	560	6
Luxembourg	9	76
Netherlands	23	2
Austria	509	72
Portugal	77	15
Finland	285	77
Sweden	166	45
United Kingdom	77	8
Total	**2 652**	**17**

The future health of our landscapes and our biological resources will continue to be critically dependent on the patterns and practices in the agricultural sector and how they evolve in the years ahead. We believe that full and proper integration of biological and landscape objectives into the agricultural sector is vital everywhere, not just in the special areas, such as national parks and other protected landscapes.

3. Reform of the Common Agricultural Policy (CAP)

The European Union is moving in this direction, if only tentatively, in its current proposals for reform of the CAP under the Agenda 2000 banner.

3.1. Agenda 2000

This document states that regarding the future of European agriculture, the Commission is determined to give agricultural policy a number of new tasks so that it can meet the expectations of society.

> "Action on the environment is to be substantially reinforced. The resources devoted to agri-environmental measures are increased and the aid for less-favoured areas is to be made into an instrument for consolidating, or even expanding, cultivation methods requiring low intermediate inputs. A major effort will be made to encourage truly extensive beef production by almost tripling the premium for this type of livestock farming. Finally, Member States will have to take detailed steps to ensure that environmental rules are complied with, including reducing or discontinuing direct payments.
>
> The new Rural Development Regulation, for the first time, lays the foundations for a comprehensive and consistent rural development policy whose task will be to supplement market management by ensuring that agricultural expenditure is devoted more than in the past to spatial development and nature conservancy.
>
> Rural development will thus become the second pillar of the CAP. This major departure is to be backed by European Union funding for rural development schemes across all rural areas."

Draft regulations were published in March 1998. Final approval of the package of reforms is anticipated sometime during 1999.

4. Principles for rural policy

Until now, the common agricultural policy has represented a contract between the farmers and citizens of Europe whereby agriculture provides an assured supply of food and economic activity in rural areas in return for support from the taxpayer. But agriculture's role is changing with increasing recognition of its environmental importance and its shrinking importance in the overall rural economy.

In working towards the integration of biological and landscape diversity objectives into the agricultural sector, we believe that an even wider integration of policy thinking is required.

We are looking for a suite of policies for rural areas that will promote sustainable and multipurpose land management and deliver a wide range of public benefits such as the following:

- landscapes rich in local character and distinctiveness;
- sustaining Europe's biodiversity by protecting and enhancing wildlife habitats and species; but also
- a rich resource of historic and archaeological features from which we can continue to learn about the long-standing relationship between people and the land;
- opportunities for public enjoyment through open-air recreation and visual appreciation;
- sustainable management of the basic resources of soils, water and air, upon which we depend for our survival;
- viable rural communities which compete in increasingly global marketplaces by sustainable use of their natural and cultural resources;
- high quality food, fibre and other primary products whose production meets basic animal welfare and environmental standards.

These objectives require policies, which are non-sectoral, broad in scope and capable of being tailored to match the great diversity of needs and opportunities in rural Europe, both between and within member states.

We supported the principles of Commissioner Fischler's 1996 Cork Declaration, A Living Countryside, which highlighted the need for a shift of policy in this direction, and set out the main principles which should underpin a new framework.

In line with this thinking, we have welcomed the proposal for a new Rural Development Regulation, and the European Union's aim to make this a second pillar of the CAP which focuses upon rural development that is environmentally, economically, and socially sustainable.

This single regulation combines agri-environment support, aid for less-favoured areas, support for forestry, support for rural development and other measures. We see this as an imaginative step in the transition towards a more integrated rural policy, which meets the environmental, economic and social needs of rural Europe.

We are very concerned however, that the current proposals for CAP reform fail to match this encouraging rhetoric by a real switch of CAP resources, away from commodity support and into sustainable rural development and environmental protection.

The current proposals are for the CAP budget to increase by around 16 per cent by the year 2000 to 2006, whereas after a modest increase in the year 2000, the budget for rural development and environmental measures will be virtually frozen.

We are pressing for a substantial shift in resources, and suggest that at least 25 per cent of the future CAP budget be allocated to the Rural Development Regulation by the year 2006.

We are aware that some other member states' views are the exact opposite of this. They believe the proposals go too far in reducing price support for agricultural commodities, and they intend to weaken the proposed limited moves in this direction if possible. Thus we cannot be sure that the final agreement will achieve even the modest transfer of resources envisaged.

Without it, Europe will face further environmental decline in many areas and a continued pressure upon farmers to intensify or to maintain the current intensity of management.

Under these circumstances, we argue that it remains extremely important to take steps to improve the environmental impact of the rest of the CAP. We therefore support all the moves within the commodity support regimes, which may offer opportunities for the environment.

These include:

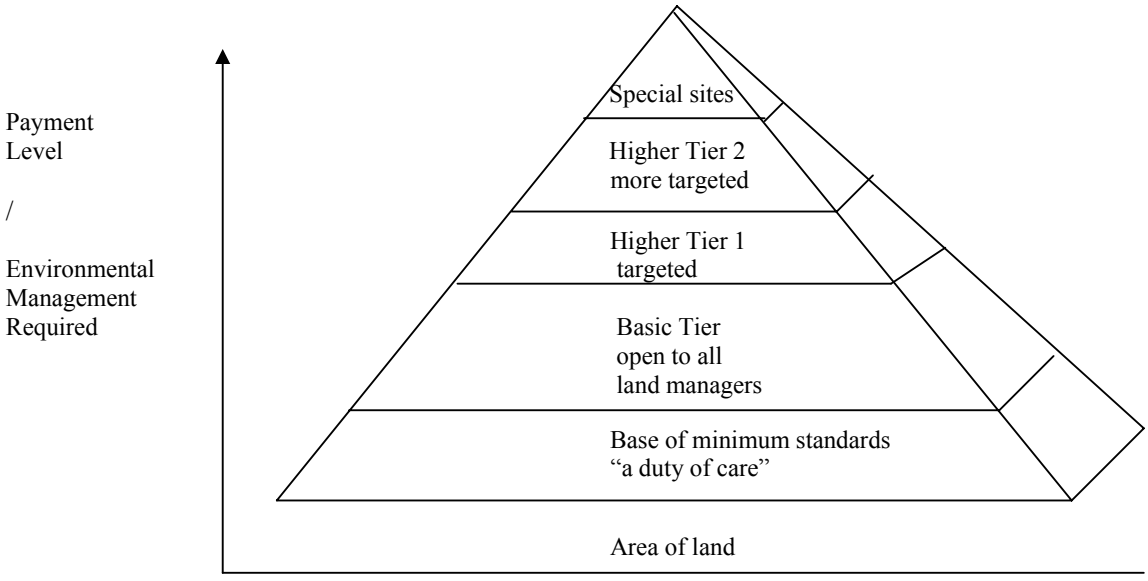
- cross compliance: the requirement to apply appropriate environmental conditions to commodity regimes, to ensure that they do not work against environmental aims and obligations;
- the prospect of a "national envelope" of compensatory aid in some sectors, allowing flexibility for member states to target this in environmentally appropriate ways, if they so wish;
- the moves toward further decoupling of support from output, which may weaken the incentive for farmers to maximise production at all costs;
- options to limit compensatory aid, but only on condition that this offers the prospect of greater resources becoming available for environmental conservation measures and for rural development.

5. The longer term

In our view, a longer-term model of future policy needs to be built around a new form of contract between land managers, other rural businesses and society, which reflects the broad range of public benefits described earlier.

Conceptually, we see this new model as resembling a tiered pyramid combining an element of regulation, to prevent further serious and irreversible environmental losses in the countryside, and a range of positive incentives to reward careful and sustainable management of the rural environment, which cannot be secured by regulation alone, and which go beyond what markets will pay. Advice and information would be an essential third element in delivering the policy.

The pyramid would comprise the following.



The bottom of the pyramid would provide a base of minimum agricultural standards – a common level of regulation based on minimum standards of responsible husbandry, which would ensure that basic environmental resources were protected from damage. This baseline would represent a "duty of care" for all land managers and rural businesses to observe and would need to be tailored to the particular environmental circumstances of each member state. It would require compliance with existing laws, for example regarding pollution, and the following of codes of good practice.

Above the base there would be a basic tier – a contract offered to every land manager across Europe, to provide for the management of the essential fabric of the countryside, to preserve valued features in the landscape, to safeguard biodiversity and to provide appropriately for public enjoyment. Payments would contribute towards good environmental management, over and above good agricultural practice.

Above the basic tier there would be higher, more targeted tiers which would attract higher rates of payment. These payments would be set to secure active management of areas of high environmental or amenity value, to support areas under threat from current market incentives, and to create new landscape features and habitats in degraded areas. Resources should also be available to stimulate environmentally beneficial rural diversification and sustainable development.

At the top of the pyramid there would be special support payments for the management of Europe's most important biological areas and landscapes. Payment levels would reflect the costs of the quite sophisticated management often required to conserve special environmental features.

Such a support system would, of course, require careful monitoring arrangements to ensure compliance with the baseline requirements, value for public money from the support payments, environmental targets, and evidence that the environmental goals were in fact being achieved from the management prescriptions stipulated.

6. Conclusion

We have acknowledged that the Agenda 2000 proposals are a significant step in the right direction, but we do not believe they go far enough in decoupling support for the farming community from commodity production. This leaves Europe very vulnerable to further pressure to reduce market prices when the next round of World Trade Organisation negotiations gets underway. This suggests that another round of CAP reform is inevitable in the not too distant future and will have to be more radical.

The proposals I have put forward for a new form of contract with land managers would support a new rationale for European Union support payments to the farming community, which should be acceptable to the World Trade Organisation. The purpose would be to enable farmers to continue to provide the widest possible range of benefits to society beyond those, which the market place can stimulate. Achieving biological and landscape diversity objectives would be at the heart of the policy and of the highest priority.

The countryside agencies in the United Kingdom believe that the conceptual model of a pyramid of support payments is a promising one and we will be developing the idea further over the coming months.

THEME 2

DIVERSITIES AND PARTICULARITIES OF RURAL AREAS IN EUROPE

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Diversity of rural areas in Europe (eastern European mountain areas and Mediterranean rural areas)

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1. Introduction

Rural areas account for over 80 per cent of the territory of the European continent, they are home to more than one quarter of its population. Today rural land and society are increasingly subject to pressures that threaten to undermine their already fragile equilibrium. They are mainly suffering from the consequences of underdevelopment and backwardness and the threat of urban development.

There is even a debate on the word "rural". Some states, such as France, Spain, Italy, Ireland and Germany use a population threshold to define it, although the population threshold differs in each country. Benelux, Denmark and the United Kingdom use a planning-based approach. OECD uses a definition based on a population of less than 150 inhabitants per km². And EUROSTAT uses one hundred inhabitants per km². The rural environment and land resources are the foundation on which a sustainable-development policy is built. The rural environment needs management and civic responsibility to increase the efficiency of this management process. The major part of rural areas is used for agriculture, forestry, aquaculture and fishing; for the economic and cultural activities of country dwellers, for non-urban recreation, leisure, housing and even industry. Formulation of an absolute definition of a "rural area" is impossible because of their diverse structure. Thus, we have to produce a classification for this multiplicity that will lead us to a managerially-based approach to the definition and to the implementation of sustainable development policies.

2. Classification of the diversity in rural areas: Europe

In many rural areas agriculture, by which we mean highly productive agriculture that can compete in world markets, continues to play an important role in the economy and remains the main land use – agriculture that is not product-competitive needs to change. In both cases the key word for a spatial strategy will be "diversification", not only of crops but also of the economy as a whole.

By classifying diversity in European rural areas, we can develop a better understanding of its features.

2.1. Geographical and environmental structure

Mountains, valleys, forests and coastal zones (especially the Mediterranean and Aegean coastal zones) of Europe share a common environmental and cultural heritage, and each suffers some common constraints in terms of development.

The rural areas in the coastal zones of Europe face the problems of secondary housing and the complications that follow intensive tourism investment. The coasts of Spain, Portugal, Greece, France and Turkey suffer the same results of unsustainable tourist development. Massive construction activities have been undertaken along the Mediterranean coast which have destroyed its historical, social, agricultural and aquacultural heritage. Fish stocks and forests have been depleted at a rate exceeding their regeneration. These areas enjoy the advantages of high accessibility and economic development, whether sustainable or not. The mountain areas of Europe that cover a considerable part of the continent, such as the Scottish Highlands, the higher parts of the Alps and Pyrenees, and the mountain areas in Greece, Italy, Spain, Portugal and Turkey are all affected by the problems related to insufficient accessibility, less developed infrastructure and public services. These mountain areas are often associated with low-income levels, lack of job opportunities and emigration to urban areas (see the draft European Charter of Mountain Regions appended to Recommendation 14 of the CLRAE – Council of Europe). There is also a problem when younger people leave an area to the elderly and less dynamic. These areas have an enormous importance in terms of relaxation, recreation, cultural heritage and even as a transit place for Europe as a whole. They have the largest drinking-water reserves that are especially sensitive to environmental pressures.

The pastures and forests of Europe face a similar type of threat as the mountain areas, especially from environmental degradation.

Mountains, forests and pastures are under the threat of a new "rural way of life". Therefore, it is becoming increasingly important to balance the advantages and disadvantages of counter-urbanisation.

The valleys, such as those in western and central Europe, with developed agricultural and animal-based production enjoy high accessibility, low unemployment and an income that originates from town-based activities.

Most of these valleys reached this point of agricultural development by using high technology, machinery, fertilisers and genetically developed breeds, etc.

As a consequence, because of Europe's diversified geographical and environmental structure, some rural areas exist under excessive urban influence, others on the contrary, create their own businesses, while others have moved towards further intensification or extensification of agriculture.

2.2. Quality and quantity of land and its ownership

In the countries in transition and some western and northern European countries, large-scale or collective farming is a dominant feature due to past agricultural and regional policies. Some of these policies accelerated the economic decline and backwardness of some areas of the regions concerned (Doğanay 1993).

Large-scale farming has destroyed traditional landscapes. Hedges, bands of forest, and farmhouses have disappeared, terraced slopes have been flattened. Large-scale animal husbandry has seriously polluted the soil. This animal husbandry and agricultural production, together with the high technological and biological methods used have led to and accelerated the migration from rural to urban areas and a subsequent diminishing need for labour.

On the other hand, in the rest of Europe where such policies were not implemented, a diversified structure was created. It must be noted that it is very difficult for small and medium-sized farms to compete with the large-scale farms in terms of economic and business needs.

In the future, small and medium-sized farms will be ubiquitous throughout Europe because of the prevalent form of private ownership (Hyland 1996). Therefore, management of land use will become the key issue for the profitability of agricultural production.

2.3. Climate

We can speak of a common climate for all the coastal areas and for all the mountain regions. While coastal regions have a sub-humid or humid climate, mountain regions have a semi-arid or arid climate. Unlike Turkey, other European countries do not have areas under threat of desertification. The south-eastern part of Turkey is a prime example of this. Because of the construction of large-scale irrigation projects the land will either be agriculturally productive or industrially attractive.

2.4. Accessibility

Accessibility is a major issue in the diversification of rural areas. Lack of accessibility limits diversification of economic activities. Each kind of economic activity requires specific forms of accessibility. New technologies enable globalisation of information and this information is becoming a leading factor in intangible production. Therefore, access difficulties regarding transport can be balanced by communication and access to information. Unlike transport, communication does not have any side-effects on the environment.

In order to accelerate rural economic development, investment in human resources should be considered in order to increase accessibility through new communication technologies, either within or complementary to agriculture. This will provide new opportunities for employment that will be particularly important to the rural population regardless of whether they are unemployed or underemployed at present.

Development in the “deep countryside” which is characterised by low population densities, long distances from urban centres and an ageing population, can also be promoted by providing these areas with the necessary accessibility (Hyland 1993).

It is widely believed that the development and economic diversification of rural areas require efforts to decentralise economic activities. The key feature of this strategy will be the support of medium-sized urban centres capable of boosting the economic fabric of the surrounding areas, and which can take up new economic activities. Local economic goals can be achieved only by increasing all types of environmentally friendly investment to promote the accessibility of rural areas, and by environmentally friendly transport and infrastructure programmes.

2.5. Socio-cultural and demographic structure

In any kind of management model for rural development, the social and cultural structure of Europe's folk traditions should not be neglected.

Family values and community arts are key factors in the survival of countryside culture and in the balance of rural society as a whole. Any kind of new activity that is imposed on rural life (especially tourism) should not conflict with the cultural heritage just to secure sustainable social development.

As well as the social and cultural elements of society, demographic structure also affects the level of local development. The emigration of youth from rural areas is one of the major problems negatively affecting rural development.

Rural cultural heritage can be enhanced and rural lifestyles can be promoted in ways that preserve the endogenous population's ability to pass on local knowledge.

2.6. Political structure and rural policies

Different political structures in Europe (such as countries in transition, countries which had been formerly ruled by dictatorial regimes, and capitalist countries) have affected the level of development of Europe's rural areas This created a patchwork pattern in Europe. Unification of agricultural land, development of large-scale farming and animal husbandry, co-operative means of agricultural management, agro-industries and agro-settlements are common features of socialist policies (Doğanay 1993). Some of the western European capitalist countries surprisingly implemented similar regional policies. But the main difference has been whether these policies were implemented by mainly obligatory sanctions or through incentives.

After the end of the second world war even the democratic countries implemented (and some are still implementing) similar policies for achieving rapid economic development such as the European Union's Common Agricultural Policy (CAP). In free-market countries, free mobility of people and economic activities, as well as the right of ownership have rarely been limited. Consequently, in these countries the rural areas are extremely diverse economically, socially, culturally and even environmentally.

Small and medium-sized individually managed farms are a unique characteristic of these types of society. Even the demographic structure of each society is affected by the rural policy of the state. Families, who own private large-scale farms, have also large household sizes. The unproductive agricultural areas and backward regions suffer from the emigration of the younger generation to urban areas. The rural areas that have recently opted for local development to balance urban policies do not have large populations or family sizes. On the other hand, in the coastal zones, where tourist development and secondary housing is common, the difference between the summer and winter population numbers creates service problems. In other words, the economic and housing policies of the state have a significant effect on vulnerable rural areas.

At present the rational utilisation of resources, greater competitiveness and preservation or extension of market share are essential for any country that wishes to preserve or enhance its economic status and social achievements in the short term – all the more so in the medium or long term. Accordingly, greater integration and globalisation of the world economy urges each state to encourage economic and social cohesion between regions and seeks to secure the broadest possible participation in Cupertino through a fair distribution of the advantages to be gained from rationalisation.

The recent trend towards decentralisation is partly a result of the diversity of local needs. Decentralisation from a political and administrative point of view foresees the delegation of the greatest possible degree of autonomy to the rural areas. This is an important step towards strengthening the endogenous development potential of rural areas. It is also important to involve self-help and non-government organisations in the development and decision-making process.

2.7. The relationship between urban and rural areas

Rural areas near or adjacent to urban areas are affected by urban sprawl. An increasing interdependence between rural and urban areas can be observed. This rural-urban relationship is not the same in the densely populated areas as in the sparsely populated ones. In densely populated areas, continuing urban sprawl takes up more uncultivated and agricultural land. Damage to the environment is widespread. Urbanisation and construction of infrastructure (particularly transport) lead to the fragmentation of open areas and the consequent irreversible loss of the rural character. The threat of fragmentation and the need to retain continuous open countryside are important issues in densely populated rural areas, in which spatial planning has a significant role to play in achieving a balance between urbanisation and open countryside. While cities impose pressure on the rural hinterlands, the rural settlements also benefit from the high accessibility to social and economic services. On the other hand, cities also benefit from the attractiveness of the countryside.

Extensive, less densely populated rural areas are better placed to retain their rural character. But this kind of rural settlement suffers the consequences of limited accessibility to commercial services, education, etc. Nevertheless they have the advantage of a well-preserved natural and cultural heritage which can be used as the basis for a new type of tourist activity, which could be described as “rural tourism”, or “soft tourism”.

But unfertile/unused lands that are also far away from urban areas have no attraction either for entrepreneurs or for tourists. Therefore, they need special attention and development policies in order to gain some attractiveness for any kind of economic activity. The south-eastern Anatolia project (GAP) is an example of this kind of development policy and will be discussed in more detail.

3. Why should the diversified structure of rural areas be preserved?

Our main purpose in listing the characteristics of different types of rural areas was to provide a basis on which to discuss the necessity of preserving the diversified structure of rural areas.

One can say that implementing common policies for higher productivity of agricultural land, adequate housing and services is sufficient to achieve rural development. But this kind of approach reduces the differences between regions and creates a uniform rural way of life, without necessarily securing sustainable development.

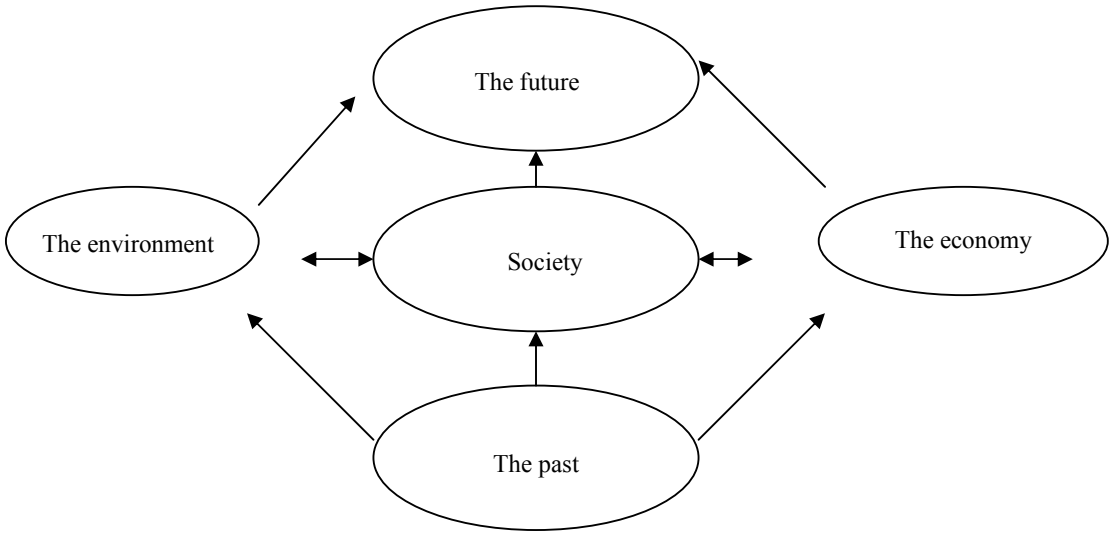
As large, intensively producing farms continued to be favoured in the European Union (European Union Commission 1991), the process of "expand or die" accelerated. This has also led to an increasing misuse of the natural environment as well as social, structural and cultural erosion in rural areas. A world-market oriented "agricultural reserve" has developed where (more or less intensive) large-scale farming is concentrated in the so-called favourable areas, whereas in the lower-yield producing regions, farming is slowly being abandoned or being sustained only because of large subsidies. The increasing use of land for settlement growth and transport is one of the main reasons why rural infrastructure, agriculture, man-made and natural landscapes are threatened (Burdick 1998).

Therefore, new policies should be formulated to preserve and/or promote diversification in the rural areas of Europe to ensure adequate standards of living while still adhering to the principles of sustainability.

4. Towards a sustainable management model

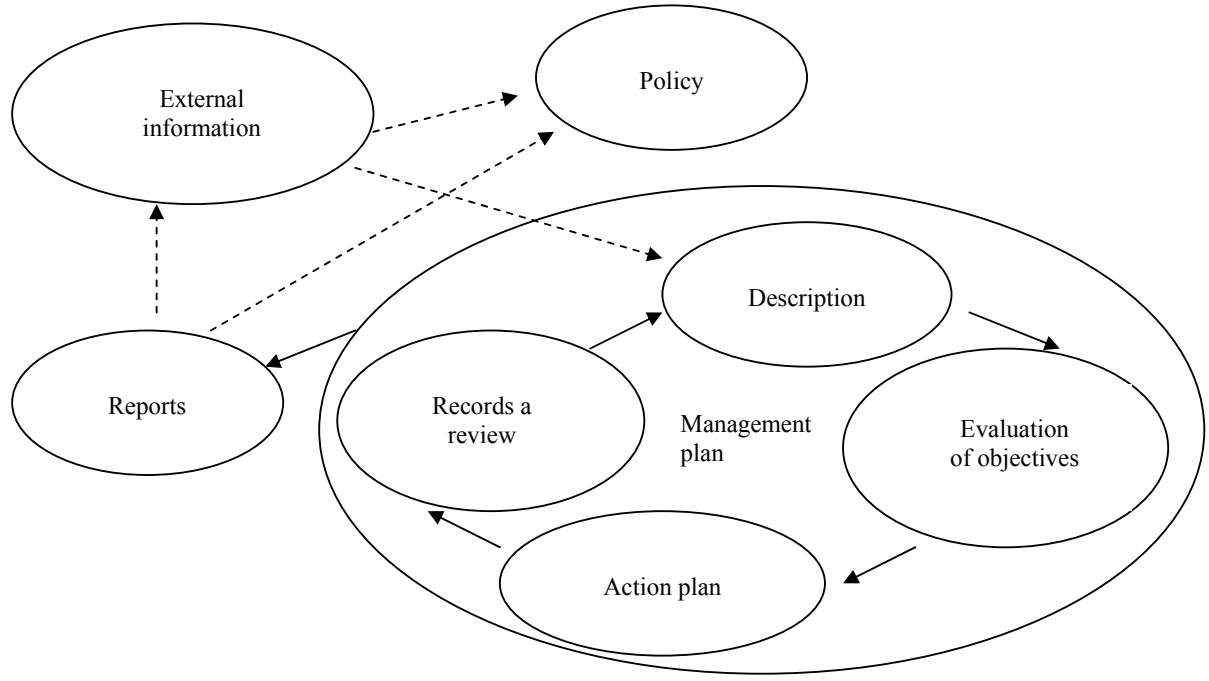
The concept of sustainable development, which was consolidated at the UN Earth Summit Conference in Rio de Janeiro in 1992, contains three essential dimensions: social, economic and ecological. Sustainable development is also providing for the future in a spirit of partnership (Figure 1). In other words, society is at the core of sustainable development.

Figure 1



The diversified features of rural areas and the need to preserve their characteristics while achieving sustainable development, means one must develop a management model. Figure 2 illustrates the structure of such a system proposed by at the Ramsar Convention on Wetlands of International Importance 1997 and by Alexander (1993). It could also be considered as a valid model for rural management.

Figure 2



This management system is cyclical, but the loop is not closed to external influences. The objectives of the model are explained as follows:

Description: This is fundamentally a collation exercise. Thus, all relevant data on diversified features of the regions must be collected.

Assessment: This step begins with a statement on the recognised status of the area and proceeds through a structured process in order to assess, confirm and/or identify the important site features. The steps of assessment must be as follows:

- the features must be listed in order of priority;
- a clear objective should be defined for every feature recognised as important during the assessment;
- conflicts between objectives must be considered;
- while defining objectives the acceptable change must be limited;
- the monitoring project or projects for each limit must be identified;
- all activities that can influence our ability to attain the realisation of the objectives must be recorded.

Action Plan: This part of the model is used to describe all the work required to achieve each individual objective.

Record and review: This provides storage for project records and consequently all the data required for planning reviews. It is essential to review the management plan at predetermined intervals.

For efficient implementation of rural management plans each community must have access to the local action-plan reports and external information. The local autonomy for decision making is an important factor in ensuring success. Even professionally less desirable management plans can be successful due to the willingness of local inhabitants to implement them. By giving people more information and increasing their accessibility to the information the quality of local decision making will improve in terms of public interest, providing for the common interest and future generations.

5. A case study from Turkey (GAP)

The principle of sustainable rural development is observed to a great extent, either implicitly or explicitly, in the spatial planning activities of GAP. This is a project which is based in the south-eastern part of Turkey.

Figure 3

South-eastern Anatolian project

However, it must be noted that this is not a local management model, but a highly centralised decision-making model. Because of the density of high unemployment, it was formulated to improve the living standards in the area, to improve unproductive land and abolish the underdevelopment characteristics of this region. The Turkish Government decided to develop a project that consisted of various components, but that was principally based on irrigation. In fact the aim was to accelerate all kinds of economic activity. Priority was given to the formation of viable systems and service industries. The development of the infrastructure systems for settlements and regional infrastructure such as transport so as to support this objective was also foreseen in the master plan. The survey and planning works realised by the GAP administration have produced results that support these basic ideals. The essential point here has been the formulation of an environmental management system that ensures environmental protection and upgrading while simultaneously providing sustainable economic development. Accordingly, a close co-operation between the Ministry of Environment and the GAP administration is being sought in order to ensure the harmonious conduct of economic development and environmental projects.

In the land use plans made for the GAP region (for all settlements at all levels) the principle of sustainability for socio-economic development is taken into account. As mentioned before, irrigation, agriculture, the environment, social and spatial development are all addressed in the context of sustainability and the plans, programmes and projects initiated (or to be initiated) by the GAP administration are examined in the light of these considerations.

The GAP master plan identifies the spatial development problems of the region as follows: population movements within the region, excessive population pressure on cities and the existing dispersed pattern of settlement. The master plan also identifies the basic objective of spatial development as the “enhancement of the population absorption capacities of the big cities in the region”. To realise this objective, decisions were taken in the development plans of these cities (Gaziantep, Diyarbakır, Şanlıurfa, Adıyaman, Batman, Mardin, Kilis, Viranşehir and Nizip) particularly regarding land use, transport systems, expansion areas in the form of organised industrial sites, and housing estates.

Besides spatial planning activities, projects to assist rural-urban integration and programmes for community development have taken place. On a more local level, a participatory planning approach is increasingly being utilised.

But overall, GAP has a centralised decision-making approach. However, its success will depend to a large extent on the co-operation of local inhabitants. In one sense, it had to be centralised because of its large scale. This part of the country has long been suffering the consequences of severe underdevelopment, requiring an impetus for this kind of economic development. Still, at lower levels, locally decided action plans can be and are being implemented within the general framework of GAP; these can affect the overall policy because of the cyclical character of the sustainable management model.

6. Conclusion

Rural policy can no longer be seen solely as a means of increasing production in agriculture, animal husbandry, and fisheries, etc. Rural policy must also combine elements of agricultural, social, regional, transport, energy, and environmental policies, based on the principles of concentration of effort from all sectors, plus clear and active participation on the part of the people who are affected by these new policies. Subsidiarity based on large-scale regional policies should be compatible with local rural development policies that can close the gaps between regions while securing their diversified structure and sustainability.

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Structural changes in rural areas during the transition period in eastern or central Europe

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1. Introduction

All European countries, and even those that belong to the OECD, are experiencing similar problems in rural areas. As one can see from a great number of studies, rural areas are described in terms of declining economies, depopulation, high unemployment rates, low capital investment, scarce employment opportunities, low income, insufficiency of services and infrastructure, difficulties and slow rate of structural adjustment in rural economies, and so on.

At the same time there are very distinct differences among rural areas of different countries and even among rural areas of small countries such as Hungary. The transition process of the Central and Eastern European Countries (CEECs) has been progressing at different speeds with different results country by country. Structural changes in the rural areas of these countries differ in their directions, depth and the new problems they bring about. For these reasons it is very difficult to give a general overview or explanation of structural changes in rural areas of the CEECs.

The serious problems that were experienced during the transition period in all CEECs cannot be properly understood without analysing the earlier policies of the communist regimes. I do not want to go into any details here, but I would like to draw attention to this problem for the benefit of "western experts" who sometimes give advice without fully understanding the real situation. In fact even the scientists and the policy makers in the CEECs have not yet been able to carry out a real analysis of the "development processes" of previous periods or to face the present situation without political bias and preconceptions.

2. An overview of past structural changes and the present situation

2.1. The differences in the problems of rural areas in western European countries and in the CEECs

While the basic problems of rural areas are quite similar in both western European and central and eastern European countries, an essential difference can be pointed out. In the western European countries the problems of rural areas are the result of economic development processes governed by market forces in which rural areas could not be competitive despite a considerable high level of support for agriculture. Governments were not able to respond with effective policies and programmes to maintain the balance in the development of urban and rural areas. Nevertheless this kind of development can be considered as a continuous and somewhat "organic process" even if it resulted in the decline of rural regions. However, in the CEECs, when the communists came to power the development processes both of the urban and rural regions were disrupted by the arbitrary and destructive forces of the so called "scientific socialist centralised planning". This kind of centrally planned development is a typical example of how imposed external intervention in the development process can lead to an extremely distorted structure and can cause deep crises at a later date.

In western European countries economic processes and the industrialisation of agriculture resulted in a decline of rural regions but it is commonly accepted that urban areas and the economy as a whole have provided a positive balance. At the same time in the CEECs the forced industrialisation and urbanisation was detrimental to the whole economy and disrupted the normal or organic development of towns as well.

The forced collectivisation of agriculture and the introduction of mechanised intensive technologies changed the whole structure of rural economies and society. Agriculture offered jobs for fewer people and needed only specialised skilled workers. Hundreds of thousands of people migrated to industrial centres and conurbations. In some cases the extended development in industrial centres needed an increasing number of workers, but the towns in these industrial centres were not able to absorb all the labour force or those who had migrated from rural areas. State housing programmes could not meet the demand of the incoming population; some of whom found their own solution to their housing problems in the overflowing settlements around large towns. Travelling around the CEECs one can see the huge, quickly erected housing areas made up of a jungle of poorly constructed buildings around old city centres. The towns were not able to integrate these mass settlements into their traditional community structures and their infrastructure could not keep pace with the increase of population. But even the state housing programmes and the people's own efforts were not enough to accommodate everyone in the towns or in the conurbations surrounding them.

Too many work-places were concentrated in towns while a great number of the workers had to live in villages. In Hungary for example hundreds of thousands of people had to travel or were transported by their companies every day from the villages to their work-places in the towns, sometimes from quite long distances. These people somehow floated between villages and towns. They could not be integrated into the community of the town, but they lost their roots in rural communities as well. After the collapse of communist regimes the deep economic crisis caused almost insoluble problems for both those who had settled in large towns and for those who still remained in villages. For many thousands of people villages were just "sleeping places" but not real homes.

Similar structural changes can also be observed in western European countries in the sense that during the past hundred years there has been rapid urbanisation, an exodus of rural people to towns, and also in the sense that in the recent decades many people now live in villages but work elsewhere. But still the basic difference is that all these structural changes were brought about and justified by the development of the economy, while in the CEECs it was imposed by the central decision-making authorities without any real need or without a real economic basis for it.

2.2. The problems of social acceptance of rural development policies

The above-outlined characteristics of the development process have had very serious effects on the possibility of working out and implementing a policy for rural areas. The imposed structural changes of the previous period resulted in many difficulties for the transition process:

- under the conditions of a general economic crisis governments could not give enough attention to the problems of rural development because they were preoccupied with macroeconomic problems;
- some big industrial and mining centres are in an even more serious crisis than rural areas. Unemployed people who live in the artificially developed large housing areas in towns and who are not able to pay essential bills would not understand why public money should be spent on rural development;
- there is no clear understanding among politicians, government officials or even academics about the necessity or the economic and social value of rural development;
- there is great inconsistency in the thinking of people concerned. Because of the drastic intervention of central authorities before the transition process started, communities both in some towns and rural areas have lost their ability for endogenous development and expect state authorities to take care of all their problems. At the same time they are very suspicious about any initiatives that come from above or outside because they have had such bad experiences in the past and they suffered so much from the many changes of policies.

  In Hungarian agriculture for example, some owners of land and forest have been very keen to exploit their new property but they are not willing to make efforts or investments to set up a farming business. Land consolidation initiatives and proposals for organising new co-operatives, machine pooling, credit unions, etc. are angrily rejected by the people because of lack of confidence and the fear that they may be cheated again. Even after the collapse of the communist system agricultural and rural policies in the CEECs continued to change with each change of government. The socialist or social democratic parties, which are usually successors of the former ruling parties, tend to favour keeping up or restoring large-scale farms, mostly the producer type of co-operatives, while right wing or conservative parties would give preference to the development of family farms. In this way rural people still cannot be sure about what they can expect in the future;
- for most of the new landowners, for the leaders of large farms and other interest groups, rural policy is still equivalent to agricultural policy. For this reason the clarification of the future role of agriculture within the whole socio-economic system and in the development of rural areas is urgently needed. In this respect CEECs do not get enough guidance from the European Union, because the discussion about CAP reform is still not settled. Advisers coming from the European Union or OECD

suggest not increasing support for agricultural production but instead introducing an "integrated rural development policy". But no clear definition of it is given and there is no experience of how it can be introduced under conditions of economic crisis in CEECs. At the same time the European Union still keeps subsidies to agricultural production high and saturates the markets of CEECs with agricultural products.

This confuses rural people and they are very suspicious when they are told about rural development policy. In the recent years I took part in a great number of meetings about the countryside. I was told many times that it might be just an other trick to justify a further decrease of the support to agricultural production, consequently further reducing people's income-earning potential. This fear is strengthened by their knowledge that the funds made available for regional or rural development are limited, individuals have almost no access to them, the different funds are not co-ordinated and are used on projects which have no direct relation to the economic activities of rural people or with their every-day lives.

In summary, the major obstacles to rural development are the lack of clear understanding of its real meaning, rural people's lack of knowledge concerning new possibilities, and in general a low level of acceptance of a new approach by society.

2.3. Structural changes of the whole economy and their effects on rural areas

- the collapse of the former communist systems in the CEECs was a result of the forced and extensive industrialisation which built up inefficient, extremely energy consuming and inflexible large industries. Besides this, quite a large number of industrial plants served only the huge armament needs of the Soviet Union and the Warsaw Pact countries. This type of development was bound to lead to a general crisis of the whole economy that in turn has caused a very severe problem for people living in towns in industrial areas. But in most of the CEECs the burden of the national economic crisis fell on rural people. In Hungary, because of some peculiarities of the previous regime, rural people were the first to loose their jobs and the unemployment rate in some rural regions escalated at the beginning of the transition period. First, people who lived in villages lost the jobs they had in the towns, because they were considered "too expensive" to employ. Then the plants of large companies located in small towns or villages were closed down. This was followed by the industrial and service activities of large farms that previously also received orders from large industrial companies. Finally a great number of people lost their jobs in large co-operative or state farms because of the crisis in agriculture;
- in the transition process the role and development perspectives of different regions within one country have changed considerably. Some areas that were previously developing rapidly lost their importance while others came up with new development opportunities. For this reason the spatial distribution of population and other resources became unbalanced again. Regional differences in some cases have been sharply increased;
- the flawed regional policies of the communist era caused the decline of villages especially the small settlements. In Hungary for example the National Spatial Development Plan which was introduced in 1971 classified rural settlements into three categories: central areas to be developed, villages which can be maintained but not to be developed, and "settlements with no future". The programme of the Caeuşescu regime in Romania to destroy small villages is a well-known example of the so-called "scientific regional planing". Because of this policy small areas suffered even more

than the declining rural regions. According to a report the number of villages with less than 500 inhabitants in Hungary increased by almost 10 per cent and the unemployment rate in some of them rose as high as 60 to 70 per cent. This report even mentions a small village where 100 per cent of the adult population is unemployed and living on state benefits without the slightest hope of getting a job.

– the population decline in rural areas has stopped and even a slight increase can be observed in some regions. This is partly because some people who lost their jobs in towns moved back to the villages and partly because of the higher birth rate among the Roma population. (Roma people constitute a considerable minority population in most of the CEEC populations.)
– because of the sharp increase in the travel costs it became more difficult for rural people to reach bigger towns even if they could get a job there, and the isolation of some villages or micro-regions has increased.
– the relative income level of rural people has considerably decreased. In Hungary the average per capita income in rural households is 42 per cent less than in households in Budapest.

2.4. Structural changes in agriculture

There are a great number of studies that analyse the structural changes of the agricultural sector in the CEECs made by different local and international organisations (European Union, OECD). The Committee on Agriculture and Rural Development of the Parliamentary Assembly of the Council of Europe has also prepared several reports on different aspects of the transition process of agriculture in CEECs. The transition process in agriculture progresses at different speeds and with different results country by country. For this reason it is quite difficult to draw up a general picture. The transition process in agriculture is extremely complex and sometimes it is difficult to see clearly what is going on because of the lack of reliable information. Here, I am trying to point out only those aspects that seem to be the most influential on rural development.

2.4.1. Agricultural production

The amount of agricultural production sharply decreased at the beginning of the transition period. The decrease of livestock production was usually much greater than the decrease in crop production. A great number of large-scale animal farms were closed down but new landowners could not build up new livestock production units primarily because of the insufficiency of capital resources. In a number of countries this led to a kind of extensification of agriculture. This in turn resulted in a sharp decrease of employment opportunities.

2.4.2. Land privatisation

Different countries adopted different methods for the privatisation of land. In some CEECs the result was an excessive sub-division of land while in other countries the privatisation of land has not yet been carried through In Hungary at present about 85 per cent of agricultural land is now in private ownership, about 15 per cent is still in state ownership. Quite large areas are owned by people living in towns and who have no connection with the rural areas where their land is located. Most of the new landowners do not have enough land or means of production to start up a viable farming business. They lease their land to existing producing co-operatives and state farms or to other private farmers. Quite a large number of rural people try to use their small areas of land for part-time farming or for producing some items for private consumption.

Recently in some countries private land use has increased considerably. In Hungary for example since 1992 the percentage of large producing co-operatives has decreased from 53 to 28 per cent, and by 1998 about 55 per cent of agricultural land was being used by individual producers. The separation of ownership and land use is at very high level.

We can conclude that in general the privatisation of land in CEECs did not serve the interests of rural people and in some cases is in strong contradiction to the requirements of an integrated rural policy. This seems to be particularly true when considering the multifunctional character of land that is the basic natural resource of rural areas.

2.4.3. The share of agriculture in total employment and in the GDP

On average, agricultural employment in relation to the total employment figures and to the GDP in CEECs is still considerably higher than that of European Union countries. But since the beginning of the transition process the restructuring of agriculture in CEECs and the development of the whole economy has resulted in different trends concerning the relationship. In this respect an OECD[1] study distinguishes four groups of CEEC and NIS countries.

In the first group the share of agriculture both in total employment and in the GDP declined since 1989 (Czech Republic, Estonia, Hungary and Slovakia). The study also places Poland and Slovenia into this group but with the note that these two countries preserved through the whole communist era their agricultural structure based on small-scale family farms.

The second group is made up of Latvia, Lithuania and Bulgaria where the share of agriculture in the GDP declined or remained stable (Bulgaria) but its share in total employment increased.

In the NIS countries, which are in the third group, agriculture's share in employment remained stable or increased, but its share in the GDP decreased.

Albania and Romania are in the fourth group. In these countries the share of agriculture both in the GDP and in employment increased, and the ratio of rural population in relation to the total population is the highest among CEEC and NIS countries.

From the point of view of rural development it is important to point out that the proportion of rural population in all transition countries (except Albania) is considerably higher than the proportion of agricultural jobs in relation to total employment. This shows that agriculture is not able to provide an income for everyone in rural areas. But at the same time this shows that there is an excess of labour capacity for non-agricultural activities.

2.4.4. Changes in the organisational structure of the agricultural sector

Considering the changes in the structure of the agricultural sector there are also great differences in tendencies in CEECs. In countries where large-scale collective and state farms were previously predominant we can see the fragmentation of land ownership and that many thousands of rural people started some kind of agricultural production just because they had

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1 *Agricultural policies in transition economies, monitoring and evaluation* 1997 (OECD Publications, Paris 1997).

no other opportunity to earn any income. But there is also a tendency to maintain or restore the former collective and state farms after only a nominal restructuring of them. The formal legal reformation of big farms is usually referred to by governments and some agricultural lobbies as "privatisation". In reality this kind of privatisation means only that large farms abandon all the social functions they had to fulfil under the previous system, they are more business-like companies and serve the interest of a narrower group of people. In this process large farms rationalise their production and management structures, and radically decreased the number of people they employ. At the same time only a few of the new landowners or new entrepreneurs has any chance to build up a viable agricultural business or a real family farm under the extremely unfavourable economic conditions. Previous state co-ordination of the markets and the vertical integration systems have been broken up so that the result is a kind of atomised structure of the agricultural sector without any effective regulation of the market. In this way individual agricultural producers are in a very weak position when bargaining with processing and marketing firms. A lot of resources are badly allocated and there is a great fluctuation of production both in quantity and quality.

The foregoing situation is typical even in such countries as Hungary that is sometimes referred to as one of the most advanced in the privatisation and restructuring process. Neither the central right governments between 1990 and 1994, nor the socialist-liberal government between 1994 and 1998 was able to come up with a clear orientation about the preferred farming structure. Even the so called "National Agricultural Programme" prepared by the socialist government in 1997 leaves further formation of farming structure to internal competition and states that the government takes a neutral standpoint. This in reality means an implicit preference for large farms.

In summary the restructuring process in the CEECs is still far from producing a farming structure which could serve as a basis for the multiple requirements of rural development.

2.5. The present state of rural development policies in CEECs

I would like to refer again to the above-mentioned OECD study which also classifies the different approaches to rural development policies according to two concepts: the creation of institutions and the scope of policies covered. The combination of these two ideas gives sixteen possible approaches to rural development policies. The study then identifies three groups of CEEC and NIS countries:

- central institutions co-ordinating current rural development policies combined with a sectoral approach to regional policies. Countries in this group are: the Czech Republic, Estonia, Hungary, Poland, Slovakia and Slovenia;
- a partly decentralised system, combined with a sectoral approach. The study places Latvia, Lithuania, Albania, Bulgaria and Romania into this group;
- a bureaucratic "top-down approach", combined with a sectoral approach. This group is comprised of NIS countries such as Belarus, Kazakstan, Russia and Ukraine.

It seems that according to this study the ideal approach is the creation of institutions with mixed vertical and horizontal partnership links between various institutions dealing with rural development policies: that is development from below (the "bottom-up approach") combined with area-based integrated rural policies: taking into account economic, social and environmental aspects of rural development, and diversified approaches adopted according to local conditions. The study draws the conclusion that so far none of the transition countries

has been able to apply such an approach. It could be said that none of the European Union or OECD countries has implemented this ideal approach either. A third dimension of the approach to rural development policies is the way the socio-economic, environmental and political problems facing rural areas are understood. In this respect, as has been mentioned, the CEECs are really lagging behind.

In Hungary in 1997 the parliament adopted a new law on spatial development. This law deals only with the institutional aspects of spatial development, establishing different levels of "spatial development councils", but there is nothing in it about economic, social and financial measures which should be taken by state organisations or regional and local authorities. One of the leading experts[1] engaged in village development and transfrontier regional co-operation has a strong criticism about the existing system of regional development.. Some of his main points are:

- the territorial units are still the political-administrative counties and not the socio-economic or ecological regions;
- the institutions established by the spatial development legislation tend to become merely bureaucratic organisations having only loose relations with local communities;
- the "top-down" management approach still prevails, in which the central institutions determine the size and the allocation of funds without taking into account the actual needs of the regions;
- the different development organisations are more interested in developing and maintaining themselves than in their real tasks;
- the lack of information and the lack of transparency lead to a misallocation of the limited funds and even to corruption;
- local communities are too weak; civil society is insufficiently organised to give them enough bargaining power;
- only a sectoral approach is applied and decisions are made on the basis of the bargaining power of the different sectors.

This clearly shows how difficult it is to dismantle a centralised and bureaucratic system even in a country where almost everybody is declared to be in favour of a democratic and self-governing society. As the previously mentioned OECD study puts it: "acquired helplessness" and hierarchical approaches still seem to dominate many local communities. For this reason any support for rural development should be aimed first at revitalising local communities, to build up their activity and creativity. In other words support should first serve the creation of conditions for endogenous community development. The situation has also to be more thoroughly analysed by European Union officials, because it might happen that European Union funds are misused or are just simply "swallowed up" by bureaucratic institutional structures and have very little or no benefit for rural people.

In my country in the framework of the so-called "National Agricultural Programme" a "rural development policy concept" was worked out by one of the departments of the Ministry of Agriculture. This concept genuinely takes into account most of the guidelines of the Council of Europe, OECD and European Union documents concerning rural development policies, but so far it has been given little attention even within the ministry. The major obstacle to the implementation of such a programme is the lack of an integrated approach.

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1 Köles, S (1997) A *magyar regiok jövöje* (The future of Hungarian regions) In *Nemzeti Strategi 2020-ig,* Budapest

The responsibility for agricultural policy *per se* is shared among four ministries. The latest development is that after the 1998 parliamentary elections the new government is trying to integrate agricultural and rural policy by setting up a Ministry for Agriculture and Rural Development.

3. The need for better rural policies: some problems and suggestions

Since 1990 various international and national organisations have launched an intensive programme on the problems of rural areas. OECD started to deal with the development of rural areas in 1981 but it has also intensified its activities in the 1990s, and has published several valuable studies on rural policies. The European Union has also paid more attention to rural development recently. The final document of a European Union conference on rural development held in Cork, Ireland in 1996 (the Cork Declaration) became a basic reference document for those who deal with rural development. There are also a lot of actions taken and documents prepared at the national level.

In 1991 the Committee on Agriculture and Rural Development of the Parliamentary Assembly of the Council of Europe instituted an intensive programme on the problems of rural areas and organised a series of events in which rural development was the central issue. The final result of the work of the committee has been a document called the European Charter for Rural Areas. Parallel with this work the Congress of Local and Regional Authorities of Europe prepared another major document, the European Charter of Mountain Regions. The Parliamentary Assembly passed these documents over to the Committee of Ministers with the recommendation to instruct a committee of experts "to prepare a legal instrument on rural development" (and on mountain regions).On the order of the Committee of Ministers a working group which comprised experts from fourteen member states was set up to prepare these legal instruments. As a representative of the Parliamentary Assembly I took part in all sittings of this working group. My experience was a bit disappointing. It turned out that there is quite a wide range of differences among experts in understanding problems, in the definitions of concepts, in the possible solutions, etc. It also appeared that it is almost impossible to work out a legally binding document (that is a convention) on rural development policies. Based on my experiences in this working group and as a member of the Committee on Agriculture and Rural Development I feel that quite a lot of work and discussion are still needed before we can come up with acceptable definitions, concepts and applicable solutions. Here I would like to single out just a few of the problems.

– there is no generally accepted definition for the notion of "rural area". In some countries only the density of population and the size of settlements are taken into account while in others several indicators are applied. The Hungarian rural policy programme defines a region as "rural" if there are only villages and small towns with less than 10 000 inhabitants in the area. The definition in the European Charter for Rural Areas emphasises the agricultural use of the main part of the area and that the agricultural and non-agricultural parts of the rural area form a whole. But this definition was not accepted by the expert group. This shows that one of the major issues in distinguishing rural and urban areas is the role of agriculture – this will be discussed in more detail later. My opinion is that without taking into account the particular nature of the use of resources any definition of the term "rural area" is meaningless because otherwise there is no difference between the term "region" and the term "rural area".

– the aims and the social value of rural development is not clarified. There are only such general statements that "improving the living and working conditions in rural areas will contribute to social and economic progress". Another usual argument is that the rural population should be encouraged to remain where they are because otherwise towns would become too crowded. If we want to have a rural policy accepted by society as a whole the real value of rural areas has to be shown more precisely.

The value system of society has to change. Primarily, in all the generally accepted approaches, urbanisation *per se* means "development", and a high proportion of rural population means "underdevelopment". At the same time there must be a change in the method of calculating "the index of sustainable social welfare" which is a better indicator of economic performance than the GDP, as the cost of the negative effects of urbanisation and concentration of the economic activities and population is an item that has to be deducted from the GDP. In these new approaches, the maintenance and development of the countryside are essential preconditions of sustainable development. In contrast to this the expert group working on the European Charter for Rural Areas rejected the requirement included in the Charter that urban regions have to take care of their own waste products and must not flood the countryside with them.

The message of the European Charter for Rural Areas is that there is no superiority in urban and rural areas or between urban and rural life. There may even be some specific advantages in a rural life when the complexities of human personality are considered. Economic efficiency or the profit motive of some industries must not dominate human or social values.

The erroneous value system in which urban development is given a higher value than social need was one of the reasons for forced urbanisation in the CEECs under the communist regimes. Most public funding was given to urban settlements. In Hungary, for example state housing programmes existed only for towns, and increased funding was given to larger towns while people in villages had to solve their housing problems by their own means. For this reason bigger villages were lobbying to get "township status". Of the 3 126 settlements in Hungary there are 200 towns but 75 of these have less than 10 000 inhabitants. Most of them are really just large villages.

3.1. The relationship between agricultural and rural areas

There are quite a number of different opinions about the relationship between agriculture and rural areas. There are warnings that "agricultural and rural policies should not be equated or confused". It is true that in most CEECs there is a tendency to consider rural areas as synonymous with agriculture and most of the funds for rural development are channelled through agricultural support measures. OECD criticises the practice when agricultural and rural development is integrated into one ministry. But we can see other examples as well. In my country after the beginning of transition "regional development" was integrated with "the environment" under one ministry. In the past few years approximately twice as much was spent from the national budget on regional development than on direct support for agriculture. For example, large amounts of money were spent on the development of gas supply systems while new landowners did not have even the most essential means to cultivate their land and agricultural incomes fell near to zero. The result has been that the gas supply is not used because people have not enough income to pay for it. Nobody considered whether it would be better to support energy production by agriculture instead of supporting the building of gas supply systems based on imported natural gas. In this way, local resources and the capacity of

local people has not been fully utilised, while the deficit of the balance of payments of the country has increased. This example shows that even energy supply policies for rural areas cannot be separated from agricultural policy. A really integrated approach to rural development should be based on, and all other policies should be integrated with, agricultural policy. But agriculture can play a central role in the development of rural areas only if we really think in terms of an integrated and multifunctional agriculture.

It is interesting to note that all the documents of the Committee on Agriculture and Rural Development of the Parliamentary Assembly of the Council of Europe use the expression: "agricultural (including aquaculture, fisheries and forestry)". This is because the meaning of the term "agriculture" has become too narrow as a result of the disintegration of agriculture in the course of past developments.

In former times the natural environment controlled the life of the people and there was no separate "agriculture". In the first development stage, agriculture and the environment became separated from each other. Then disintegration within agriculture itself accelerated. This process is manifest in the separation of crop production, horticulture, viticulture, forestry, hunting, fisheries, aquaculture, animal husbandry, etc.

At another level, conservation and methods of processing and marketing agricultural products became separated from the actual production. Fragmentation even within crop production and animal husbandry went further and crop rotations, diversified cropping patterns or polycultural crop production was replaced by monoculture. In my country the simplest forms of primary processing of agricultural products are considered to be industrial activities.

To an increasing extent, agricultural machinery and industrial inputs were substituted for human and natural resources or for farm-produced inputs. In addition, this disintegration process was extended to cover labour and science related to agriculture. In many places the complex and integrated knowledge of farmers was replaced by branches of agricultural sciences, specialised skilled workers trained to do only one specific job, etc. In some of the former eastern bloc countries even agricultural higher education was separated from the universities into institutions specialising in sub-systems of agriculture. In this way the scope of agriculture has been narrowed down to producing fresh food and raw materials for food processing industries.

Recently there have been several initiatives to reintegrate agriculture. The search for a reintegration process manifests itself in such initiatives as sustainable, low-input, integrated, organic, or ecological agricultural systems. This tendency is marked by such concepts as polyculture, mixed cropping, multifunctional agriculture, etc. The fullest level of integration is suggested by the concept of permanent agriculture or in short permaculture.

The integration of agriculture has to be realised in the following aspects:

– the reintegration of agriculture with rural areas. Industrial agriculture is isolated from rural areas in the sense that it is organised only by the criteria of its own economic efficiency. Agricultural activities have to fit into land use plans and into plans for the utilisation of the rural space.

- agriculture has to be reintegrated with the natural environment. This means that the production structure and the agricultural technologies must be synchronised with environmental and natural development requirements, but also that the protection, sustainable management and development of natural resources are a part of the functions of agriculture.
- the reintegration of the land itself, which is the most valuable multifunctional natural resource, is necessary. In my country in the debates on land-ownership only the production function of land is considered. Land use practices or planning should take into account all the functions of land for example as it is stated in Recommendation No. 15 (1989) of the Committee of Ministers of the Council of Europe.
- the separated sub-systems or part-processes of agriculture have to be reintegrated (crop and livestock production, horticulture, forestry, fisheries, hunting, primary processing of products, etc.) On a farm level this requires a move from specialised structures toward a more diversified production pattern. Processing and marketing of agricultural products has to be brought closer to production and the phases of the vertical processes should be better synchronised.
- agriculture and the rural communities should be reintegrated. Rural cultural heritage and life-styles are closely related to agriculture. Because rural space, that is the environment of local communities, is strongly affected by agriculture, all members of local communities should be concerned about agriculture regardless of their profession.

My suggestion is that we should give back the original meaning of agriculture that comes from the Latin words: *ager*, meaning land and *cultura,* meaning cultivate. In this sense agriculture means the culture of the land or the culture of rural areas, which means much more than just one form of capital investment to make a profit. If we define an integrated and multifunctional agriculture as a branch of the national economy primarily responsible for the utilisation of natural and human resources available in rural areas for the benefit of the whole society, then an agricultural policy can really be the basis, the determining part of an integrated rural development policy. But this requires a more radical reform of the European Union's CAP and also of the agricultural policies of CEECs.

Integration of European Union agricultural policy with the agricultural policies of other European countries

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1. Introduction

The integration of the agricultural policy of the European Union (EU) with agricultural policies of other European countries will be not an easy task because of the current characteristics of the Common Agricultural Policy (CAP) and the reform proposals presented within the context of Agenda 2000.

In fact, the dominance of non-decoupling support measures and the very high concentration of revenue transfers generated by this policy in a relatively small number of agricultural production sub-sectors does not facilitate the distribution of CAP income transfers.

The very unequal distribution of CAP income transfers among the agricultural sectors of the Mediterranean member states and the agriculture of the other European Union member states is a good illustration of this type of integration problems.

The purpose of this report is to analyse the effects of the CAP on the distribution of income support for agriculture across European Union member states, and to discuss long-term alternatives having a positive effect on the future distribution of these income transfers and their contribution to a better integration of European agricultural policies.

2. CAP and its consequences for Mediterranean agriculture

Currently the main characteristics of CAP are:

- a very high level of support provided by the European Union to agricultural producers;
- the dominance of price support measures;
- the high concentration in a small number of agricultural production sub-sectors of income transfers generated either by regulated agricultural markets, or by European Union and/or national budgets transfers.

According to our calculations based on the available data, in 1995, more than a half (55 per cent) of the total income of the European Union agricultural sector has resulted from income transfers generated by agricultural policies. This corresponds to a value of 77 billion ecus of a gross added value at factor costs (GAVfc) around 141 billion ecus. The high level of support granted in 1995 to the European Union-15 agricultural producers is not significantly different from that granted to the European Union-12 agricultural producers before the 1992 CAP reform. In 1990 CAP support had totalled 52 per cent of the corresponding GAVfc (Table1).

Again in 1990, income transfers generated by European Union market-price support mechanisms were 46 per cent of the total income of the agricultural sector. The other 6 per cent had resulted from budget transfers associated with direct and indirect payments to agricultural production (Table 1).

Despite the 1992 CAP reform, between 1990 and 1995 the dominance of income transfers through market-price distortions was maintained. However, the importance of this type of transfer has been reduced from 46 to 34 per cent of the total European Union agricultural income. At the same time, transfers from European Union and national budgets have increased from 6 to 21 per cent of the total European Union agricultural income (Table 1).

According to OECD data, in 1995 84 per cent of all income transfers generated by CAP have supported only three agricultural production sub-sectors: milk (29 per cent), cattle (26 per cent), and arable crops (29 per cent).

Concerning milk, income transfers resulted almost exclusively from the support of European Union prices well above the corresponding world prices. This support was provided through border tariffs, intervention, and export restitution. In 1995, income transfers to milk producers were approximately 41 per cent of total European Union transfers through market mechanisms. In the case of cattle, European Union support was given mainly through markets (32 per cent of total market transfers) and to a lesser extent through budget transfers to producers (14 per cent of total budget transfers). As for arable crops (cereals, oil seeds, and protein crops), 1995 budget transfers to production totalled 68 per cent of European Union-15 budget transfers, while market transfers represented 11 per cent of total European Union income transfers through market mechanisms (Table 2).

According to the available data (Table 2), in 1995, 40 per cent of the European Union final agricultural output was represented by a group of vegetable and animal products that benefited from 84 per cent of the CAP income transfers. In contrast, the typical Mediterranean products (fruits, vegetables, wine and olive oil) which represented 20 per cent of the European Union agricultural final output received only 6 per cent of the 1995 policy income transfers generated by CAP.

CAP has two major effects on Mediterranean agricultural farming systems. On the one hand, CAP has introduced a system of incentives which strongly supports typical northern and central European products such as cereals, cattle and milk. It does not provide the same degree of support for typical Mediterranean products such as wine, olive oil, fruits and vegetables. On the other hand, CAP income transfers among European Union member states, agricultural regions, and farmers, work against Mediterranean farming systems.

As a consequence of the existing agricultural policy distortions the European Union products presented, in 1995, very different nominal support co-efficients (NSC) with values around or higher than 2 for typical northern and central European agricultural products, and with values lower than 1.5 for the typical Mediterranean products.

One can argue that typical northern and central European products also constitute an important share of the agricultural production of the European Union Mediterranean member states. However, this results from Mediterranean member states having important agricultural areas with a climate other than Mediterranean. It also results from the traditional support provided for these products by the agricultural policies of Mediterranean member states.

In our opinion, CAP policy distortions are not desirable as they promote inefficient farming systems and agricultural activities when compared with those of the Mediterranean states.

The limited importance of the most supported commodities on the final agricultural production of Mediterranean member states is the main reason for the unequal distribution of CAP transfers between these and the other member states (Table 4). In fact, in countries dominated by a Mediterranean agriculture (Spain, Greece, Italy and Portugal) in 1995 CAP transfers represented 37 per cent of the total income of the agricultural sector. In contrast, this percentage was 66 per cent in the other member states of the European Union (Table 5). It is of interest that in 1995 these four Mediterranean member states made a greater contribution to the creation of agricultural wealth than the other eleven member states, while with CAP distortions they produced only 38 per cent of the total income of the agricultural sector of the European Union. Mediterranean member states have benefited from only 22 per cent of CAP market transfers and 32 per cent of CAP European Union and national budget transfers (Table 6).

Portugal and Ireland provide a good example of what was stated above. The share of the most strongly supported CAP commodities in the final agricultural production is respectively one of the smallest (26 per cent in Portugal) and one of the largest (75 per cent in Ireland) of the European Union. Because of this, in 1995 the Portuguese agricultural sector has benefited from policy transfers that represented only 38 per cent of the value of its final agricultural production. This same percentage was 90 per cent for the Irish agricultural sector, 55 per cent for the whole European Union, and 61, 72, 71 and 56 per cent, respectively for France, Germany, the United Kingdom, and Denmark, all member states with stronger agricultural economies than Portugal (Table 7).

In Portugal 62 per cent of the wealth generated by the agricultural sector does not result from CAP. This percentage is greater than the European Union average (45 per cent) as well as that of the majority of the other member states. In particular Ireland (10 per cent), Germany (28 per cent), the United Kingdom (29 per cent), Belgium (37 per cent), France (39 per cent), Denmark (44 per cent) and Spain (54 per cent), being almost equal to the Netherlands (61 per cent), and less than Greece (62 per cent) and Italy (69 per cent).

The comparison of agricultural labour income across member states allows us to draw crucial conclusions regarding the CAP's impact on European Union farmers' income (Table 8). First, in the absence of CAP, agricultural labour income within the four Mediterranean member states would be almost 2.5 times the average agricultural labour income of the other eleven

central and northern European member states. However, with CAP it is just half. To measure agricultural labour income one is using the net added value at factor costs per annual work unit (NAVcf/AWU).

Second, on average, Mediterranean agriculture is more efficient than that of other member states. This results from a better use of intermediate agricultural inputs, in spite of the stricter structural constraints than those faced within the European Union.

The Portuguese case is again remarkable. Under the CAP, Portugal has the lowest agricultural labour income within the European Union. At the same time, Portuguese farmers benefit the least from CAP support. Table 9 provides us with some important data.

First, in the absence of CAP, agricultural labour income in Portugal would be 75 per cent of the European Union average. CAP transfers reduce the country's agricultural labour income to the lowest of the European Union: less than 33 per cent of the European Union average.

Second, while the Portuguese agricultural labour income with CAP (NAVcf/AWU) is less than half of Ireland's, and less than one-third of Germany's, it would be clearly higher than these in the absence of CAP, measured by the net added value at parity prices per annual work unit (NAVpp/AWU).

Third, in 1995 the Portuguese agricultural labour income was less than a quarter of the United Kingdom's. However, by removing CAP transfers, the two countries would have presented with very similar agricultural incomes.

Fourth, in 1995, without CAP, the Portuguese agricultural labour income (NAVpp/AWU) was below that of Belgium, Spain, France and Denmark. However, this results mainly from structural constraints, and not from a lower efficiency in the country's use of intermediate inputs or land, as is often inferred.

Fifth, Greece, Italy and Holland are the only member states whose agricultural income gap in relation to Portugal reflects differences in efficiency in the use of agricultural inputs. However, one should not ignore the fact that in 1995 income transfers per AWU were approximately nine times less for Portugal (1.8 ecus x 10^3) than they were for Holland (15.7 ecus x 10^3).

Sixth, in 1995 income transfers per AWU for Portugal (1.8 ecus x 10^3) were approximately 5.9 times less than those for the European Union (10.6 ecus x 10^3), 9.7 times less than those for France (17.5 ecus x 10^3), 11 times less than those for the United Kingdom and Germany (20 ecus x 10^3), 12.6 times less than those for Belgium (22.6 ecus x10^3), and almost 15 times less than those for Denmark (26.4 ecus x 10^3).

3. The future of CAP and its impact on Mediterranean agriculture

The Agenda 2000 proposals do not change the guidelines for CAP transfers.

First, the reduction of CAP price support through regulated markets, due to the European Union's approach to world prices, is at least partially compensated by budget transfers tied to historical agricultural production levels. Therefore, there is no reason to believe that the transfer of revenue within the member states will be modified.

Second, CAP income transfers designed to support the rural areas and an environmentally friendly agriculture are not significant enough to change this distribution.

Third, the horizontal measures proposed within the reform framework and the national financial package for the cattle and milk Common Market Organisations (CMO) will probably allow a more equitable distribution of CAP income transfers within each member state. However, there is no reason to believe there will be a more equitable distribution of CAP income transfers across member states.

Therefore, it is entirely justified that the Portuguese Government should press for a CAP reform providing a more equitable distribution of CAP income transfers encompassing European Union agricultural sub-sectors, member states, regions, and farmers. Two alternative proposals for a gradual shift of CAP guidelines towards a more equitable distribution model of CAP income transfers are given below.

The first alternative would be to retain the policy of shifting CAP market support to CAP budget support, while extending this support to other agricultural sub-sectors, regions, and types of farming within the European Union. To implement it, one could adjust national supports for CMO expenditures. Member states receiving the bulk of CAP support within a given CMO should pay more of its costs. The major advantage of this alternative is that it does not penalise those agricultural sub-sectors, regions, and farmers that currently receive the bulk of CAP support. At the same time, it extends this support to other agricultural sub-sectors, regions, and farmers. Difficulties in the implementation of this alternative may arise from the need for supplementary budget efforts from the most strongly supported member states. Budget restrictions imposed by the creation of the Euro may render this alternative unfeasible.

The reinforcement of CAP support through budget transfers tied to historical production levels constitute another inconvenience for this first alternative plan because such a procedure will create problems for the next round of World Trade Organisation negotiations and it does not promote efficiency of production.

A second alternative for a new model concerns the gradual elimination of CAP support through markets and/or budget transfers linked to historical levels of agricultural production, along with the institution of a new CAP. The guidelines of the new CAP should be to promote technical change and structural adjustment in favour of economic efficiency, and to support small farming systems with a social function, farming systems that protect the environment and rural landscape, and farming systems that contribute to economic diversification and heritage protection in the European Union rural world.

The main obstacle to this second alternative is that it penalises those farmers, regions, and member states benefiting the most from the current CAP. From an European Union budget point of view, this second alternative is less controversial, as it does not imply any increase in national transfers for purposes of supporting sub-sectors and territories. However, it is not neutral from a national budget point of view, once it is realised that a reallocation of funds would result in reduction of budget transfers for some member states and consequently in an increase of their net contributions to the European Union budget. The attractiveness of this

second alternative is that it would be compatible with a multilateral liberalisation process and it gives the right incentive for those farming systems able to compete in the world market, while supporting at the same time farming systems that protect the environment and the rural world.

In our opinion, this second alternative is the one that better serves the mid and long-term interests of the Mediterranean member states, in general, and of Portugal, in particular. However, it is the alternative of most difficult application as it requires a complete change of the current European Union model of agricultural support, and challenges those member states, agricultural regions, and farmers with greater economical and political strength.

However, this second alternative is, in our opinion, the only one that could create conditions for a gradual integration of the CAP with the other European agricultural policies, and so, facilitate the European Union enlargement process within a future context of multilateral liberalisation.

Table 1: Agricultural income and CAP income transfers in the European Union (1990 and 1995)

	1990		1995	
	B ecus	**Percentage**	**B ecus**	**Percentage**
Agricultural income without transfers[a]	59	48	63	45
Policy income transfers				
– through the market[b]	57	46	48	34
– through the budget[c]	8	6	29	21
– total	65	52	77	55
Agricultural income[d]	124	100	141	100

Sources: OECD, Economic Accounts for Agriculture and Producer Subsidy Equivalent.

a. Gross added value at parity prices (GAVpp).
b. Gross added value at market prices (GAVmp) minus GAVpp.
c. Gross added value at factor costs (GAVcf) minus GAVmp.
d. GAVfc.

Note: GAVpp = GAVmp minus total value of market-price support measures (MPS).

Table 2: CAP income transfers by groups of products (1995)

Products	**Market price support[a]**	**Direct payments**	**Total**	**Percentage agricultural final output**
Wheat, barley and oats	7	51	21	7.1
Maize and rice	4	5	4	2.1
Oil seeds	-	12	4	1.2
Sugar	6	-	4	2.5
Fruit	1	-	1	4.3
Vegetables	3	-	2	8.7
Wine	0	2	1	5.8
Olive oil	1	4	2	1.2
Tobacco	0	5	1	0.3
Dairy	41	0	29	18.5
Beef	32	14	26	11.1
Sheep and goats	2	8	4	1.7
Poultry and eggs	3	-	2	6.5
Total percentage	100	100	100	100
(B ecus)	48	21	69	207

Source: OECD, Economic Accounts for Agriculture and Producer Subsidy Equivalent and author's estimate.

a. Market price support adjusted by the feed adjustment.

Table 3: Nominal support co-efficients by groups of products in the European Union (1995)

Products	Nominal support co-efficients[a]
Wheat, barley and oats	2.00
Maize and rice	1.89
Oil seeds	1.99
Sugar	2.19
Fruit	1.16
Vegetables	1.29
Wine	1.12
Olive oil	1.53
Tobacco	2.33
Dairy	2.20
Beef	2.08
Sheep and goats	2.22

Sources: OECD, Economic Accounts for Agriculture and Producer Subsidy Equivalent and author's estimations for wine, olive oil and tobacco.

a. Ratio of the value of production at market prices adjusted by the direct payment and the value of production at parity prices.

Table 4: Mediterranean and other member states' agricultural indicators (1995)

	Mediterranean member states*	Other European Union member states	EU-15
Structural indicators:			
– UAA/Farm (ha)	10.1	31.7	17.5
– AWU/Farm (no.)	0.8	1.2	0.9
– UAA/AWU (ha)	12.8	26.5	18.8
Productivity indicators:			
– AFO/IU	2.4	1.4	1.7
– GAV/UAA (1 000 ecus)	0.6	0.4	0.5
Policy income transfers indicators:			
– MSP/AWU (1 000 ecus)	2.6	11.9	6.6
– PD/AWU (1 000 ecus)	2.3	6.3	4.0
Agricultural labour income indicators:			
– NAVpp/AWU (1 000 ecus)	5.7	2.7	4.4
– NAVmp/AWU (1 000 ecus)	8.3	14.5	11.0
– NAVfc/AWU (1 000 ecus)	10.6	20.9	15.1

Sources: OECD, Economic Accounts for Agriculture and Producer Subsidy Equivalent;
EUROSTAT: Agricultural Income, author's estimations.

* Spain, Greece, Italy and Portugal

Note: UAA: utilised agricultural area;
AWU: annual work unit;
AFO: agricultural final output;
IC: intermediate consumption;
MPS: marke- price support;
DP: direct payments;
NAVpp, NAVmp and NAVfc: net added value at parity prices, market prices and factor costs.

Table 5: Relative importance of subsidised products in the European Union agriculture final output (1995)

Country	Portugal	Spain	Greece	Italy	Ireland	Belgium	Denmark	NL	Germany	France	United Kingdom	Percentage UE-15
More subsidised products[a]	26	21	23	28	75	33	46	32	50	47	53	41
Less subsidised products	74	79	77	72	25	67	54	68	50	53	47	59
Total percentage	100	100	100	100	100	100	100	100	100	100	100	100

Sources: OECD, Economic Accounts for Agriculture.

a. Arable crops, beef and dairy.

Table 6: Agriculture income and CAP income transfers by groups of member states of the European Union-15 (1995)

	Mediterranean member states*		Other EU member states		EU-15	
	B ecus	Percentage	B ecus	Percentage	B ecus	Percentage
Agricultural income without transfers[a]	34	63	30	34	63	45
Policy income transfers:						
– through the market[b]	11	20	37	43	48	34
– through the budget[c]	9	18	20	23	29	21
– total	20	37	57	66	77	55
Agricultural income[d]	53	100	87	100	141	100

Sources: OECD, Economic Accounts for Agriculture and Producer Subsidy Equivalent.

a. Gross added value at parity prices (GAVpp).
b. Gross added value at market prices (GAVmp) minus GAVBpp.
c. Gross added value at factor costs (GAVfc) minus GAVBmp.
d. GAVfc.

* Spain, Greece, Italy and Portugal.

Table 7: Contribution of the Mediterranean and other member states to the agricultural income and CAP income transfers (1995)

	Mediterranean member states*		Other European Union member states		EU-15	
	B Ecus	**Percentage**	**B Ecus**	**Percentage**	**B Ecus**	**Percentage**
Agricultural income without transfers[a]	34	53	30	47	63	100
Policy income transfers:						
– through the market[b]	11	22	37	78	48	100
– through the budget[c]	9	32	20	68	29	100
– total	20	26	57	74	77	100
Agricultural income[d]	53	38	87	62	141	100

Sources: OECD, Economic Accounts for Agriculture and Producer Subsidy Equivalent.

a. Gross added value at parity prices (GAVpp).
b. Gross added value at market prices (GAVmp) minus GAVpp.
c. Gross added value at factor costs (GAVBfc) minus GAVmp.
d. GAVfc.

* Spain, Greece, Italy and Portugal.

Table 8: Agricultural income and CAP income transfers in some of the European Union member states (1995)

Country	**Portugal**	**Spain**	**Greece**	**Italy**	**Ireland**	**Belgium**	**Denmark**	**NL**	**Germany**	**France**	**United Kingdom**	**Percentage UE-15**
Agricultural income without transfers[a]	62	54	63	69	10	37	44	62	28	39	29	45
Policy income transfers:												
– through the market	21	22	16	19	63	53	39	40	47	39	47	34
– through the budget	17	25	21	12	27	10	16	-2	26	22	24	21
– total	38	46	37	31	90	63	56	38	72	61	71	55
Agricultural income	100	100	100	100	100	100	100	100	100	100	100	100

Sources: OECD, Economic Accounts for Agriculture and Producer Subsidy Equivalent.

a. Gross value added at parity prices (GAVpp).

Table 9: Agricultural indicators for different member states (1995)

Country	Portugal	Spain	Greece	Italy	Ireland	Belgium	Denmark	NL	Germany	France	UK	Percentage EU-15
Structural indicators:												
– UAA/Farm (ha)	8.9	18.1	7.0	7.0	27.9	18.0	36.7	16.5	28.6	37.8	65.0	17.5
– AWU/Farm (no.)	1.3	0.7	0.8	0.7	1.5	1.1	1.1	1.8	1.2	1.3	1.7	0.9
– UAA/AWU (ha)	6.8	24.5	8.6	9.6	19.0	16.8	31.9	8.9	24.6	29	39.3	18.8
Productivity indicators:												
– AFO/IU	1.8	1.9	3.3	3.0	1.2	1.3	1.5	1.6	1.3	1.5	1.3	1.7
– GAV/UAA (1 000 ecus)	0.5	0.4	0.9	1.0	0.1	0.8	0.7	2.7	0.3	0.4	0.2	0.5
Policy income transfers indicators:												
– MSP/AWU (1 000 ecus)	1.0	3.6	2.0	2.7	8.6	19.0	18.7	15.7	12.8	11.2	13.2	6.6
– DP/AWU (1 000 ecus)	0.8	4.1	2.6	1.7	3.7	3.6	7.7	-0.8	7.0	6.3	6.7	4.0
Agricultural labour income indicators:												
– NAVpp/AWU (1 000 ecus)	3	7	7	5	-1	5	10	14	-2	6	3	4
– NAVmp/AWU (1 000 ecus)	4	10	9	8	8	24	29	29	11	18	16	11
– NAVfc/AWU (1 000 ecus)	5	15	12	10	12	28	37	29	18	24	22	15

Sources: OECD, Economic Accounts for Agriculture and Producer Subsidy Equivalent.

Note: UAA: utilised agricultural area;
AWU: annual work unit;
AFO: agricultural final output;
IC: intermediate consumption;
MPS: market-price support
DP: direct payments;
NAVpp, NAVmp and NAVfc: net added value at parity prices, market prices and factor costs.

What kind of agriculture and forestry for the next century?

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1. Introduction

The landscape of Slovenia has changed very rapidly during the last hundred years; the forest cover has increased from 36.4 per cent in 1875 to 53.2 per cent in 1990 and as the forest advanced, acreage of agricultural land has decreased. In the last fifty years, acreage of agricultural land has decreased by 3 500 hectares per year on average. An increase in the forest cover is expected in the future, but this increase will slow down. What will happen to agricultural land is more difficult to predict, as social and economic influences are more complex. It is reasonable to assume that professional farming will be concentrated in the lowlands on soils of good quality whereas farms in marginal areas will switch from farming to non-agri-food production and amenities.

Agriculture together with forestry contributes about 4 per cent of the total added value of the Slovenian economy. Yet both industries provide several positive extra-market benefits that make them of the highest importance for the further development of Slovenian society and its welfare.

2. Agriculture

2.1. Agriculture in the Slovenian economy

Slovenia's development pattern has been oriented on services, transport and manufacturing.

Table 1: Agriculture in the Slovenian economy (1991 and 1996)

Share of agriculture (percentage)	1991	1996
Employment	8.4	6.3
GDP[a]	5.1	3.8
Investment	4.7	1.4[b]
Import	3.1	3.2
Export	1.8	0.7

Source: Republic of Slovenia Statistical Yearbook, 1992, 1997.

a. Agriculture, hunting, forestry.
b. 1995.

In 1991, agriculture represented the principal source of revenue for 145 000 people (8 per cent of the total population) on 785 000 hectares of agricultural land or 39 per cent of the total land area.

Table 2: Volume indices of agricultural output, Slovenia (1990-1996)

Previous year = 100

	1990	1991	1992	1993	1994	1995	1996
Total agricultural output	104	99	94	99	108	104	102
Final agricultural output	103	100	90	99	123	102	102
Arable crops	107	102	79	100	152	102	98
Fruits	142	76	123	112	150	92	100
Viticulture	122	96	113	103	101	79	140
Total livestock production	98	103	93	97	101	106	101
Cattle and milk	97	104	98	95	103	109	100

Source: Republic of Slovenia Statistical Yearbook, 1996, 1997

Agriculture is in the process of recovery after the economic depression of the transition. Yet several weaknesses of the industry might threaten further development if they are not managed properly.

2.2. Pattern of technical progress in Slovenian agriculture

In the early 1970s, Slovenia started modelling its agricultural policy when self-sufficiency became the main goal of agricultural development. According to former Slovenian planners there were only two production factors that were to be used intensively to achieve this goal: agricultural land and the quantity of livestock. Slovenian agriculture was explained as well as regulated by a very specific production function:

$Q = f(AL, NL) + I$; where: Q = quantity of production
AL = agricultural land
NL = number of livestock
I = intensity

Therefore, quite a complex dual agricultural system was reduced to basics by this equation. All other factors of contemporary agriculture were covered by the notion of "intensity", which remained undefined. "Intensification and/or intensity" became a kind of magic wand for managing agricultural production. All possible choices between different factors of production were reduced to basic agricultural funding. It made government regulation easy; as the type of intensification was not defined there was enough room left for traditional and the conventional agricultural practice.

Factors of growth outnumbered factors of development within Slovenian agriculture. Labour and capital principally contributed to GDP growth. The impact of technical progress was insignificant. Given the low development level, this situation in practice was less damaging to the environment (Vajnberger 1990, Gartner and Urek 1991, Maèek 1992) than in the European Union. Comparison of productivity between Slovenia and European Union agriculture shows that the ratio of labour input per hectare is 515 hours per hectare to 174 hours per hectare (Gliha and Rednak, 1989).

Table 3: Production functions of Slovenian agriculture

	Type of production function
Agriculture total[a]	$Q_{CD2} = 0.446\ C^{0.355}\ L^{-0.030}\ e^{0.06}$
Crop production[b]	$Q_{CD1} = 5.6.10\text{-}4\ C^{1.075}\ L^{0.800}$
Livestock production[b]	$Q_{CD2} = 1.1997\ C^{0.781}\ L^{0.90}$

a. 1965-1988.
b. 1973-1988.

Agriculture as a whole is characterised by a production function with decreasing returns, whereas crop and livestock production have production functions with increasing returns. Therefore, agricultural production can still be based on traditional technologies at reasonable costs. Slovenia is facing the problem of how to develop and extended environmentally conscious technologies which could increase productivity at lower costs (Vadnal 1993).

2.3. Agricultural structure

A non-market economy, and a radical pattern of agricultural change along with agricultural production functions have resulted in an underestimation of allocation problems and severe structural weaknesses in the industry.

The structure of agricultural production by activities has been developed under the influence of simple or inherited factors of comparative advantage. Out of the 785 000 hectares of agricultural land, about 30 per cent is arable while 70 per cent is located in mountain and hill areas, with almost two-thirds being under permanent pasture. Therefore animal husbandry, and cattle breeding in particular, dominates the industry.

Table 4: Structure of agricultural production by activities, Slovenia (1995)

Percentage (total = 100)

	Gross agricultural production	Net agricultural production
Animal production	46.9	62.2
Arable crops	43.7	25.5
Fruit production	4.9	6.4
Viticulture	4.5	5.9

Slovenian agricultural production is based on inherited factors of competitive advantage that threaten the economic viability of the industry and aggravate the problems of marginal resources. To improve its performance, Slovenian agriculture should abandon available inherited factors; it must switch to developed and specific factors of competitive advantage, which are scarce.

Table 5: Actual (1991) and target rate of self-sufficiency of agricultural production, Slovenia: percentage

	Final production[a] to final consumption[c]		Net final production[b] to net final consumption	
	1991	**Target**	**1991**	**Target**
Agriculture	93.29	104.60	78.00	99.21
Arable crops	55.15	45.55	55.15	75.55
Cereals	57.14	100.00	12.73	100.00
Industrial crops	12.73	49.64	99.38	49.64
Vegetables and potatoes	99.38	83.87	100.53	83.87
Permanent crops	100.53	134.02	1 170.00	134.02
Hops	1 170.00	1 285.71	98.86	1 285.71
Fruits	98.86	118.90	77.93	118.90

Source: Strategy of Slovenian agriculture, 1992, pp. 40, 74.

a. Production of food.
b. Value of animal production minus value of imported fodder.
c. Consumption of food.

Table 6: Structure of family farms and agricultural enterprises by area farmed, Slovenia (1997)

	Total area	Percentage family farms		Percentage agricultural enterprises	
	ha	**Number**	**Area, ha**	**Number**	**Area, ha**
Total	**466 589**	**100.0**	**100.0**	**100.0**	**100.0**
Under 1ha	521	9.3	1.2	0.5	0.0
1-3 ha	61 224	34.3	14.2	2.7	0.0
3-5 ha	79 185	22.2	18.4	0.9	0.0
5-10 ha	159 828	24.8	3.7	1.4	0.1
10-20 ha	99 596	8.4	23.1	4.6	0.4
20-30 ha	17 222	0.8	3.9	4.1	0.6
30-50 ha	6 538	0.2	1.4	4.1	1.0
50-100 ha	3 040	0.0	0.5	5.5	2.5
200-300 ha	2 466	0.0	0.0	7.3	6.5
100-200 ha	3 106	0.0	0.1	5.5	8.0
300-500 ha	3 972	0.0	0.0	4.6	11.0
500-1 000 ha	3 492	0.0	0.0	2.7	9.7
Over 1 000 ha	21 677	0.0	0.0	5.5	60.2

Source: Statistical Office of the Republic of Slovenia: Sample farm structure survey, 1997.

The economic structure of Slovenian agriculture is dispersed. Small-scale farming dominates the industry. Lack of economy of scale threatens the efficiency and also aggravates problems of marginal resources. Other problems arise from this inefficient structure, such as:

- suppliers are not maximising profits, therefore their market behaviour is difficult to predict;
- as production is dispersed, it is very difficult to achieve a uniform quantity of supply that corresponds to market need at reasonable cost. This further aggravates cost prices and quality problems and management of supply.
- given the large number of producers and their lack of organisation, the markets are not clearly defined, and this increases the risk in agricultural production.

Table 7: Number of family farms and agricultural enterprises by type of production, Slovenia (1997)

	Family farms	Agricultural enterprises
Arable land, total	77 907	82
Cereals, total	61 649	54
Industrial plants	12 355	28
Potatoes	54 914	5
Fodder plant, total	47 680	34
Vegetable and other crops[a]	7 445	26
Intensive orchards	3 185	28
Extensive orchards	30 657	0
Fallow land	2 247	8

Source: Statistical Office of the Republic of Slovenia: Sample farm structure survey, 1997

a. Strawberries, flowers, ornamental plants, tree nursery products, seeds, etc.

2.4. Conceptualisation of future agricultural development

At the beginning of the transition period, dualistic and economically weak agriculture was subjected to quite a liberal macroeconomic policy. After two years of this policy, the question has been raised, how to define the role of agriculture within the Slovenian economy in transition and what should be the most suitable development pattern of agriculture itself. To form a new agricultural development paradigm a document on the strategy for Slovenian agriculture has been adopted by the Slovenian Parliament.

Table 8: Pattern of future agricultural development in Slovenia (1993)

Goals	Suggested measures	Anticipated effects
Cultivation of all available agricultural land	Price support in unfavourable areas. Farmers' income support	Proper settlement of the territory
Increase of crop production and proper allocation of cattle breeding	Output price support and intervention purchase. Active foreign trade policy through tariff barriers	Food self-sufficiency with moderate surpluses. High food prices. High costs of agricultural policy
Decreasing share of fodder in crop rotation. Increase of "alternative" crops (oil seeds, legumes). Larger proportion of beef within cattle production	Moderate intensity	Sustainability of production

Source: Strategy of Slovenian agriculture, 1992, p. 69.

Although labelled as the strategy of eco-social development, the document is inspired more by former identifiable development concepts and patterns than by challenges of food security and sustainability (Vadnal 1990).

The main idea of the strategy is that global social goals should have precedence over agricultural ones. Properly settled, cultivated landscape and environmentally feasible production are set as global goals. Minimum surpluses gained at the lowest possible expenditures are defined as proper agricultural objectives. Therefore, agriculture primarily should provide socially relevant services, proper settlements and a cultivated landscape, while producers' income and the existing structure of production should be subjected to a highly protective agricultural policy. Therefore, stripped of all "eco" labels, it reveals the well-known picture of an agricultural policy with high negative externalities.

A profound change in the agricultural strategic thinking is needed in Slovenia in order to meet three major challenges of modern agriculture:

– food security;
– efficient agricultural and food production;
– sustainability of the whole industry.

Adjustment to new standards of operation will be neither easy nor simple, within or beyond the European Union. It will become smoother as agricultural policy adapts to actual agricultural performance, to the state of the national economy and to the international environment.

3. Forestry

3.1. Slovenian forestry – a review

The total surface area of Slovenia amounts to 20 254.69 km² of which 10 764.74 km² are overgrown by forest, resulting in a forest cover of 53.2 per cent in 1990. Slovenia's forestry is oriented towards multiple use and is based on close-to-nature silviculture. Consequently, timber production is only one of many forest functions. Forestry methods should show sustained development within a space and time in balance with the forest's other uses (Košir 1994). In approximately 23 per cent of the forest area generally beneficial functions are emphasised. Most of the area is classified as permanently protected forest and forest with a limited timber-production function.

3.1.1. Temperature, precipitation, relief and geology

Slovenia is a unique country with a wide variety of ecological conditions. The climate ranges from semi-arid to humid. The temperature ranges from -1.8ºC at 2 514 m above sea level to 13ºC on the Adriatic coast. The average precipitation ranges from 769 mm in the north-east to 3 400 mm in the north-west mountain region. The highest peak rises to 2 864 m above sea level. The vegetation period lasts one month in high mountain areas and from seven to eight months in the sub-Mediterranean region. The timberline varies between 1 400 and 1 700 m above sea level. At that height, the mean temperature is 2.9ºC on average (Krvavec 1 740 m). More than two thirds of the forested area is hills and mountains with steep slopes. Table 9 shows the distribution of forests at different altitudes and slopes.

Table 9: The distribution of Slovenian forests at different altitudes and slopes

Altitude in m above sea level	Proportion of forest as percentage	Slope as percentage	Proportion of forest as percentage
0-299	13	0-10	8
300-499	26	10-20	20
500-799	34	20-35	36
800-1 399	25	35-70	29
Above 1 400	2	Above 70	7

Most of the permanently protected forests are located at an altitude above 1 000 m. The main bedrocks are as follows: moraine (36 per cent), limestone (29 per cent), dolomite (5 per cent), sandstone (6 per cent), eocene flysch (4 per cent), flint keratophyre (one per cent), flint slate (4 per cent), tonalite (one per cent), marl (one per cent), glacial grave (4 per cent), fluvial alluvium (one per cent) clay (3 per cent) and other bedrock (3 per cent).

3.1.2. Forest vegetation and site units

A great number of natural plant communities, that is, vegetation units have formed because of the various climate, terrain and soil conditions. Many of these plant communities have been replaced by secondary plant communities through forest management and the planting of other tree species. Close to the Adriatic coast lies the large so-called Karst region, which a hundred and fifty years ago was almost totally destroyed by overgrazing. The forests had been turned into pastures and barren areas. Currently pioneer stands of black pine and other indigenous shrubs and tree species grow there. In the mountain region forests of Norway spruce, larch, silver fir, beech and mountain pine prevail. In the north-east, one finds stands of black alder, common ash and common oak with hornbeam. In the south-west there are mainly stands composed of silver fir and beech with some additional sycamore, mountain elm and lime. Sessile oak-beech stands with wild service trees and field maple grow on warm slopes.

Table 10: Site groups in Slovenia (classed according to natural plant communities) and their relative proportion

Site group	Surface area (km²)	Proportion as percentage
Willow-grove and black alder forest	75.08	1
Oak-hornbeam forest	873.73	8
Oak forest	337.69	3
Thermophile broad-leaved trees forest	579.36	5
Pine forest	393.94	4
Beech-oak (sessile) forest	1 151.66	11
Beech forest on limestone	2 860.74	27
Acidophile beech forest	1 794.51	17
Silver fir forest	492.28	4
Silver fir-beech forest on dinaric karst	1 635.80	15
Spruce forest	154.71	1
High mountain forest	415.25	4
Total	**10 764.75**	**100**

Table 10 lists the site groups that are characterised by natural plant communities. These site groups were formed on the basis of the compatibility of the natural vegetation and other site conditions, for example the potential (natural) vegetation on the silver fir-beech forest site groups, stands of silver fir and beech are mixed in, in spite of the fact that Norway spruce currently grows there. Table 10 also illustrates that in Slovenia forest sites prevail in which the beech has the dominant role. In the past, forest management especially favoured the Norway spruce therefore the present composition of tree species is a departure from the natural composition. By "natural composition" we mean such tree species combinations that would be found in a natural plant community. Table 11 details the present and natural tree species composition.

Table 11: Proportions of tree species in Slovenian forests as a percentage (Forest development programme, Slovenia 1995)

	Beech	Norway spruce	Silver fir	Oak	Other broad-leaved trees	Other conifers
Present share	29	35	11	8	10	7
Natural share	58	8	10	8	14	2

The proportion of spruce is much higher than would be if the stands had a natural structure. The high proportion of spruce has resulted in extensive damage caused by snow, wind and pests, because the spruce is growing on natural beech sites. The high proportion of other conifers is a consequence of afforestation with black pine in the Karst region, which for one hundred and fifty years had been practically barren.

3.2. Development of forest cover and the structure of forests during the last century

3.2.1. Forest area

The process of forest increase was evident in Slovenia during the last century. The forest had encroached and now again encroaches on abandoned pastures, vineyards and orchards. At the end of the nineteenth century many inhabitants left Slovenia and emigrated to the United States. This process seriously diminished the population at a time when some regions were overpopulated. One consequence was an increase in the forest cover from 36.4 per cent in 1875 to 43.2 per cent in 1947. After the second world war until 1990, another remarkable process occurred that resulted in a forest cover of 53.2 per cent; many people in agricultural regions moved to the cities and their suburbs. At that time the cities offered much better living conditions and work opportunities because of rapid industrial development. Increases in the forest cover for the period 1875 to 1990 are shown in Table 12.

Table 12: Forest increase during the period 1875-1990

Year	1875	1947	1961	1970	1980	1990
Forest area in km²	7 370.0	8 790.0	9 610.0	10 260.0	10 450.0	10 770.0
Forest cover as percentage	36.4	43.2	47.5	50.7	51.6	53.2

The forest area increased every year during the period 1947 to 1990 by an average of 46 km^2 and the growth rate amounted to 0.47 per cent per year. This process will continue but the rate of increase will slow down.

3.2.2. Changes in the growing stock, volume increment and felling between 1947 and 1990

Data on growing stock, increment and felling was not available until 1947 because management plans were necessary only for large estates. The data for 1947 was based on a visual estimate. After 1952 a detailed forest management plan was obligatory for all forests in Slovenia. The work-plan period was ten years, and on the basis of these management plans and units, the state of Slovenia's forests was calculated every decade. The data for the years 1961 and 1970 are mostly based on a fully integrated survey. The data for 1980 and 1990 are based on sample surveys (representative and permanent samples). Table 13 lists the main indicators of forest structure during the period 1947 to 1990.

Table 13: Growing stock, current annual increment of volume (CAI) and annual cut during 1947-1990

Year decade	Growing stock in m^3/ha			CAI in m^3/ha per year			Annual cut in m^3/ha per year		
	Conifers	Broad-leaved sp.	Σ	Conifers	Broad-leaved sp.	Σ	Conifers	Broad-leaved sp.	Σ
1947	68 (54%)	58 (46%)	126	1.71	1.38	3.09	1.84	1.42	3.26
1961	91 (58%)	65 (42%)	156	2.05	1.46	3.51	1.78	1.23	3.01
1970	96 (56%)	76(44%)	172	2.31	1.76	4.07	1.84	1.22	3.06
1980	100 (54%)	85 (46%)	185	2.45	2.26	4.71	1.96	1.21	3.17
1990	100 (52%)	92 (48%)	192	2.43	2.49	4.92	1.61*	1.19*	2.80*

* Prescribed allowable annual cut for period 1991-1999.

The growing stock and volume increment rose considerably from 1947 to 1990, that is, by 60 and 58.7 per cent respectively. The share of conifers in the growing stock decreased from 58 to 52 per cent. This is the consequence of silver-fir die-back and the pursuit of close-to-nature forestry. The data given in Table 13 presents the mean values for whole forests in Slovenia. In the managed forests these values are higher, namely 207 m^3/ha for the growing stock and 5.3 m^3/ha per year for volume increment.

Site productivity is estimated at 8 m^3/ha per year on average, which means that the utilisation of site productivity amounts to only 62 per cent (Košir 1976, Kotar 1983a, 1983b). This large difference between site productivity and volume increment is a consequence of the low values of the growing stock and because of the great proportion of newly established young stands on abandoned agricultural land. The correlation between volume increment and growing stock is high ($r = 0.96$). A rise of volume increment of 1 m^3/ha per year requires an increase in the growing stock of 40 m^3/ha within the range (in the growing stock) of 126 m^3/ha to 207 m^3/ha.

3.3. The structure of forests according to quality

The important characteristic of forests, on which their future depends, is the present quality of the stands. Table 14 shows how forests are grouped according to the quality of their timber production into four classes. The stands that belong to the first class – excellent quality – are composed of well-shaped trunks and are considered suitable to provide timber of veneer quality. The second class includes good quality stands, and the third class stands are of insufficient quality. The fourth class consists of so-called low-grade quality trees, the stands that produce timber of fuel quality. The forest composition in Table 14 is given according to quality and according to the forest's developmental phase.

Table 14: Composition of forests according to quality and developmental phase

Rank of quality					
Developmental phase	**Proportion in development phase**	**First class excellent quality**	**Second class good quality**	**Third class insufficient quality**	**Fourth class low-grade quality**
Young growth stands, thicket and pole wood stage forests: DBH<30 cm	13%	38%	48%	12%	2%
pole wood stage forests: 30 cm>DBH10	52%	15%	55%	25%	5%
mature stage and stands in regeneration: DBH>35 cm	35%	22%	59%	17%	2%

Table 14 shows that about 75 per cent of the forests are of either excellent or good quality, which implies that forests in Slovenia have all the prerequisites for high quality timber production (veneer, etc.).

3.4. The factors which influence growth trends

In the last century in Slovenia agricultural land dominated the territory. But emigration of large numbers of the population to the United States at the end of the nineteenth and at the beginning of the twentieth century, resulted in an increase in the forest area. This process continued after the second world war when people left rural regions in large numbers, in search of better living and working conditions in the cities. In 1990, forest cover amounted to 53.2 per cent of the country, once again giving Slovenia a wooded landscape. The growth trends of forests in Slovenia are highlighted by the following characteristics:

- the forest cover increased during the period 1875-1990 from 36.4 to 53.2 per cent;
- the growing stock in 1947 was only 126 m^3/ha, but by 1990 was 192 m^3/ha on average. In managed forests the growing stock is 207 m^3/ha;
- the woody biomass – which is very important for timber production as well as other generally beneficial functions – has almost doubled during the last forty-three years in Slovenia. The increase in forest area and the growing stock per hectare is included in this;
- the current annual increment of volume rose from 3.09 m^3/ha per year to 4.92 m^3/ha per year (and in the managed forest, 5.3 m^3/ha per year);
- the annual cut ranged from 3.01 to 3.26 m^3/ha per year during the period from 1947 to 1990. Since 1990 the prescribed permitted cut has been only 2.80 m^3/ha per year;
- the volume increment did not reach and does not now equal the site productivity. The utilisation of site productivity for 1990 was only 62 per cent;
- therefore Slovenian forests offer the possibility of increasing both the volume increment and growth of forest;
- the damage caused by wild herbivorous animals, air pollution, snow and wind hinder growth;
- in the same way silver-fir and oak die-back influence growth;
- growth of forest was and is affected by site productivity, which has increased in the last decades;
- many indicators confirm the presumption that forest growth will also increase in the future.

3.4.1. The factors which decrease forest growth

In spite of the fact that the volume increment has risen in the last decades, there are currently many factors in Slovenia that diminish the increase in the growing stock and forest growth. The most important of these factors include the following:

- damage caused by wild herbivorous animals (browsing, grazing and peeling) which hinder growth and intensify the difficulties of natural forest regeneration and reduce timber quality. About 382 000 hectares of forests are threatened in this way;
- damage caused by air pollution. This type of damage is found in forests growing in areas surrounding steam power stations. In these forests the volume increment is decreased and the biodiversity reduced as a consequence of the disturbances to the functioning of the forest ecosystem;
- fir die-back that is present on 213 000 hectares. This results in a decrease in the volume increment and often in the early regeneration of the premature stands. The fir has to be replaced by other tree species therefore the risk in such forests is much higher.
- oak die-back. The result is similar to the previous case.

Beside the above-mentioned factors, damage caused by wind, snow and pests is often evident in forests. This kind of damage is visible on some sites after a wet period, and on other sites after a dry period. In this way about 150 000 hectares are threatened, especially spruce stands on sites where the spruce was artificially planted.

3.4.2. Factors increasing growth trends

The volume increment is dependent on the growing stock, the tree composition of the forest and on site productivity. The natural tree composition of stands diminishes risk, assures sustainable management and makes the entire utilisation of the site possible. An increase in the growing stock is assured by a management plan, therefore higher volume increment, meaning forest growth, is expected. Eventually the site productivity increases. This model was confirmed by an investigation of beech stands at eighteen site units (Kotar 1994). The results of that investigation show that:

- the current annual volume increment in the analysed stands is higher than the increments listed for corresponding stands in yield tables. The mean age of analysed stands ranged from 94 to 196 years;
- the height increment of the trees that constitute the top-height is much higher than the values given in the yield tables;
- a comparison of the top-heights of stands regenerated at different points in time on identical sites (the same site unit) shows that younger stands have a higher top-height at the same age;
- the radial increment of trees that constitute the top-height trees also shows an increase in the growth trend in the unthinned stands;
- on the basis of this evidence it can be assumed that the growth pattern of the current annual increment, of the top-height as well as the diameter, shows a change in site productivity. What the main cause for this increase in site productivity is, we can only guess; perhaps the high level of NO_X, NH_3 pollution, or perhaps the higher concentration of CO_2, or the warmer climate. Such a question is not answerable at the moment.

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The need to reorganise and modernise the agricultural sector in central and eastern European countries

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1. Introduction

"Agriculture" and "modernisation" are the two key words for the future of rural areas in central and eastern European (CEE) countries.

The title of this paper denotes one of the most important actions that should be carried out in eastern Europe in the framework of economic and democratic reforms – modernisation of agriculture.

This importance stems from the crucial role that agriculture plays in the economies of central and eastern European countries (in terms of employment, contribution to GDP, and the balanced development of territory). The Council of Europe sees agriculture playing a key role in the strategy of CEE countries' preparation for accession to the European Union.

Improvement in economic performance in these countries will depend to a great extent on the improvement of this economic sector. At the same time, agriculture is the sector directly supporting the economic and social existence of at least one-third of the CEE population. Thus problems of agriculture and farming should be given first priority in order to ensure a decent standard of living for the population. These are the most obvious reasons that put agriculture at the heart of modernisation of the central and eastern European countries. It is equally true that other European countries are also concerned about agriculture, even though in these countries this sector has a lesser impact on society.

But the title of this paper must not make us approach agricultural modernisation merely as an objective *per se*. This modernisation should be considered in the context of a complex relationship built around this sector, exploring:

- the conditions which necessitate the reorganisation and modernisation of this extremely important economic sector;
- the impact that agricultural modernisation will have upon the rural economy and rural areas;
- the role played by agricultural reorganisation and modernisation in the economic sectoral strategies of CEE countries and in the regional development of these countries.

2. Modernisation and reform in Europe

"Modernisation" and "reform" have become fashionable words in western and eastern rural Europe during the last decade, although the need for modernisation in both parts of Europe

stems from different realities and conditions. However, at the same time, they take each other into consideration and adjust, more or less specifically to one another.

Because of the Common Agricultural Policy, reform in western Europe is in essence the same for all European Union members; in the adjustments that are made the emphasis is put on quality.

In eastern Europe, one cannot speak about "a reform" – though there are a number of common elements – but rather about "reforms", as the individual needs of each country prevail. In the reforms taken in eastern Europe emphasis is put on quantity, imposed by the need to reduce organisation and performance gaps. On the whole, the CEE countries' biggest problem is reorganisation of their rural areas related to reaching certain minimum European Union levels: yields, profitability, etc.

There is a catalyst for standardising the reforms carried out in CEE countries, the reference to a common standard by which the actual conditions in each country are measured, namely the European Union performances.

In view of the CEE countries' future accession to the European Union, these performances will be the guiding principle for reform in each country, and for the adjustment and homogenisation of agricultural policies between each of the CEE countries and between the CEE countries and the European Union countries. In this way the agrarian policy contributes, in a particular way, to the realisation of the idea of European unity.

Considering these European conditions, two types of driving force, which impose agricultural reform in the central and eastern European countries, can be identified:

– the general European conditions – adjustment and desire for integration into an economic and social context existing in the European Union, that is not only different, but also under reformation itself – require the knowledge and adoption of the new dimensions of the European Union agricultural and rural policy;
– the particular regional conditions, specific to eastern Europe as a whole and to each individual country, are translated into the need to surmount the precarious existing situation that is quite unstable and incoherent because of a difficult past and to a still uncertain present.

2.1. In a general European context

For more than thirty years the European Union has followed a policy of trying to harmonise the interests of agriculture with those of the rest of society. This objective is translated into measures that should allow every consumer in the European Union to buy his/her daily provisions in sufficient quantity at affordable prices. At the same time, these measures should provide incomes and a standard of living in the agricultural sector comparable to other economic sectors (from the objectives defined under Article 39 of the Treaty of Rome, 1962).

Such a philosophy was also listed among the political objectives of the former communist countries. However, in practice, the agricultural policy that was applied had disadvantaged the rural areas in general and the farmers in particular. Agriculture was considered as a "buffer sector" to redress the deficits, offset the needs of the labour force and to adjust the revenue from the industrial sector, this latter being considered the only sector capable of bringing progress to society.

CEEC agricultural policy will have to consider these two major objectives: the change of the farmer's situation and the modification of food sector organisation, that is the improvement of product quality, and structural improvement of the agri-food market.

In the European Union countries during the last decade one could note a change in the status of agriculture in the rural areas, as well as in its place in rural areas in society. Also, there was a re-evaluation of the position and functions of the rural areas in relation to the urban areas. The principle of this new outlook is to place agriculture, and to consider agricultural operation, within a complex system. On the one hand, it has an economic perspective, together with the other types of activities related or complementary to agriculture, placing agriculture in competition with other economic activities. On the other hand, it has a social perspective (together with other fields) that makes farmers' or a rural population's life more attractive, while the environmental quality is unaltered. These perspectives provide the basis for a new type of rural development, an integrated and sustainable one. The CEE countries should be prepared for this new type of agriculture and its new status in the rural areas.

The Common Agricultural Policy of the European Union has been subject to reform during the past decade, without breaching its initial principles. The effects of this reform can be seen not only in agriculture but also in rural areas as a whole.

The new regulations demonstrate the viability of the objectives, that is to provide a good quality of life for farmers, as well as accepting that the problems of agriculture cannot be considered outside the guidelines concerning the rural areas. This outlook should characterise any development strategy for agriculture and rural areas developed by the CEE countries. Its advantage is the avoidance of errors arising from a unilateral frame of thought.

The new rural development strategy developed by the European Union that emphasises social and ecological factors is essentially based on the new reformed agricultural policy. The main characteristic of CAP reform is that it is a market strategy, while the market is the main linking element with the economies of CEE countries. The reference to this agricultural policy becomes the main element in agricultural reorganisation and modernisation in central and eastern European countries.

However, agricultural reorganisation following market and efficiency principles is in the first place a problem for the national interests of each CEE country. Reform of agriculture in CEE countries is an internal necessity.

A workable relationship and agricultural policy adjustment within CEE countries in relation to European Union policy will make the dialogue between the two segments of the European market easier and more efficient. At the same time, it will facilitate the free movement of agricultural products – the final objective of the agricultural policy.

The message launched by the new CAP reform to the European Union partners, among them the CEE countries, is establishment of the market as the main regulating factor of the agricultural sector and greater trade liberalisation.

Applying for European Union membership, the CEE countries accept without any reservations:

– the fundamental objectives of the European Union;
– its strategies and tools.

In order to comply with all the conditions for European Union membership the countries also accepted the idea that fundamental reforms are necessary for the economy in general and for agriculture in particular.

In this respect reform supposes the creation of conditions for:

– a modern, functional and competitive market economy, in which the demand/supply balance is established by the free-market rules;
– development of agriculture as component part of rural area development.

2.2. In CEE countries

Although all of the CEE countries had a communist experience, this was manifested in different ways in each country. Agriculture is the sector in which the most obvious differences were noticed because of the different attitudes of the respective communist regimes with regard to ownership rights. In many countries private agricultural ownership was maintained in totality; in other countries this right was maintained only in the areas where land amalgamation was difficult – mountainous regions for example, while in others it was totally abolished. This situation resulted in different types of organisation and development levels in agriculture in eastern Europe. However, the socialist and central planning philosophy under which agriculture operated in these countries generated similar destructive processes that hampered economic performance.

Under the new political conditions created by the transition from a command economy to a market economy, in all countries the restructuring and reformation of the economy in general and of agriculture in particular was necessary. The essence of this process is the shift of operational guidelines of the economic and political systems from a strongly centralised totalitarian mechanism to a democratic decentralised mechanism based upon the economic agents' autonomy.

The eight-year period that has elapsed since the establishment of the new economic structure has demonstrated that the reforming process designed for agriculture is not at all simple or fast, and its evolution is neither continuous, nor necessarily growing.

This process required not only a construction, but also some elimination. Sometimes it is difficult not only to find out what must be added but also what must be removed so that the newly implemented mechanisms can operate.

The reforms applied in these countries had to eliminate a number of negative impressions that the former economic and political mechanisms left both on farming and on farmers:

- As regards farming: aspects linked to farm operation (such as a high proportion of large industrial farm units), technical endowment of the agricultural sector (insufficient machinery and equipment), economic performance, soil condition (erosion, salt soils, pollution), insufficient/inefficient relations with the sectors supplying input and output for agriculture, faulty management.
- As regards farmers, a sense of loss of ownership, lack of work motivation, precarious up-to-date skills (the skills that are present are found only among the staff at the large farms), diminution of community feeling.

2.2.1. CEEC general agricultural reforms

The elimination of this generalised dysfunction has been imposed as a necessity, so that the characteristics of the new type of agriculture should conform to an enlarged operational framework at international level, minus ideological barriers. Therefore the agricultural performance of the CEE countries should increase.

After 1989 a series of reforms regarding agriculture were necessary. The reforms took into account all aspects of economic and social life. These reforms were:

- legal reforms, mainly reconstitution of private ownership rights over land and other production means;
- economic reforms for increasing yields and reconsidering profit as an essential reason for the activity of any economic agent;
- technical reforms for increasing the amount of modern agricultural machinery and equipment;
- technological reforms: adoption of modern, non-polluting technologies for an environmentally friendly agriculture;
- managerial reforms: so that any manager of a private farm could practice this type of agriculture.
- social reforms, in particular to provide farmers with incomes comparable to those in other economic sectors, to provide older farmers with a pension system that would supplement their agriculture-based incomes.

Not all these reforms could be initiated from the beginning of the new period, and not all reforms had favourable conditions to allow progress at an equal pace. That is why there are differences as regards the reformation stage both between the different types of reforms in the same country and among different countries.

2.2.2. Land privatisation in CEE countries

One of the main reforms that was initiated in all countries was land privatisation, this being the most necessary to repair the injustices of the former regimes. The annulment or limitation of ownership rights was one of the great hardships suffered by farmers during the communist period.

After 1989 a genuine agrarian reform had to be initiated, the main goal of which was agricultural land redistribution. Special privatisation laws had to be worked out in this respect. However, this process was not uniform in all countries, due to the existence of different situations regarding land during the communist period. In certain countries agricultural land collectivisation had taken place, by which the landowner lost the right of decision on land use and utilisation of harvested products. In other countries the situation was different, with family farms surviving during the communist period.

In the case of the former countries, there was the problem of land restitution to the former owners from the production co-operatives or from the state units.

As the organisation of the present agricultural population and land use no longer coincided with the structure of land-ownership into large collective units, solutions were looked for in order to comply with the two structures. The adopted solutions were different and sometimes of mixed type:

– land distribution to former owners and to their heirs;
– land distribution to other persons who, by their work, contributed to capital formation;
– distribution of certain land areas to people wishing to farm the land, even though they did not own the land.

In Bulgaria, the Czech Republic, Estonia, Slovakia, the former owner's rights were recognised either by the physical restitution of property or, where possible, by privatisation vouchers. In Albania, Lithuania, Romania, mass privatisation took place, in particular taking into consideration ownership rights of the former landowners or their heirs. Where land reserves existed, a more limited land area was also given to the employees of the former state units or agricultural co-operatives. In other countries, such as Hungary, Poland, Slovenia, where in the communist period the land ownership was maintained in part or in totality, there was only the problem of restitution of the land belonging to the state farms. In the former Soviet Union countries – Ukraine, Belarus, the Republic of Moldova – privatisation is proceeding at a much slower pace.

Initially, privatisation in agriculture and the transition to a market economy were considered as a simple and fast process. Short periods were established for the completion of this process by issuing documents that would certify ownership rights. However, the reality proved to be different.

Generally, in the CEE countries, land restitution – so much desired by the former owners – began simultaneously with the construction of a legal framework. However, lacking coherent support, this process was run in a defective way, from the owners' point of view, allowing much abuse by officials. True privatisation did not take place and did not reach an ideal expected goal.

During this process technical obstacles appeared because of: the lack of or inaccurate character of land registry evidence; judicial obstacles such as erroneous applications or misinterpretation of legal provisions; economic obstacles such as investments made without

achieving the expected income; political obstacles, coming from groups opposed to the new reforms and favouring old structures. Under these distorted conditions for the restitution of private land ownership rights, the results of the privatisation process are sometimes also distorted, leading to different situations in each country or between different areas of the same country.

Either the existing land area was distributed among many owners, resulting in excessive land fragmentation and the establishment of very small farms, or land areas were amalgamated into very large farms. It seems that neither of these extremes corresponds to a farm type ideal for the agricultural characteristics of CEE countries, and one gathers from the experience of other countries, both types of farms prove less viable with time.

2.2.3. Obstacles to reforms in CEE countries

At the beginning of this new period of development, all hopes of agriculture revitalisation were vested in the miraculous effect of regaining a sense of land-ownership as a result of privatisation. In time, the results obtained by farmers revealed that land-ownership is insufficient if it is not combined with an adequate technical-material endowment, with a good level of technology, a sound financial system, an information and knowledge system, and in particular modern organisation.

Several basic problems that present obstacles to agricultural modernisation in central and eastern European countries, could be distinguished:

– structures inadequate for an efficient agricultural system;
– lack of an economic rural integrated system;
– lack of capital;
– non-operation of a genuine market mechanism.

The solution of these problems will represent the objective of a complex strategy for agricultural sector modernisation. However, it must be very clear that agricultural modernisation also means development and modernisation of sectors related to agriculture – related industries and services, a financial and banking system, schooling and vocational training; hence agriculture cannot be conceived in an isolated way, separate from rural development and society's development as a whole.

3. Strategies for agricultural sector modernisation – Romania's case

Beyond these guidelines for agricultural modernisation in the CEE countries, each country has to build up its own strategy based on its individual conditions. This strategy should take into consideration the initial situation, the resources that can be used and the methods with the best chance of success.

We shall present Romania's case, where agricultural results are often characterised as "ineffective", therefore the strategy for agriculture modernisation will have to:

– take into consideration the importance of the agricultural sector in Romania;
– identify the weaknesses in the agri-food system;
– emphasise the strengths and the resources of this sector.

3.1. The importance of agriculture in Romania

Agriculture is a very important part of Romania's economy. It is the second largest source of employment (35 per cent after industry) and the third largest contributor to the GDP (20 per cent after industry and services). In the last few years its contribution to the GDP has risen from 16 per cent, because of a decrease in other sectors, particularly industry.

For the rural economy agriculture is even more important, offering jobs for almost half of the village inhabitants. However, agriculture is not an exclusively rural activity. There are smaller towns, having agricultural areas in their administrative territory, where there is an active population in agriculture. To these one can add the new landowners, to whom land was granted after 1989, who live in towns and whose incomes are more or less linked to agricultural activity.

The area of agricultural land represents almost two-thirds of the country's territory, totalling 14.8 million hectares. Forests represent 28 per cent of the country's land area, totalling 6.7 million hectares; land area equipped with irrigation facilities represents 3.1 million hectares, that is more than one-fifth of the agricultural land area. At present the irrigation system still operates only on one-quarter of the land area, because of its non-use after 1989 for various reasons, despite the fact that weather conditions in the last few years have proved that irrigation is vital for this sector.

If one tries to place Romania's agriculture in the European context, a discrepancy is noticed between its potential and its performance. In relation to the twenty-one countries that would form the enlarged Europe (15+6), Romania would hold the following positions:

- for the indicators for agricultural potential Romania holds front positions: 2-8 for employment, land size and crop production; 5-11 for livestock number; second place for land area equipped with irrigation facilities;
- for the performance indicators, expressed by yields per hectare and per livestock head, Romania ranks low on the list: 12 for maize, 16 for wheat, 19 for cows' milk, 20 for potatoes;
- the indicators for technical endowment explain these results: position 16 for the number of tractors and combine harvesters, 15-19 for fertiliser consumption.

3.2. Weaknesses of the agri-food sector

3.2.1. Land-ownership

The agrarian reform in Romania turned more than a quarter of Romanians into landowners. Among the more than 6 million people who received land, only three-fifths still live in a rural area where the agricultural land is situated. The remaining two-fifths live in towns, being the heirs of the former landowners. This is the first dysfunction that must be addressed: geographical distance, and in particular, social distance between the landowners and the land to be used.

3.2.2. Land area – farms

Over 10 million hectares (72 per cent) of the 14.8 million hectares of agricultural land were transferred into private hands by the Land Law legislation. The remaining 28 per cent was retained in the state public and private domain. Only the land that had been included in the agricultural co-operatives before 1989 was privatised. The land areas that belonged to state farms were resituated only nominally, as shares.

As a result of this privatisation process, about 8.1 million hectares of agricultural land are operated by 3.9 million agricultural households (the remaining area being worked by associations). The average size of an individual farm is 2.2 hectares. Most farms are very small – between 1 and 3 hectares (71 per cent of total area); only 11 per cent of farms have more than 5 hectares. Another dysfunction can be noticed: excessive fragmentation of private land into very small properties and maintenance of property depersonalisation in the case of land that remained in the hands of the state. An inadequate farm structure leads to restrictions and obstacles to competitiveness.

3.2.3. Legislation

The main reform action – land restitution – has not been accompanied by complementary legal measures that would permit the emergence of a land market (sale, leasing), the operation of agri-food markets, quality control of agricultural products, or efficient support for farmers. However, certain progress has been made in aligning Romanian legislation with that of the European Union as regards the veterinary sector, plant health, seeds and planting stock. The consequences of the slow pace of legislation for restructuring are felt at several levels: maintenance of property and even farm fragmentation, difficulties in the consolidation of commercial farms, low yields, household decapitalisation.

3.2.4. Markets and prices

The activity of the private sector in the field of primary agricultural products (crops and livestock) accounted for 85 per cent of the gross output in 1996, though this sector owns 72 per cent of the agricultural land. However, the private sector has not maintained its dominance in the total trade with agricultural products for two main reasons: commercial activity is dominated by the state units, and a subsistence economy prevails in the private sector, commercial activities being limited and disorganised. As a result, the agricultural markets have great drawbacks in that there is no demand and supply correlation. There are major problems in organisation of demand and supply and naturally in their affects on the market.

The major supplier is the private peasant household and, owing to the farm structure and lack of technical capability, supply is fragmented and unequal in quality. It reaches only isolated, local markets. The largest part of demand is concentrated in the hands of a small number of processing units that are state enterprises, having a monopoly on the domestic market. Their collection system does not reach all private producers and at the same time they do not have the financial capacity to absorb the total supply. Thus there is no competition as regards demand, but only as regards the supply. Thus private agricultural producers are disadvantaged; their investment capacity is decreasing. As a result, the process of adjusting production to demand is quite slow and it hampers the structural reorganisation. One must also consider the non-development of a competitive environment that has a severe effect upon farmers' incomes.

As land restitution has not been accompanied by capital formation or modern techniques in procurement, private household production has not been driven by the market, but rather by the available labour force, equipment or money. Production is not destined for the market, but rather for personal consumption. Those products that needed a small labour force were cultivated. A paradox arose because of this lack of capital; something that could not earn money was nevertheless being produced. Another dysfunction is therefore revealed: lack of links with the market and the market failing to act as a production regulator.

3.2.5. Capital, finance, investments

Farmers or others who gained repossession of land were generally in a weak financial position, not being able to establish large farms. Private agriculture is confronted by a lack or insufficiency of capital while the activities of the previous years has reduced even further the country's capitalisation capacity.

The agriculture-funding scheme was very unbalanced until 1996 because most of the allocated funds went to the state farms. Private agriculture received only 20 per cent of the total funding. The main characteristic was self-funding, bank loans not being a common practice (in households, about three-quarters of the funding sources came from personal savings). The cause was the lack of collateral, the lack of dialogue with banking institutions and, in particular, high interest rates. There are few investments made and generally they express a lack of a modern thinking in farm organisation and tend to a reconstruction of the old traditional rural household. The main dysfunction stems from deficiencies in the credit policy and the lack of efficient investments to support farmers' incomes.

3.2.6. Agri-food processing system

The system of industrial processing is an important destination for agricultural production in any country. In Romania this system accounts for 20 to 25 per cent of industrial activity and many of the processing companies have closed down because of inefficiency or lack of raw materials. Generally, the production units, being very large units with obsolete technologies, are totally inadequate for the present ownership structure. Only a third of them was privatised, and very few small and medium-sized private companies emerged. The dysfunction is a non-consolidation of a sector, complementary to agricultural activity in the rural areas.

3.2.7. Technical endowment

Although in the 1990s a vast amount of agricultural machinery and tractors was purchased, the present endowment cannot ensure mechanised practice in the optimum periods: there is a lack of specific machines and others are obsolete. In the last few years private farmers have purchased more equipment; in fact most of the equipment is in private hands. Farmers do not always appreciate the mechanised processes performed by the state farms, or consider them too expensive. The deficiencies in this field have extremely severe consequences for agriculture. Technical advances have essentially positively influenced agricultural performance in only the European Union countries.

3.2.8. Input consumption

Production in recent years has been vulnerable because of the insufficient inputs into agriculture. The new landowners neglected the role of quality seed. This situation was exacerbated by legislative restrictions and by the lack of a structure for rural services within an easy reach and at affordable prices for farmers. The use of non-certified biological material of low quality (generally from the farmers' own production) resulted in low yields and the continuous diminution of farming, particularly those that specialised in seed production. A decreasing trend was noticed in the consumption of fertilisers and other agrochemicals. This crisis in inputs is because of the lack of a market for inputs that should be adjusted to the new ownership structures, to the gap between the price of industrial and agricultural products, to farmers' lack of funds and to an inefficient system of financial support for agricultural production.

3.2.9. Associations

Agricultural associations are almost exclusively associations for production purposes. The current system of association is not a genuine collective process and in general has a negative motivation. Most of the reasons for the practice are non-economic, such as the landowners' old age, lack of technical skill or machinery, lack of operating capital, the landowner's residence in other area, and the lack of a legal framework to regulate the land market. Association farming is characterised by variations in the type of association, by the numbers involved and the size of the land areas. Associations exist mostly in a family form (family associations being the most frequent, but of quite a small size). Legal associations are fewer, but their average size is four times larger. Farms having the majority of state capital, former state units, are very large, which makes them difficult to manage and inefficient.

The major deficiency in this field is the lack of a genuine co-operative system, permeating all stages of agricultural production.

3.3. Strengths and resources of the agri-food sector

Despite the existing weaknesses, Romania also has strong points, worthy elements that can contribute to a modern agriculture.

3.3.1. Land resources

Romania has an agricultural land area totalling 14.8 million hectares and 6.7 million hectares of forest. Arable land accounts for 30 per cent of the total area of the country. Soil quality is one of the best, high quality soils existing over vast areas. Soil degradation and pollution do not affect significant areas of land.

The diversified structure of land areas, according to the land use categories, contributes to the great diversity in crops. An important characteristic of land use is the significant regional diversity of land, which contributes to a relative zone specialisation, to the utilisation for certain "vocations", that is vineyards in Dobrogea, Vrancea, central Moldova, Tfrnave, etc., potatoes in Bra-ov, Covasna, wheat in plain of BçrÇgan, etc. This is quite a good premise for obtaining certain trademark products of higher quality.

3.3.2. Human resources

According to the census data, in 1992 the rural population reached 2.2 million. Further surveys indicated an increase to 3.5 million people in 1997.

The first explanation for this increase could be that after 1992, when restructuring took place in industry, some of the former agricultural workers, who had emigrated to industrial towns, came back to their villages, to agriculture. This assumption is only half-true. The figure of 3.5 million people largely stems from the fact that certain persons who farm resituated lands (either their own or their families') are working part-time in agriculture. Some of these people continue to live in towns. The real modernisation of agriculture will be done with the help of village inhabitants. The new development scheme for rural areas must be worked out especially for them. There are 10.1 million inhabitants living in administrative territorial units and having rural status. This is less than half of the country's population – 45.5 per cent in 1998. The diminution in the rural population continues at present, at a lower rate, because of the negative natural population balance, caused by a very high mortality rate.

On average, the rural population is undergoing the demographic ageing process, more than 22 per cent of the population being over 60 years of age; the average age of the rural inhabitant is 36.6 years, much higher than that of the urban population.

However, in Romania there are great differences between the demographic characteristics and perspectives of certain rural areas these being mostly explained by the emigration history of the last decades, that also depended on collectivisation of land and means of production. Thus one can explain a paradox in the regional development of Romania, where the zones with the most severely ageing population and with the most unbalanced demographic structures, affecting the capacity of population regeneration, are the plain and plateau regions, the same areas that have valuable soil resources. These were the collectivised zones, which were abandoned by a large number of rural people.

The regions that maintained their demographic balance, where the population's demographic vitality prevailed and ageing was slower, were the mountainous zones where land was left in the citizens' ownership.

Despite the indices highlighting the ageing of the rural population, as a result of continuous population decreases in the last decades Romania is in an advantageous situation. It has an age group from 15 to 29 years old, very numerous in real terms and proportionally much larger than the age group preceding it (30 to 44 years old) and which it will replace on the labour market. In 1990 this young age group was still in the rural areas and did not migrate in a similar proportion to that of the young population of the communist period. This is the main population group that will support the future rural development in Romania; it represents a real asset for the rural areas and for agriculture in particular, as it is a dynamic, innovation-receptive population category. This is the target group on which rural development should be particularly focused. Their presence in the rural areas means taking urgent intervention measures; in rural area development and in an agricultural modernisation strategy the programmes for youth support and protection must have an important place.

Different situations throughout the country impose a regional differentiation of objectives and of the means to reach these objectives.

3.3.3. Current and potential employment

Agriculture employs a very large number of village inhabitants, 47 per cent of them work in this sector. The remaining 53 per cent have jobs in non-agricultural sectors. This does not mean that village economy is divided into an agricultural and non-agricultural economy. Villages have less non-agricultural activities, as many non-agricultural employees living in the rural area have jobs in towns. Many non-agricultural skills are related to the exploitation of soil and subsoil resources (forestry, mining). It is worth mentioning the existence of persons with non-agricultural qualifications (this implies a higher degree of schooling and vocational education and a more developed entrepreneurial spirit) that can be used as a professional stock at village level. There are great differences among the country's zones as regards non-agricultural employees in rural areas. In certain regions the non-agricultural population accounts for only 20 to 25 per cent of total population, while in others the non-agricultural population has a large share (from 60 to 70 per cent).

In many regions, the high percentage of non-agricultural population is correlated with the percentage of the young population; this offers good prospects for the region's future. There are also areas where agricultural workers are in the majority (over 75 per cent), most of them being very old. This is the situation in the plains and the less developed regions of the country. These areas will pose the most difficult development problems, as they also require a modification of the inherited development pattern.

The employment aspects linked to population are one of the most valuable development assets. Thus one can appreciate that the rural zones located near the influence of towns as well as the hilly and sub-Carpathian regions have the best prospects for diversification of the rural economic structure, based upon a multifunctional agriculture.

3.3.4. Environment quality

The low degree of technical advance in agriculture permitted the good quality of the natural environment to be maintained in most parts of the country. The sub-Carpathian hills and the mountainous zones in particular have ecological conditions which allow the production of healthy crops and livestock products and also offer special conditions for the development of agro-tourism. The pollution generated by industrial or livestock activities, as well as by soil management (irrigation, drainage) is generally local and small-scale, mainly in the plains areas.

3.4. Principles and strategic objectives

From the above analysis of weaknesses and strengths in Romania's agriculture, it is apparent that the land and the human resources are both valuable assets for agricultural development. It is the modernity and organisation elements that are lacking that might make these two factors work profitably, qualitatively and competitively.

The improvement of the agri-food system can be achieved by developing policies that will remove all of the above-mentioned drawbacks. All policies must be guided by two basic principles:

- they must be in alignment with the European Union requirements formulated in a series of documents of the European institutions;
- they must comply with specific local needs.

The most important principles of agricultural modernisation are the following:

- agricultural policy should be conceived as an important part of the rural development policy (this means that agriculture must be considered in the context of rural economic activities, together with the system of related services);
- modernisation activities should be conceived in the context of sustainable development, while protecting and preserving the natural resources and environment quality;
- the placing of the farmers' and rural population's interests at the core of development programmes is vital;
- agricultural and rural policies must be considered as a priority for political action;
- the state must be involved in solving the main problems of infrastructure (technical, educational, health), considering the low financial capabilities of rural communities;
- the particularities of each area must be preserved in a combination of activities.
- the need to reduce the disparities between regions must be addressed.

Given the large number of negative aspects mentioned above, the action plan for Romania's agricultural reorganisation and modernisation has included almost all fields: technical and technological, environmental, institutional, legal, educational and vocational, life and working conditions.

Below are some of the strategic objectives of agriculture modernisation:

- stimulation of small and medium-sized private family farm consolidation, as an optimum form for Romanian agriculture. The psychological climate in the rural area supports this as shown by the interest manifested by farmers, by the people's initiatives, by valuing work as the main source of success in life;
- stimulation of farmers' co-operation and associations in ante- and post-production activities, giving up the large collective-type agriculture for production purposes (that was practised in the first years after 1990 in certain areas). The association must primarily give advice to farmers, as well as provide the necessary materials for crop establishment. In the associations for the sale of products, activities that correspond to the local infrastructure conditions, to the need of jobs in the area, to the marketing traditions, should be stimulated;
- investment stimulation in the production and processing sectors that contributes to the diversification of agricultural produce destination;
- completion of the legal and functional framework in order to face the competitive pressure from the world and European Union markets;
- creation of a framework for professional and managerial training of young people in the rural areas who wish to establish modern farms; establishment of a rigorous programme for training assistance for Romanian farmers by western farmers (whose experience is often called upon in a non-organised way).

The most important effects of agricultural modernisation are those which can be seen locally and regionally (apart from its contribution to economic macro-stabilisation).

Putting into operation a dynamic system of agriculture will be achieved in each zone by:

- infrastructure improvement;
- development of sectors complementary to agriculture, both in towns and in rural areas;
- increase of job diversification;
- satisfactory incomes for rural people;
- conservation of environmental quality;
- increase of rural area attractiveness.

As Romanian rural areas are very much dependent on agriculture, the underdevelopment of the agricultural sector is fully reflected in the underdevelopment of rural areas in general.

Romania's rural areas have great deficiencies in their economic development, equipment, infrastructure, housing and services. In the last three decades the rural population decreased by about 20 per cent while the general population increased throughout almost the whole period. The average rural development level is below the national level and well below the average rural level in western Europe.

In these circumstances, certain underdeveloped rural areas are in significant economic and demographic decline. In this category there are mostly zones with non-diversified economic activity, mainly agricultural. In these zones over 70 per cent of the population is an agricultural population, with an elderly population consisting of more than 30 to 35 per cent, and the average age is 40 to 45 years.

Despite all this, rural underdevelopment is not officially defined, while the areas in this situation are not yet included in the new law of regional development.

Research, especially regional planning research, has existed for several years in the identification, delimitation and investigation of problems and potential specific to these rural areas with development drawbacks. There were also initiatives from some government departments to work out special programmes including certain measures for supporting these areas.

At present, the problems of the Romanian village are the focus of plans in many government institutions. The Ministry of Public Works and Regional Planning is particularly interested in village conditions and runs a programme for the improvement of local road transport infrastructure and of drinking water supply. There are attempts at a rural development policy, with special attention given to disadvantaged areas, at the level of the Ministry of Agriculture and Food. The Ministry of Industry and Trade is concerned with the reconversion problems of certain mining areas that rationalised their activity, many of these being rural zones or zones influencing the rural area.

In all of these fields, agricultural activity plays an important role and by its diversification it will have to make up for the jobs that disappeared in other sectors, and provide jobs that use staff with non-agricultural qualifications in activities related to agriculture, such as forestry and agro-tourism. Any action to support agricultural activities in these fields will contribute to narrowing the gaps in territorial development.

The future of rural areas in central Europe and the impact of Agenda 2000

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1. Introduction: the role of ECOVAST

Thank you for the chance to speak from the standpoint of the European Council for the Village and Small Town. ECOVAST is a pan-European non-government organisation set up in 1984 in order to promote the well-being of rural communities and the safeguarding of the rural heritage throughout Europe. It has over 500 members in twenty-eight countries in east and west Europe. The membership is widely drawn to include individuals, government and non-government bodies, from local to international level.

ECOVAST operates mainly as a network to help its members in pursuing their activity in rural areas. We have national branches in Croatia, Estonia, Germany, Hungary, Italy, Poland, Romania, Russia, Slovakia, Sweden and the United Kingdom and others planned in other countries: these provide a focus for exchange and activity within each country. We have active working groups on rural architecture, rural development, and rural tourism. We have consultative status with the Council of Europe, and with the European Commission. We organise conferences, seminars and other events, and send technical missions to advise on rural development and heritage protection. We take part in major practical projects including the successful creation of Heritage Trails here in Slovenia.

ECOVAST's "Strategy for Rural Europe", published in 1994, sets out our policy approach. It emphasises our strong commitment to a joint focus upon the people and the heritage of rural Europe, and to the mutual support which can and should be found between these two broad interests.

Mr Bassi said at the beginning of this seminar that the purpose was to search for principles for the evolution of rural areas in Europe. I offer five principles, without claiming that they are comprehensive.

2. The move to a comprehensive rural policy

First, we should recognise that, throughout Europe, we are in the process of a major change from a purely agricultural policy to a comprehensive rural policy. This process started about ten years ago, and I sense that it has another ten years to run before it is fully realised.

Franz Fischler, as Commissioner for Agriculture and Rural Development, understands this. He spoke, in his address to this seminar, about the need to create "sustainable, viable and attractive rural areas". At the Cork Conference in November 1996, there was a call for a European Rural Policy to be set alongside (and in due course to subsume) the Common Agricultural Policy. One must recognise that there is too much political capital wrapped up in agriculture for this radical change to be acceptable yet. But ideas are changing, and we welcome Franz Fischler's statement that the Commission sees the rural development programmes as the "second pillar" of the CAP, as amended under Agenda 2000.

To emphasise the need for a comprehensive rural policy is not to dismiss or diminish the crucial and continuing importance of agriculture. Agriculture is needed as the producer of food and fibre and energy; as a key contributor to the economy and to employment; as a source of raw materials for added-value enterprises; and as guardian of the landscape and the environment. These crucial roles are fully recognised in the report "Agriculture and Forestry: Sustaining their future in Europe", which ECOVAST published in 1997. The challenge, addressed in that report, is to find a truly sustainable basis for these great industries within the context of the political and economic changes proposed in Agenda 2000. Continuing and widespread action, specific to agriculture and forestry, is needed throughout Europe. In central Europe, that action must include solutions to the great problems of land reform, finance and modernisation of farming.

However, alongside this continued work in agriculture, we need comprehensive rural policies, which embrace other sectors of the economy, such as industry, crafts, service industries and tourism; and other aspects of rural life, such as housing and local services. The formulation and pursuit of such policies must involve all the people who live in rural areas, bearing in mind that in much of rural Europe the farmers are now a minority within rural populations.

In the European Union, policies and programmes of this kind are rapidly being evolved, through the Leader programme and other initiatives, but there is still a long way to go. In much of central and eastern Europe, the process of developing comprehensive rural policies is only now getting started, after the long period under command economies when governments effectively looked to rural areas only for supply of food and timber, when even the processing of these was largely done in the towns, and when no other economic activity was encouraged in the countryside.

3. The scope and funding of rural development programmes

Second, the new rural development programmes must be truly comprehensive and properly funded. It is good to hear Franz Fischler speak of an integrated policy for rural areas, embracing support for farm investment, for the environmental role of farmers, for diversification of the rural economy, village renewal and so on. However, the wording of the

Agenda 2000 proposals suggests that the new rural development programmes within the European Union will be financed from the FEOGA funds; that their scope will be confined to activities which are directly related to agriculture; and that funding for activities "off the farm" will be severely constrained.

The basic problem seems to be that the European Commission, and the European Union member states, still see the economies and populations of rural areas as being based on, or as an extension of, agriculture. As a result they propose that the main European Union funding for rural development should be found by a switch of money from agricultural funds, rather than taken more broadly from the structural funds. In response, agricultural interests, faced as they are with severe changes to their financial regimes, naturally tend to oppose a switch of funds from agriculture to broader rural interests.

In our view, that should not be the issue. In the European Union, the majority of the rural population, and the larger part of the rural economy, are not connected to farming. They have their own needs and justifications for funding, based on the problems of the rural areas *per se,* and upon the key point that problems which are not solved in the rural areas will lead to greater problems in the cities if people are obliged to move from the countryside into the towns. The answer is not funds diverted from agriculture, but structural funds devoted to the rural areas in their own right.

As for the countries of central Europe, ECOVAST warmly welcomes the proposed SAPARD programme within Agenda 2000. This, if approved, will be the first programme of European Union funding to be related specifically to rural development in the accession states. We hope that the governments of these states will use this stimulus to prepare truly comprehensive rural development programmes. But, again, one must ask whether the funding will be adequate. The European Union is effectively offering an average of 50 million ecus per accession country per year. This will be a start, but it will not go far. We therefore urge the governments to prepare their rural development programmes in a way that will enable them to draw down funds not only from SAPARD, but also from Phare, the EBRD, the World Bank or other multilateral or bilateral donors.

4. Tempering globalisation with local pride

Previous speakers have emphasised the strength of the process of globalisation, for example in the fields of culture, multinational companies and biotechnology. All Europeans can gain benefits from this process, for example through being able to buy high-quality cars at reasonable prices.

But I believe that there is a growing reaction against too much globalisation. This is reflected in a growing public interest in what is local, special or diverse, whether in products, landscapes, music, the arts or other fields. In parts of western Europe, people in considerable numbers are moving out of the cities to live in small towns, villages or the countryside, in a search for local roots, for a distinctive style of life and for the social contacts that can be found in small communities.

The principles of sustainability, too, argue for a greater degree of localness in human activity. I was recently shocked to find, in Estonia, large lorries carrying uncut roundwood logs from the Estonian forests to the port of Tallinn, to be exported for processing in sawmills and pulpmills in Sweden. This procedure not only wastes energy and creates pollution through the

long-distance transport, it also robs Estonians of the added value which they could gain if they cut their own timber; and it removes from them the material which they could use to continue, in modern form, the tradition of timber building.

ECOVAST believes that rural development programmes should be so conceived as to build on this growing interest in localness and on the concept of sustainability. Rural development should indeed both use and further inspire a sense of local pride. This can be reflected in the promotion of local products; in emphasis upon the specialness and quality of those products, through (for example) the use of *appellations controlées* and of *denominazioni de origine controllata;* and in the promotion of added value to food, wool, timber and other local products. It can be reflected also in the protection and celebration of local culture and use of that culture in programmes of green tourism; in planning policies which sustain in modern form the traditions of building; and in measures to sustain the ways of life which created our cultural landscapes whose diversity is so rich a part of the heritage of Europe.

5. Landscape: a major asset for rural Europe

Previous speakers, notably Professor Ogrin, have described something of the remarkable wealth and diversity of the cultural landscapes which we Europeans have inherited. A spatial development strategy must take account of this remarkable heritage, not seeking to freeze the landscape, but rather to assist its evolution in a manner which meets modern needs but which protects the quality and diversity of the landscape. This is part of the responsibility faced by CEMAT as they prepare a spatial development strategy for this continent.

However, I say to CEMAT that spatial or physical planning is not alone enough to sustain the quality and diversity of the landscape. Landscapes need day-to-day management. They are affected by policies across a wide field, including agriculture, forestry, tourism, water supply, telecommunications, transport, etc. They depend upon the decisions and actions of landowners, householders, voluntary bodies and private interests, as well as public bodies.

That is why the Congress of Local and Regional Authorities of Europe has brought forward the draft European Landscape Convention, on which I had the privilege to work as an expert adviser. This draft has now been referred by the Committee of Ministers to the Cultural Heritage working group (CC-PAT) and to the Pan-European Biological and Landscape Diversity Strategy (PEBLDS).

I understand that CEMAT has discussed this proposal, and that some members may be concerned about the growing number of existing or proposed conventions. Allow me, therefore, simply to make the point that no other convention, existing or proposed, relates to the landscapes of the whole of Europe. The Bern Convention relates to sites of special value for nature conservation; the Granada Convention to sites of historic or architectural interest; the Charter, or possible Convention, for Rural Areas excludes the cities and is not primarily focused on environmental issues. None of these are concerned with the whole of Europe's landscapes – urban, peri-urban and rural – which provide the day-to-day setting for the lives of European citizens.

Moreover, the draft convention, if adopted, will not place a frightening degree of new burdens on member states. The commitments implied by it will build on what many governments or local and regional authorities are already doing. At the inter-governmental conference on the draft convention, held in Florence in April 1998, representatives of some thirty governments expressed support for the principles set out in the draft. For these reasons, I believe the draft deserves a fair hearing.

6. Rural development is about people

Finally, rural development is, above all, about people. The process of rural development must spring from the energies and aspirations of the people.

Mr Franz Fischler spoke of rural development as a "bottom-up process". The Leader programme is showing how rural development programmes can be used to release the latent energy of the people, so that they take the prime responsibility for articulating and meeting their own social needs and for strengthening their own local economies. This is by no means an easy process, even within the democratic systems of the European Union. It can present an even greater challenge in central Europe, where the era of command economies tended to suppress the voice of the people and to discourage local initiative.

The challenge, for central and eastern Europe, is to develop a "civil society", as an ally for the public bodies and a stimulus for local action. We in ECOVAST are working, with our national sections in central and eastern Europe and in the European Union, to develop a programme of local mobilisation and capacity-building in central Europe. This programme will start in the Carpathian Euro-Region, which embraces parts of Hungary, Poland, Romania, Slovakia and the Ukraine, in co-operation with the Carpathian Foundation.

We urge the governments of the accession states to include in their SAPARD plans a programme for the strengthening of civil society, and for mobilising the interest and energy of the people in their rural regions. ECOVAST, as a non-government organisation with national sections or members in all these countries, will be glad to assist this process. We will be in further contact with these governments to offer help.

THEME 3

A COMPREHENSIVE AND COHERENT APPROACH FOR ALL RURAL AREAS IN EUROPEAN COUNTRIES

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A COMPREHENSIVE AND COHERENT APPROACH FOR ALL RURAL AREAS IN EUROPEAN COUNTRIES

Establishing and monitoring a balance between urban and rural areas

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RURAL SPACES

1. Facing the changes and challenges of the twenty-first century

Continuous exponential economic growth has come to a halt in all the developed countries and has never really got off the ground to any stable, sustainable extent in the developing countries, with one or two exceptions.

This state of affairs, combined with monetary instability (particularly in Asia and Russia, etc.), high unemployment, ailing cities plagued by violence and poverty, the decline of certain traditional occupations, the profound changes affecting agriculture, the difficulties encountered in world trade talks and so on, all characterise the long-term structural crisis we are currently enduring, which promises profound changes as we enter the twenty-first century.

These unmanageable social and economic realities are accompanied by certain, not necessarily new socio-cultural and economic phenomena the vocabulary of which is revealing: new theories on the social economy, local development, alternative production systems, citizen participation, territorial identity, promotion of local areas, and so on.

These new schools of thought, which are often born in the city as a form of protest, have difficulty making a lasting mark there. They are all too often overshadowed by violence and brutality, extremism and fundamentalism, drugs, popular disillusionment, sectarian trends, fuelled by unemployment and poverty. The lack a clear vision of the future and the loss of family and territorial reference marks accentuate the problem. Young people are the worst hit; for many of them unemployment runs in the family.

In rural areas these new ideas are assessed in very positive terms and play an active part in the revitalisation of the countryside currently visible in most European Union countries.

Consequently, although the general trend towards urban concentration is as strong as ever and social movements will continue to develop in the cities, we should be looking to rural spaces as a hope for the future, as areas destined to play a part in the development of the regions.

2. Towards a new deal: rural spaces as welcome partners in regional development

The European Conference of Ministers responsible for Regional Planning referred to this new deal in Vienna back in 1978, maintaining that in an economic system that no longer guaranteed continuing growth, the rural world had a real capacity to adapt to the essential changes and the new forms of social life that would emerge in the future.

In northern Europe, particularly in France, numerous rural areas devitalised by the loss of their best-trained people demonstrated in the early 1960s, through development projects, that these were not empty words, that they were indeed capable of reacting and reviving development in sectors previously considered beyond hope. Yet government policy in the EEC member states and subsequently in the European Union has persisted in seeing rural areas as nothing but agricultural land. As a result, states have focused all their energy on urban development, concentrating economic activities, infrastructures and services in the cities.

Concerned as they were for their own future, the rural areas failed to project themselves as potentially very useful partners in the development of urban and regional poles of activity.

When it opened its doors to Spain and Portugal (at a time when social unrest in the cities was already very palpable), the European Union missed its appointment with balanced regional development. A missed opportunity to spare the rural areas in those states the fate of their counterparts in the other member states.

The eastward expansion of the European Union is a new opportunity and one we must not miss.

Let us trust that at the CEMAT in Hanover, in the year 2000, the ministers responsible for regional planning will clearly express the role of states in the future of rural spaces and the position they must occupy in regional planning and development strategies in the European Union.

However, if they are to participate fully in this new deal and contribute to its materialisation, rural spaces must be aware of their future and the role they have to play, and be capable of visualising and defining that role and negotiating it with the cities and with regional and national decision-makers.

If we accept and consider this new vision of relations between rural spaces and urban centres in terms of mutual interest and synergy rather than as the domination of one by the other, we must not overlook the fact that rural and urban populations today have the same aspirations and expectations, and that rural areas should therefore be placed in a situation of competition with urban spaces (housing, lifestyle, environment, assistance to families, children and infants, education, cultural provision, etc.).

Relations between rural and urban spaces must accordingly be based on development projects negotiated on an equal footing in the context of regional spatial development policies.

Engineering is a decisive factor in helping rural areas to build and work towards this new deal.

In view of the changes in store and of Europe's unique place in the world, it would be a great shame to deprive our world of the wealth of its cultural diversity; this is a major issue and one that cannot be ignored.

At present, all over Europe, in the race for a competitive edge, decision-makers, seemingly unmindful of these realities and of the need for spatial development policies, continue to focus on urban centres. A region's development potential is measured in terms of critical mass, density of towns with more than 100 000 inhabitants and so on. All these criteria, be it human resources, quality of life, even culture, are measured and weighed in quantitative terms. It is very difficult in these conditions for less densely populated areas, too often seen as farming areas relying on subsidisation for their standard of living, to put themselves across as potentially worthwhile partners.

3. The rural area: a thing of the future or a thing of the past?

The economic battle is set in a global context, and there is truth in the commonly accepted idea that it is waged first and foremost by the large cities. But decision-makers must be made to realise that, as confirmed in the Jouve and GERI reports in France, investing in the repositioning of rural areas in regional, national and European spatial planning policies is a wise move because:

- they cover vast, available expanses of Europe, which zero population growth and urban concentration are combining to depopulate;
- they are used to functioning autonomously (high percentage of small businesses, farmers, craftspeople, etc.);
- the labour force is reliable and takes the interests of the firm to heart, as the future of the local area is often bound up with them;
- social relations marked by conviviality and solidarity add to their value as healthy residential and leisure areas;
- they have objective advantages to offer firms (proximity to the production site in the agri-food and timber industries, for example), provided that the areas concerned are properly equipped with telecommunications, transport infrastructures and so on.

The rural development in question is not a return to “paradise lost”, and rural identity (specific to each region) is not defined and developed solely in relation to the past but above all in a context of spatial, economic, institutional and cultural reorganisation.

Everywhere in Europe the rural areas which have embarked upon this course have recognised the advantages of a programme combining the permanent values of “rural tradition” with the latest advantages which modern science and technology have to offer.

There is an element of paradox in the fact that in order to revitalise those areas in greatest need, one has to apply the most effective public and private management techniques together with the most appropriate and the most finely tuned tools of social science.

Bearing in mind the special features and requirements that characterise it, integrated rural development may be said to be a combination of various elements: political theory, a spatial planning method, an action and management system, a promoter of new political and civil relations, a socio-economic programme and a budgetary technique.

Without a negotiated plan for the future, rural areas will continue to be defined only in terms of the role the cities attribute to them (farming, nature, leisure activities and so on), but with no corresponding financial or legal provision. This is hardly surprising when present economic and tax mechanisms have a strong tendency to distribute wealth where it already exists, thereby further penalising the zones where there are few people and therefore little wealth.

It is therefore up to rural areas to make the most of their differences (space, environment, relational system, etc.) by turning them into key assets, and to open their doors to the new information and communications technologies, which will enhance their economic competitiveness as an alternative to the traditional city-based economy.

In keeping with this logic, traditional economic activities, bolstered by a microeconomic strategy to promote local resources through products with a strong social significance for the consumer (from farm to plate, from forest to furniture, for example), will be strengthened by improved integration into the local social economy. Tourism then performs a major promotional function, linking city-dwelling consumers with rural producers.

By bringing markets and their operators closer together, the new technologies open up economic and cultural prospects for rural areas that are easy to imagine, without them abandoning their distinctive spatial and social characteristics or waiting for urban economies to relocate.

To rise to this challenge, the rural spaces of the European Union must be able to rely on engineering resources and the support of development agencies, as envisaged at the time of the Leader 1 initiative. Those rural areas which have managed in this way to embark on an integrated course of rural renewal must strive to develop balanced relations with the urban centres. But they need to be constantly supported in their efforts and to be given their rightful place in spatial planning policies.

Although Leader 1 was not open to all the rural areas which needed it, we were optimistic enough to imagine that the message had got through to the European Union since it was supporting integrated development strategies and the emergence of development agencies such as the IDC.

With Leader 2, set against the backdrop of subsidiarity, we are not so sure. Let us hope that in meeting the challenges of Agenda 2000 the European Union's member states will succeed in anticipating and correcting any adverse effects they might have on farming and the rural environment.

At a time when certainties are giving way to doubts about what development strategies to implement, in these times of single currency and enlargement, when so-called developed countries, where growth is taking a long time to pick up significantly, exist and will increasingly exist side by side in the European Union with countries and areas which are still developing, or even losing ground, we must implement regional spatial development policies that see rural areas in terms of spaces full of potential, resource spaces where it is possible to test and correct regional development strategies and, by a genuine spatial policy, create the conditions for balanced, cost-effective development, in social and economic terms.

Alongside urban centres and their role as a driving force and a showcase, rural areas are essential to the development of the regions in the European Union.

This is a fundamental principle if centres of activity are to play their part and win their wager and the regions are to reap the benefits of the profusion and diversity of local areas. However, as is customary in relationships where one partner has the upper hand, it is for rural regions to impose themselves as essential partners of the cities, to demonstrate what the new deal has to offer them and show how they can contribute to it, to give these rural centres and regions a dynamic and attractive image.

By offering rural spaces a challenge and practical measures to steer them into the twenty-first century, planning authorities would allay the fears of these areas and find active and imaginative partners in them.

It is essential in my opinion that the opening up of the European Union to the countries of eastern Europe, many of which have deep-rooted rural traditions, should at last be taken as an opportunity to make tangible headway in this direction, by giving these areas access, at the same time as urban areas, to the infrastructures, amenities and technologies which are essential to development.

These are the goals to which we are committed in the European Rural Movement, which the RED association has initiated with other European organisations and which it co-ordinates.

Defining the role and function of urban centres and other settlements in rural areas (developing rural centres, maintaining population levels)

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1. France is currently revitalising its regional planning policy

The concept of regional planning was introduced in 1947 after the publication of J.-F. Gravier's book *Paris et le désert français*. The book describes the Paris-orientated centralist approach as one of the causes of demographic, economic and cultural imbalance, and as a hindrance to France's harmonious development.

Until the start of the 1970s, regional planning policy was concerned with redistributing the effects of economic growth; the spoils were shared out between Paris and the provinces on an extremely voluntarist basis by the state, which had a good deal of influence on the choice of location for key economic agents.

In the early 1970s, the economic crisis led to policies favouring regions which were considered to be in a critical state; hence the beginnings of policies on mountain and rural areas and the setting up of FIDAR, the Interdepartmental Rural Development and Planning Fund. Efforts were made to emphasise the potential for development from within the regions themselves, and the state opted for a strategy of assisting microeconomic performance, although in France the return of the pendulum from exogenous to endogenous development was still limited.

At the start of the 1980s, matters were confused by a number of factors:

- the introduction of decentralisation, which placed a temporary check on state intervention, although local authorities had not taken over totally from the state;
- the growing influence of Europe and its regional aid policy, which is based on financial and technical instruments that are sometimes more powerful than those of the states themselves; as a result, the French central authorities at times feel as though they are caught in a cleft stick between Europe and the regions;
- globalisation, a phenomenon which, although not new, is gathering momentum and destabilising previously stable positions; now, there are only temporary situations whose advantages and disadvantages are somewhat precarious;
- the increasing complexity of the region as a concept. Our economy is made up of networks, whose centres are nothing more than intersections in a vast system in a state of flux; in this context, the centre/periphery model is becoming increasingly irrelevant (for example, does the development of Toulouse depend more on the state of the economy in the Midi-Pyrénées region or on the city's relations with Paris?) These trends encourage an intricate spatial and organisational web-like structure with greater interdependence between nuclei and better integration of the spaces in between.

In this difficult context, regional development policy is evolving relatively slowly, but the Outline Regional Planning and Development Act (4 February 1995), complemented by Ms Voynet's bill, is now clarifying the issue considerably.

Current regional planning policy has a straightforward aim: to ensure that development is balanced in terms of space and time (sustainability), quite simply because the polarisation of activities and the consumption of natural resources raise a number of problems for the future such as, pollution, the renewal of resources, and social marginalisation; state intervention is justified by the recognition that the market cannot enable this goal to be achieved, because it does not operate in this way (financing certain external aspects of agriculture, for example, is problematic) or because it generates adverse effects.

France's current regional planning policy sets out to strike a balance between the following three objectives:

- economic performance;
- social cohesion;
- the quality of the environment.

The innovative aspects are:

- the objective of sustainability and the concern for balanced development, not only in terms of space, as before, but also in terms of duration;
- the assertion that regional planning is no longer merely concerned with infrastructures and concrete, but is chiefly concerned with organisation;
- the assertion that a country forms a whole and that one cannot attend to part of it without attending to all of it; this means firstly that action should primarily be based on sectoral planning policies rather than remedial policies (to take an example from the agricultural sector, more effective assistance can be given to mountain regions by promoting extensive livestock farming in the organisation of agricultural markets than by injecting subsidies locally), and secondly that rural development policy should aim to find ways in which towns and countryside areas may mutually support each other;
- regional planning concerns everybody, and not merely the central authorities, Europe or local authorities; hence the importance of developing participative democracy at local level.

2. Evolution of the definition of rural areas

"There is no such thing as 'the rural area', any more than there is such a thing as 'the average Frenchman'", wrote the National Planning Commission in a November 1998 report on the prospects for the development of rural areas.

2.1. Two approaches to the concept of rural areas

The concept of rural areas may be approached in two complementary ways: one statistical, the other sociological.

From a sociological point of view, rural areas may be identified, according to the geographer Bernard Kayser, "by a specific type of land use and a particular way of life; they are characterised by: a relatively sparse population and housing density, landscapes dominated by vegetation, and economic activity centred on agriculture, livestock farming and forestry; a way of life in which the inhabitants tend to belong to very small communities and have close ties with their local area; and, lastly, a specific identity and image that are heavily influenced by peasant culture".

Nevertheless, although the specific features of rural areas are easily identifiable in terms of land use and the organisation of land, they are less so in terms of social organisation; local communities are undergoing radical changes as a consequence of widespread improvements in mobility and the forming of various networks on a larger scale than that of a village; some rural areas now operate in a similar way to towns.

From a statistical point of view, the definition of rural areas has also evolved considerably.

In 1954, communes were reclassified into urban units by the National Institute of Statistics and Economic Studies (INSEE); these units were defined as groups of dwellings that were a maximum distance of 200 metres apart, with at least 2 000 inhabitants. This morphological definition adopted a population threshold that had been in use since 1856. Hence a distinction was made between urban areas (towns), with their tight concentration of dwellings, and the remaining areas, that is, rural areas (the countryside). Very soon, however, the idea of an urban/rural or town/country dichotomy proved too simplistic. A proportion of the population left urban areas to live in the country, while continuing to work in towns. Suburban areas thus grew up, featuring communes which were rural in appearance but which also contained aspects of urban areas, thanks to the lifestyles of their new inhabitants.

In order to take these developments into account, INSEE created the category of industrial or urban population areas (ZPIUs) in the 1960s. Depending on the proportion of the employed population working outside their local area and the proportion of households supported by agriculture, a distinction was drawn between rural communes regarded as being under the influence of towns (rural areas within ZPIUs) and those which were "deep in the countryside" (rural areas outside ZPIUs). This definition remained unchanged for thirty years, the classification of communes into the different categories simply being brought up to date after each population census.

However, owing to the rapid increase in distances travelled from home to work, which has been made possible by the widespread use of the car and improvements in the road systems, and the decline in the number of people employed in the agricultural sector, the number of communes belonging to urban units or located within ZPIUs rose from 9 000 in 1962 to 28 500 in 1990; by then, these communes accounted for 96 per cent of the population of France. Although these figures highlight significant social and economic developments, the categories on which they are based no longer allow us to draw any meaningful distinctions between types of area, other than to conclude that the influence of towns is both ubiquitous and homogeneous.

INSEE therefore proposed a new classification of communes in 1996, by means of zoning in urban areas (ZAU), based on a more restrictive approach to towns and suburban areas. Urban centres represent the largest urban units: those providing at least 5 000 jobs, and with a minimum of 8 000 to 10 000 inhabitants. Suburban communes are defined by the high proportion of the employed population (at least 40 per cent) working in urban centres or in other suburban communes under the influence of these centres. In this way, France is divided into predominantly urban areas (urban centres and suburban communes) and predominantly rural areas. The first category contains 13 300 communes and 76 per cent of the population of France, while the second category contains 23 300 communes and 13.4 million inhabitants.

As far as rural areas are concerned, a joint INSEE/INRA (National Institute for Agricultural Research) working party has suggested a further division into four categories.

Rural areas with a slight urban influence form an additional ring around predominantly urban areas. They consist of communes where at least 20 per cent of the working population travel to work in urban areas every day. This category covers an area comparable to that occupied by suburban communes, but with half the number of inhabitants.

Rural centres are small urban units providing employment for between 2 000 and 5 000 people, where there are more jobs than actively employed residents. They therefore act as a magnet for the surrounding area and play an important role in its structure.

The periphery of rural centres comprises communes where at least 20 per cent of the working population travel to work in rural centres every day. However, the ring which they form does not cover a very large geographical area.

Finally, isolated rural areas form the remaining category, which nevertheless covers over one-third of the territory of France and contains 10 per cent of its population.

3. The future of rural areas

3.1. Are we witnessing the revival of rural areas?

Table 1: Rate of population change

Category of area	Annual rate of population change			Net annual migration rate
	1968-75	1975-82	1982-90	1982-90
Predominantly urban areas	+ 1.21	+ 0.59	+ 0.64	
Predominantly rural areas	- 0.32	+ 0.09	+ 0.11	
Rural areas with slight urban influence	- 0.31	+ 0.45	+ 0.55	+ 1.06
Rural centres	+ 0.85	+ 0.17	- 0.11	- 0.78
Periphery of rural centres	- 0.53	+ 0.48	+ 0.56	+ 1.34
Isolated rural areas	- 0.72	- 0.34	- 0.31	+ 0.08
France	**+ 0.81**	**+ 0.47**	**+ 0.52**	**0.00**

Source: INSEE.

Since 1975, there has been an increase in the population of predominantly rural areas; however, it cannot be said that previous trends have been reversed on account of changes in the geographical distribution of the population. Over the period from 1982 to 1990, it can be noted that there was a decline in the population of rural centres and isolated rural areas.

It is therefore more accurate to say that towns have spread out than to speak of the revival of rural areas; rural centres are clearly facing serious problems. However, a new social trend is emerging whereby rural areas are highly sought after as areas for leisure and creative relaxation, where the quality of life is high.

3.2. The challenges

There are two main challenges: firstly, to strengthen the residential function of rural areas, and secondly, to use this function as a basis for job creation.

Rural areas will be made more attractive if there is easier access to services (this will no longer be determined by individual mobility, particularly as the ageing population will have fewer resources available), and if there are opportunities for job creation.

Job creation will depend upon two principal factors:

– the ability of those concerned to obtain access to existing markets or open up new opportunities (innovative solutions are required);
– the enhancement of the main assets of these areas, in particular their natural, cultural and man-made heritage. The development of amenities, that is, aspects which help make the area more attractive, is a profitable undertaking in terms of maintaining or creating jobs.

3.3. Future prospects for rural areas

There are several categories of rural area, each with different prospects for the future. These areas may be classified according to three criteria: their degree of attraction in relation to that of towns, their level of amenities and their potential for agricultural development. Among the main variables likely to influence their development are:

– the ability of towns to control their growth and to preserve their level of attraction;
– the ability of rural inhabitants to take charge of the development of rural areas by organising themselves, integrating into an economy of networks and realising the demand of urban dwellers for amenities;
– the guarantee of special arrangements to protect agriculture while opening up the economy, with the aim of promoting multi-purpose farming, to which European society as a whole is strongly attached.

Possible scenarios for different types of areas include:

– decentralisation of urban areas: rural areas might be restructured, under the influence of urban areas, into industrial estates, residential areas and readily accessible leisure areas; these areas, near to towns, would become specialised;
– enhancement of the natural heritage: rural areas with little prospect of financial profit might be designated as nature reserves, with the authorities reinforcing their policies to protect the natural heritage;
– "ranch-style" farming, with a low input per hectare; this might be accompanied by a low frequency and sparse provision of amenities (cereal and pastoral farming areas, etc.);
– multi-purpose land use in rural areas, which would thus be able to provide a wide variety of services; this would require efficient organisation on the part of those concerned, and would lead to the area becoming more attractive;
– possible total set-aside of areas with few amenities, limited agricultural potential and remote from the attraction of a town; here, maintenance work or reforestation might be required.

4. Interaction between town and country

4.1. Traditional relationship: considering a given area as a self-contained unit

Here, the role of towns is to provide certain services and facilities for the inhabitants of surrounding rural areas. In return, towns consume certain material goods supplied by the rural areas: foodstuffs, building materials, and so on.

4.2. New relationship

– relations should be developed in the context of a more open economy: towns then become contact points, connecting the whole area to other areas. Economies based on such connections prevail over economies of scale and, in some towns, lead to the concentration of population, employment, wealth and information. The level of wealth in a town is connected to its ability to trade with the outside world; hence the idea of networks of specialised, or complementary, towns;

– relations should aim at complementarity and should be viewed in the context of wider issues. Small towns and the surrounding countryside both have an important role to play in making an area more attractive; if the countryside is welcoming but lacks basic services in its central market town, it is not, in actual fact, very attractive, just as small towns offering a large number of services are not very attractive if the quality of life is poor in the surrounding countryside;
– exchanges should focus on new products: they are increasingly concerned with intangible assets (cultural, social and educational exchanges, information on the labour market or indeed any other market, etc.), as well as with new products such as waste;
– the balance of town/country relations should shift towards the countryside, since the countryside is providing more and more services for urban dwellers (risk prevention, biodiversity, various amenities such as the quality of water, the landscape and peaceful areas, etc.) and is increasingly moving away from its former role as a mere supplier of raw materials.

There are considerable opportunities for job creation in rural areas, provided that a number of markets relating to amenities are opened up.

5. Types of town/country partnerships

– regional charters: devising a common development strategy (particularly with regard to developing ways of catering for tourists); aiming for complementarity in material and non-material investments;
– joint representation on a variety of decision-making bodies, irrespective of where particular activities are taking place; for example, rural dwellers should be given a say in the renovation of rural town centres and urban dwellers should be given a say in the management of rural areas;
– twinning arrangements: these do not need to be on a contractual basis, but should instead entail flexible forms of co-operation.

6. The DATAR experiment (Regional Planning and Action Commission): revitalisation of twenty-one town centres

This experiment involves twenty-one small towns with between 10 000 and 50 000 inhabitants, situated in rural areas with a low population density (rural development areas, which have a population density below thirty-one inhabitants per square kilometre). In all these towns, the town centre is losing its vitality; this is manifested both in the closure of shops and businesses and in the large proportion of dwellings that are vacant.

These towns generally have a distinct role as a regional centre. In some cases, this is very strong, particularly in isolated towns, or in larger towns; in other cases, the town is under the influence of another larger town, owing to the existence of high-speed traffic links; and in other cases, the town is merely the largest in a network of smaller towns in the area which it supplies.

The deterioration in the centres of these towns may be purely a result of poor management of the town's growth, that is to say, the town's function as a centre is not under threat, but within the built-up area, the main economic activities have moved to the periphery because of problems with access and the quality of premises, whether residential or commercial. Here, the problem may be addressed by means of an analysis carried out within the urban area; beyond the solidarity factor, efforts should be made to define the purpose of the various parts of the urban area in relation to one another. As far as business is concerned, what specialised sectors, for example, should be located in the town centre? As far as housing is concerned, will the centre, for example, contain a greater number of small houses or flats that are suitable for young or old people? What services should be available in order to back up such specialisation?

In other towns, the deterioration of the centre is linked to a decline in the attractiveness of the town as a whole.

Here, it is essential for the town to make itself more attractive by drawing on the entire surrounding rural area; this is the logic behind the concept of regions. In this way, some towns have developed their own cultural products (often in the town centre), with the aim of incorporating them into a broader cultural product, taking the rural heritage into account. Exactly the same approach may be applied to housing and to certain facilities.

There are often links between the two approaches (urban areas and the countryside), and they may complement each other in the revitalisation of small rural town centres.

The continuation of complementary activities in addition to agriculture and forestry in rural areas

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1. Introduction

The post-war rise in productivist agriculture has had a tremendous impact, both on the need for changes in agricultural activities and also on the shaping of rural spaces. In the 1970s, problems created by this productivist approach came to light, leading to the questioning of full-time farming as a concept (OECD 1978, Krašovec 1982). Since then the role of complementary activities in farm households has been increasingly discussed. The debate has had to redefine the wider significance of terms such as part-time farming for European agriculture (and also farm structures in other parts of the world), and the more recent "pluriactivity", even though such methods of combining agricultural and non-agricultural labour have always existed and represent a common feature of rural areas.

Agricultural policies in the 1970s were production-oriented and targeted at full-time farmers with the aim of maximising output and enhancing agricultural income. Although there was a recognition of pluriactivity, it was seen at that time as a refuge for those leaving farming, rather than as something which could make a positive contribution to the survival of farm families (Bandarra and Bryden 1992, p. 11). With the increasing political power of consumers and environmental movements there has been continuing reform of agricultural policies and a shift in the functions of farmers. Given the strong opposition from farmers' interest groups and the difficulty of reconstructing the roles of farmers, it took a long time for policies on agricultural structures to change significantly, to move away from production orientation, and to be aimed less at full-time farmers and encourage diversification. Even before the reform of the structural funds the regional dimension of agricultural measures and its environmental impact had started to become key issues.

European research only become interested in the topic over the last decade and has concentrated its efforts on the following areas:

- developing the theoretical concept of pluriactivity and studying its different forms;
- providing information on the frequency of pluriactivity;
- investigating the factors and processes involved in the diversification of farm household activities;
- relating patterns of pluriactivity to the regional context.

The discussion of the role of pluriactivity within European (but also worldwide) farm households preceded the formulation of rural development programmes, which attached great significance to diversified farm activities. The continuation of complementary activities in farm households has become an undisputed objective of agricultural and rural (regional)

policies. It is worth noting that a large number of rural amenities are dependent on these agricultural structures. With the current globalisation process, it seems essential to see the specificity of rural amenities as a rural development asset and, thus, a means of providing diversification options for the future (OECD 1998a).

In this paper, I begin by making a summary of recent research on pluriactivity focusing, in particular, on changes in the underlying theory and reviewing the main complementary activities in agriculture and forestry and the need to integrate these into rural development programmes. These programmes are then examined briefly in order to highlight their concern for diversified farm activities. Finally, some considerations about future European and national rural development schemes and practices are put forward, focusing in particular on the importance of these activities for rural development.

2. From part-time farming to pluriactivity

The standard idea behind all twentieth century agricultural policy is that the farm family should develop its agricultural labour so as to derive its income entirely from the farm. Until the second world war, most farms did have diversified farm activities, including mixed farming management and local non-agricultural activities. As specialisation on the farm took place, in particular in the period 1950-80, the concept of full-time farming became the main objective of agricultural policies and was firmly opposed to part-time farming.

Economic growth in other sectors was a powerful magnet, attracting great numbers of, at first agricultural labourers, and then farm family members to take up work in other sectors. In many cases this also meant migration to urban centres where the bulk of jobs were available at that time. Changes in agricultural structures over the last decades have therefore not only shaped the agricultural sector, but have also had a strong influence on the spatial distribution of the population and economic activity between rural and urban areas.

With rising surpluses in agricultural production and decreasing agricultural output prices these processes of structural adjustment were reinforced. As labour markets became quite tough in the 1980s, the debate on structural adjustment ended up focusing on the old practice of combining agricultural and non-agricultural activities in farm households. But as agricultural policy had not until then, considered farms of this nature to be viable, little research was carried out and few data were available on those farm households and they were excluded (at least partly) from most support measures and were not a target group for extension services. Nevertheless, particularly in countries with small-scale agricultural structures, such as in many southern European countries, as well as in mountain areas, a rise in non-farm earnings was reported. It was noted that all countries had seen an increase in family labour activities pursued alongside conventional farming. Taking the farm unit as a starting point for analysis, cases in which a combination of activities were carried out, with non-agricultural activities or income predominant, were initially referred to examples of part-time farming. Owing to a lack of more detailed analytical research, the tangible importance of this process was under-estimated. It was widely considered that carrying out complementary activities to farm work was part of a transitional process of moving away from farming. Different patterns of change and the persistence of small-scale agriculture in many regions however, suggested that some forms of part-time agricultural work were in fact stable and not part of a process of transition.

The importance of this phenomenon was only recognised when the majority of farmers where themselves confronted with it in their own households. This meant that questions were asked as to the lack of data available and that all members of the farm household needed to be taken into account in an analysis of farm household strategies. Furthermore, it was essential to identify all of the different forms of non-agricultural activities being carried out in combination with agricultural work. The longitudinal study of twenty-four areas in western Europe (Arkleton Trust 1992; EC 1993; Dax et al. 1995a) identified the following types of non-agricultural activities (other gainful activities – OGA):

Diversification on farm/para-agricultural activity:

– agricultural transformation;
– other farm-based activity.

Off-farm activity:

– employed person;
– entrepreneurial work.

Whereas considerable levels of regular off-farm work have long since been recognised as a European trend, agricultural policies have tended not to take para-agricultural activities into account or have even dismissed them. Yet, those activities, often based on regional traditions, have nevertheless continued in many cases and provide a useful point of reference for new diversification initiatives which have begun over the last decade.

The change in the perception of these on-farm activities as assets to the development of farms and regions coincided with an increased interest in integrating farm households into the rural economy. It was underlined that other gainful activities in general, and those complementary activities on the farm in particular, relied on the regional economic context and its relations to the wider economy (Dax et al. 1995b).

By looking at the multitude of different types of gainful activities – occasional, seasonal or regular – the focus of interest has shifted away from the farm unit itself to all of the activities, the way in which combinations of activities are organised and the factors influencing the behaviour of all the members of farm households. Many recent empirical studies indicate that "the commonly applied differentiation into full-time and part-time farms is just a formal one and therefore arbitrary, since almost all farm households derive non-agricultural income either from capital, in the form of social transfers and/or very often from off-farm gainful activities ... This observation seems essential, as with the distinction between part-time and full-time farming the misleading impression was conveyed that only the part-time farms – and not full-time farms as well – dispose of off-farm income, an impression that has been strengthened by agricultural statistics which provides such a differentiation of farm units" (Schmitt and Burose 1996, p. 4f. – translation by the author; Ahearn et al. 1993). Therefore, the term pluriactivity seems more appropriate as it reflects the multitude of combination structures in farm households, which goes far beyond the clear-cut statistical separation of farm units.

The main shifts relevant for the recent diversification processes in many farm households have been summarised in the following way: "The farm must become a centre of mixed entrepreneurial activity – tourism, craft production, new ventures in marketing products – and

in paid work to conserve and improve the rural landscape. The rural economy in general must be opened out to new kinds of enterprise such as high-tech (preferably 'clean') industry, home-based service work, recreation and tourism, some of which will help support farm families no longer able to exist on their farm incomes alone ... The broad vision is of a 'whole country-side' with 'dispersed development', in which the priorities have shifted to give agriculture a far less prominent place. The emphasis is on the cultivation of more dynamic values and new forms of economic activity which will allow growth from within" (Day et al. 1989, p. 241).

3. The frequency of pluriactivity: a move away from agriculture – or a step towards diversification?

By analysing the official statistics the huge impact of non-agricultural activities on farm households can be seen. EUROSTAT figures on farm structures show that about one third of farm operators carry out non-agricultural activities, either as a minor or as a predominant activity. A similar level of off-farm activity is to be found in the national averages of all the European Union countries (KEG 1997, p. T/125 ff.). The participation of spouses and other household members in off-farm activities is, of course, greater still.

Detailed studies of the phenomenon of pluriactivity and its components have, through specific case study results, heightened general awareness about pluriactivity. The western European-wide research project on "Rural Change in Europe" focused on "Farm Structures and Pluriactivity" in twenty-four study areas. The regional analyses support the view that pluriactivity is to be found in all regions and within all categories of farm sizes (Brun and Fuller 1992). However, the regional context clearly influences the extent and different types of pluriactivity, and also its development over time.

Across all the European Union study areas pluriactivity occurs in 62 per cent of farm households. But there are considerable differences between different regions. The proportion of pluriactivity, calculated as the involvement of at least one member of the household in other gainful activities, varies depending on the study area from between 36 to 88 per cent. The study areas in central Europe, mostly lying in the mountain areas of the Alps, represent the core region with highest involvement in pluriactivity. Similar high rates of combining agricultural and non-agricultural activities are reported in the southern European regions (Arkleton Trust 1992). There is, however, no indication that pluriactivity is higher (or lower) in more rurally structured areas than in more integrated (urban) areas (OECD 1998b, p. 41 ff.).

In almost all study areas income of farm households was increasingly drawn from non-agricultural gainful activities (Dax 1995). The longitudinal research approach allowed for the same farm households (who had been chosen because they were representative of the regional structure of farms in their particular study area) to be monitored and changes to be traced, for example in sources of household income and the extent of off-farm activities. Although the level of off-farm income was already high in most study areas it continued to increase in most study areas from 1987 to 1991. Conversely, the proportion of those farm households with an income (almost) exclusively derived from agriculture has decreased dramatically. This trend has occurred throughout western Europe, leading to a situation in which less than a quarter of farm households derive an income exclusively from agriculture (Dax et al. 1995a, p. 199f.), a result which is corroborated by statistics showing low agricultural income shares for most of the industrialised countries (OECD 1995, Fuller and Bollman 1992).

The general pattern is that the share of farm income has decreased, whereas there has been a respective increase in off-farm income and income derived from social transfers. This has led to the situation whereby Spain, France, the Netherlands and the United Kingdom are the only regions in which farm income accounts for the predominant share (over 50 per cent) of farm household income. In all other regions the combination of other income sources has become greater than income from agriculture alone. Also in regions where the proportion of overall income from farming was already low, a further decrease can be seen. For instance, in areas with highest pluriactivity, such as the Alpine regions, farm income, in general, accounts for less than 20 per cent and off-farm income reaches shares of up to more than 50 per cent (e.g. the study area Salzburg, in Austria; c.f. Dax et al. 1995a, p. 201).

The research also provided information about which family members were carrying out those other gainful activities. Thanks to this information, the farm household dynamics and the origin of changes in farm household behaviour can be analysed more effectively. Although there is a tendency for farm households to establish separate households from one generation to the next, it can be shown that a considerable part of off-farm labour is still carried out by persons other than the farm couple (Figure 1). Nevertheless, the bulk of pluriactivity is linked to the farmer and his/her partner.

In addition to the two main sources of income – agricultural and off-farm income – the results provided an insight into the role of the other sources of income, which are particularly relevant here. Excluding social transfer payments which are of outstanding importance for many peripheral regions in which there are still a considerable number of large families, and for households with several generations, the trend towards diversification, centred on farm activities, but no longer limited only to agricultural production, has attracted considerable interest. Available data on these activities reveal their high frequency, but at the same time the low income they generate in macroeconomic terms. However, the results vary greatly depending on the regional context and so overgeneralisations cannot be made. As in quite a number of regions these para-agricultural activities are considerably developed, with shares of about a third of total non-agricultural labour, it is possible to see significant development potential in these diversification strategies. Regions affected by such trends are to be found, in particular, in Italy, in the Alps, in Greece and lately also in the United Kingdom (Dax et al. 1995a, p. 198 f.).

In general, these diversification activities are only partly accounted for in official statistics, as most of them are part-time activities, carried out on a seasonal or irregular basis (Table 1).

Table 1: Types of other gainful activities (OGAs), (percentage of farm households)

Type	Intensity	All farms	20% smallest	20% largest
Off farm	(a)	32.7	47.2	26.5
	(b)	9.2	6.4	12.0
	TOTAL	**47.9**	**53.6**	**38.5**
On the farm	(a)	1.6	2.5	1.4
	(b)	18.0	11.2	23.6
	TOTAL	**19.6**	**13.7**	**25.0**
On another farm	(a)	1.4	1.7	2.0
	(b)	9.2	7.3	9.9
	TOTAL	**10.6**	**9.0**	**11.9**

(a): At least one full-time OGA.
(b): Only part-time OGAs.

Source: Brun and Fuller 1992, p. 55.

Figure 1: Pluriactivity in western Europe

It is interesting to note that diversification on the farm is as important for larger farms as for smaller farms. In fact, part-time activities on the farm occur predominantly on the 20 per cent largest farms. If we put together all of the different types of OGA it can be seen that a great variety of combinations occur and that the overall involvement of the 20 per cent largest farms is nearly as high as for the 20 per cent smallest. Of course, the extent to which those activities are carried out may differ, but the existence of those OGAs within about 60 per cent of farm households leads to the assumption that diversification considerations are relevant for almost all farm households (Table 2).

Table 2: Combination of OGA held by farm family members, (percentage of farm households)

OGA combinations	OGA FT or PT	20% smallest	20% largest
Off-farm	34.5	42.2	25.3
Off farm and on the farm	8.0	6.5	8.7
Off farm and on another farm	4.3	4.6	3.3
Off farm, on the farm and on another farm	1.1	0.3	1.2
On the farm	9.1	6.2	12.5
On the farm and on another farm	1.4	0.7	2.6
On another farm	3.8	3.4	4.8
TOTAL	**62.2**	**63.9**	**58.4**

Source: Brun and Fuller 1992, p. 55.

The map of the types of pluriactivity (Figure 2) highlights the regions in which pluriactivity on the farm is of particular importance. For a number of aforementioned regions, complementary activities on the farm are crucial.

Figure 2: Importance and types of farm family pluriactivity

4. Encouraging non-agricultural activities in farm households

The situation and its development potential have been widely reflected in the recent Rural Development Programmes of the European Union's Structural Funds. Although the underlying activities are often attributed to a niche market strategy, a considerable number of measures have been geared towards this potential. Fields of activity include:

- processing agricultural products;
- high-quality product design and region-specific labelling;
- direct marketing and implementing new schemes for market outlets;
- extension and revaluation of forest uses;
- preservation and use of cultural landscape characteristics for tourism;
- tourism packages on farms for specific target groups;
- environmental and health tourism;
- use of farm infrastructure for other non-agricultural activities (handicrafts, etc.);
- provision of services, tailored to rural needs;
- use of new information technologies on the farm;
- co-operative initiatives at all levels of production line.

These exemplary activities are, in particular, dependent upon and shaped by regional features, thus leading to region-specific initiatives. A series of studies have looked at the determining factors in the success of such initiatives (see, for example, Bazin and Roux 1995, Loibl 1997). They have also pointed out the need for continued support through regional development structures. In many cases development initiatives are highly dependent on patterns of demand, originating from outside the region, but reflecting the discourse of core societal issues such as environmental performance, the sustainable use of resources, the shaping of our labour world and leisure society, the valuation of "rural" characteristics and the links between rural areas and urban areas and values. Regional specificity is a source of great potential, which may be exploited by the careful positioning of these processes, which cannot be limited by regional borders.

For central and east European countries, agricultural structures have developed in a completely different way, which has led, in general to the predominance of large farm enterprises for agricultural output. The reform process of the 1990s, with privatisation policies being carried out at a different pace in the respective countries, had a decisive impact on farm household activity and provided some scope for complementary activities. However, as the recently carried out OECD country studies have revealed diversification has up to now remained of minor importance. In particular, farm households very often lack the necessary skills to start up such initiatives and local/regional infrastructures do not allow for broad diversification processes.

The data provided on the wide range of different possible non-agricultural activities in farm households should not conceal the fact that, in general, farm diversification through farm-

centred activities has remained very much a minority pattern for farm adjustment in western Europe, too. Those who diversified were comparatively young, at an early stage in the family lifecycle and were relatively well-educated (Commins and Keane 1994, Dax et al. 1993). Although farm households' and consumers' awareness of such complementary activities has increased considerably, it is important to be aware that the pace of change is slow. Nevertheless, with the enthusiasm and experience of pioneers a flair for project development has been conveyed to a large number of people at local level and a wave of initiatives have begun (Dax 1997). It seems important to remain realistic about the chances and difficulties of those activities. In particular, such approaches to development call for long-term strategies and a fostering of initiatives through substantial support for building up the fundamental capacity for the ongoing reshaping of programmes and activities.

5. The need for a base of knowledge and (social) innovation

One of the major handicaps to the reshaping of farm structures and their insertion into the rural economy is the low development rate of elements for diversification. This problem was revealed in a comparative study, carried out by FAO (1996), on the socio-economic position of rural women in central and east European countries. It stresses that women in farm households are seldomly engaged in complementary activities and that this situation is worsened by their minimal level of participation and the basic need for "education and training in entrepreneurship". In particular, what is missing is a range of positive role models and experiences of "intermediaries who are able to exploit the uncertainties of the new regulatory arena" (Marsden 1995, p. 293). Such "exchange agents" are especially required to combine an understanding of the new policies with an awareness of local development opportunities. Their decisive role as key agents in fostering rural innovation by supporting a broad base of knowledge and rural initiatives has also been studied in very different regional contexts (Loibl 1997, Bowler et al. 1995, Commins and Keane 1994).

If rural development and, in particular, the complementary activities carried out by farm households is to have a growing impact it has to have greater sensitivity to the differing circumstances in different regions and the way in which these regions interrelate. In an increasingly globalised world it is necessary to identify regional characteristics which stand out for their rarity and their uniqueness. Rational management of natural and cultural resources, often referred to as rural amenity, is becoming increasingly important for co-ordinated policy making. The preservation and development of the components of rural amenities is a fundamental requirement not simply for environmental or heritage protection but for rural policy's general aim to maintain the living conditions of the rural population.

Thus, as well as a profound emphasis on education, which is now commonplace and central to many (rural) development programmes, training, advisory and research services also need to focus on the factors affecting innovation in rural areas. What is required is imagination in setting up programmes and initiatives, rather than simply copying good examples to be found elsewhere. The social process in the region should be furthered and given scope for experimentation and learning. Such a commitment to participatory approaches are essentially long-term and can be evaluated effectively, in the short run, only by procedural criteria, focusing to a large extent on structural changes. These processes are far from being harmonious and necessitate a heightened ability to tackle conflicts which arise between different interest groups, between various actors (within the region and at different geographical levels) about the different use of spatial resources and about different approaches to development.

Development of this kind is, in addition to the natural resources available, one of the prime assets and attractive elements of regions and therefore the driving force behind future regional economic performance. This is also essential for the renewal and reassessment of complementary activities in farm households as important development assets. Their contribution involves assets that go far beyond increasing the income of farm households. By turning to the natural and cultural resources already available they add to the diversity of regional "products" and improve the overall regional "label". Moreover, by co-operating and combining different sectoral activities they set in motion the sectoral boundaries which leads to a re-evaluation of development options, innovation and learning. By responding to patterns of demand, often shaped by consumers "at a distance", they expand these learning processes and reveal similar images to the interrelated economies and new spatial structures. As such they are at the core of rural development, dealing with elements and activities which make these areas distinctive to others.

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Rural land use in Europe – processes and their effect on nature

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1. Introduction

Europe's rural areas are changing continuously. In recent decades, the transformation has been more dramatic as a result of the increasing optimisation of production systems, the opening up of markets and the removal of protective measures and subsidies for agricultural production. Other contributory factors are increased urban pressure, higher environmental standards and increases in taxes. The overall effect has been the emergence of a wide range of different developments. Some agricultural production systems are being intensified which in some cases has led to the extreme situation of a form of agricultural industrialisation, which does not depend on soil conditions in any way. In other areas, for local or external reasons, the possibilities for further development are limited and agricultural production systems which are more extensive or marginal have built up. Demands for urban land for housing, recreation, industry or infrastructures have always dominated the local market. Now, these demands are increasingly affecting rural areas as a result of population growth, increasing mobility and constraints on space. Recently, more and more attention has been paid to environmental care and nature, partly as a result of clear consumer preferences. Urban demand for wildlife areas is growing, as is interest in the conservation of different types of traditional agricultural landscape.

In order to gain an insight into development perspectives, the National Spatial Planning Agency of the Netherlands set up the project "Rural Areas and Europe" (RA&E) in 1992; this was completed in 1997 with the production of a final report. The objective of the research presented in this paper (Bethe, 1997) is to link the results of the RA&E project with the European Spatial Development Perspective (ESDP). The paper sets out to analyse the significant ongoing processes in the rural areas of Europe, such as intensification, "increase in scale", diversification and marginalisation.

2. Rural areas in transition

The research begins by highlighting the development of the various processes observed in different regions of Europe.

At present, developments in the agricultural sector are dominated by a trend towards the optimisation of input into the means of production and a decrease in cost price. By dividing this process of intensification into various subprocesses, we may obtain an overview of the present and future land use changes caused by intensification in the agricultural sector. However, the optimisation of production, with minimal use of land, for example, as a means of production, means that in some regions of Europe, agricultural production is inevitably going to be less dominant. Initially, this process will be defined as extensification, whereby agriculture is considered in terms of production per unit area and its contribution to the gross regional product.

Because of fierce market competition for land, intensification is now widespread in the agricultural production sector. In an urban context, the continuation of agricultural production can only be a realistic option if land is used efficiently. Hence the choice of the most extreme option, industrialisation. Agricultural production is being "removed from the land" and is beginning to behave more like an industrial type of production. It is especially in sectors such as greenhouse horticulture and intensive cattle rearing that this trend can be observed. Secondly, certain activities which take place further away from urban centres and which are therefore less influenced by the land market nevertheless show a similar tendency towards intensified land use, as they aim for high production per hectare, and, because of the nature of the production, tend to be concentrated in a small area. This is particularly true of the horticultural sector, including vegetable growing, bulb cultivation, arboriculture, vineyards and olive cultivation. This process is called spatial concentration. In other sectors of agriculture, however, where the nature of the production precludes productivity increases through the methods now used in horticulture, there is not such a tendency to increase production per hectare to such a great extent. This is true of dairy farming and arable cultivation, where smaller profit margins largely preclude higher yields per hectare. Instead, production is increased by extending the total area of land. This process is called "increase in scale".

Extensification is regarded as the opposite of intensification. Hence, those areas of Europe which are not involved in the three intensification processes identified above can be viewed as being dominated by extensification. Two processes – diversification of activity and new economic agents (forestry, housing, water production, recreation and tourism) – are counteracting this extensification. These new functions have created some opportunities for land use and are of considerable economic importance for various areas. Finally, certain areas are experiencing marginalisation, which means that while they are undergoing extensification in the agricultural sense they have no clear potential.

3. Making rural processes operational

The three processes of intensification have been analysed on the basis of a limited number of indicators. The areas studied were those in which trends were already observable and which, due to the structure of the agricultural sector and/or the location area (for example because of the concentration of population), could potentially undergo these processes. With reference to the first process, industrialisation, a relation between infrastructure and urbanisation must be assumed, on the basis of the premise that locations closer to important infrastructure or population centres possess comparative advantages and are therefore more likely to undergo that process in the future. The other two intensification processes are more land-oriented and their potential has therefore been assessed in relation to the soil suitability.

The agricultural processes of industrialisation and spatial concentration are relatively free from land constraints. In Europe, vast areas are available for enterprises wishing to become involved in these processes. This allows location policy to be combined with the optimisation of spatial quality, but it also means that growing international competition for this production capacity can be expected.

Increases in scale are particularly relevant in lowland areas of Europe and represent a realistic option for future agricultural land use. If the trend towards intensification continues, for instance in dairy farming, this may result in the concentration of this sector in a limited number of areas such as southern Denmark, north-east Netherlands, Flanders, Brittany, Les Landes, Ile-de-France and the Po delta.

In the remaining areas, extensification of agricultural land use will be relevant. In these areas, the extensification map has been examined with various perspectives in mind. New economic agents like housing, water production and tourism are becoming evident. The STARING Centre study “Back to the Future” (van de Klundert et al, 1994) provides an insight into the possibilities for various activities in areas where extensification is prevalent. Another option is diversification within the agricultural sector itself, which has also been mapped in the above-mentioned STARING Centre study.

The frequency of extensification, the opposite of the processes of agricultural intensification, is mainly related to three factors: soil suitability, slope and altitude. The higher regions and, in a European Union context, the peripheral regions (Baldock et al, 1996) are the ones that are likely to be dominated by this process. In particular, diversification is the best option for parts of the Iberian peninsula and central France. The great majority of the areas susceptible to extensification offer various possibilities, a large number of these are relatively small-scale, local in nature or represent only marginal improvement for the gross regional product. In some localities these possibilities can provide solutions for the declining viability of certain rural communities, but for regions as a whole they present a more diffuse range of opportunities.

Finally, some remaining areas are undergoing extensification but offer no opportunities whatsoever for new economic agents or diversification. The impression is that no economic function with a spatial dimension is appropriate for these areas and therefore in spatial terms they are likely to become disused. This is when the process of marginalisation occurs.

The initially positive impression that only a few areas are in danger of marginalisation must be qualified to a certain extent. Many areas offering possibilities for new economic activities still have to prove that they are capable of going against the current trend. In any case, it is a challenge for these areas to implement subtle and careful regional economic planning.

When intensively-used agricultural land is taken out of production – and this may also be due to government policy – soil buffer qualities may change, causing the release of poisonous compounds or other pollutants. If, for instance because of the attractiveness or remoteness of the region, constraints due to the topography, climate or soil are not compensated for, either by an increase in land prices or through government support, both the spatial and social consequences of marginalisation are to be expected.

Agricultural marginalisation may occur near urban centres if rising land prices mean that land sales provide sufficient income, if options for agricultural expansion are limited and if agricultural industrialisation is too problematic. Although aesthetic values may be affected, and may require the development and implementation of suitable policies, the social dimension of this type of 'relative' marginalisation gives less cause for concern (Bethe and Bolsius, 1995).

4. An evaluation of the typology of processes

On the whole, the typology of developmental processes presented above provides an appealing and stimulating overview of the opportunities and threats prevailing in various parts of Europe, at present as well as in the future. The typology has proved to be a useful instrument for assessing future developments in various regions and allows policy-makers to gain, at an early stage in the planning process, an understanding of potential future changes in the structure of rural areas, thus enabling them to anticipate these changes in their spatial planning policies.

5. Production of a European nature map

Europe has a rich and varied natural environment and wildlife, despite the extent of the changes to which the natural environment has been subjected. Valued ecosystems are, nevertheless, facing pressure and deterioration everywhere.

At national level, a wide variety of site designations has led to an estimated 40 000 protected sites in Europe (Dobris Assessment) although the total area covered is not known. Often sites are protected by different types of measures. Not all of the national and international initiatives have yet succeeded in stabilising Europe's ecosystems and halting the deterioration of flora and fauna. The total area protected for nature conservation is nevertheless an issue of importance for the development of human activities in rural areas. The lack of data makes it impossible to show all of the designated areas; even after a decade of co-ordinating environmental data, such as in the CORINE project, the exact locations of the protected areas have not yet been pinpointed.

New developments are, nevertheless, taking place. International and national nature strategies have reached a general consensus regarding the development of ecological networks.

The Convention on Biological Diversity, the IUCN action "Parks for Life" and the Pan-European Biological and Landscape Diversity Strategy, under the auspices of the Council of Europe and the UNEP, are recent initiatives in this field. They are directed towards a more integrated vision of nature protection through the development of ecological networks and sustainability in rural development outside the protected areas. The common aim is the conservation and development of biodiversity in Europe.

The areas of interest for European nature conservation illustrate the EECONET strategy, developed on the basis of the EECONET declaration (Sofia, 1995). The international activities carried out in the context of the EECONET and the Pan-European Ecological Network may be regarded as elements of the Pan-European Biological and Landscape Diversity Strategy (ECNC, 1996).

A study by Bischoff and Jongman (1993) produced a more detailed version of the basic EECONET map that had been compiled in a separate study concerning future land use in the European Union. Information was added concerning the content of the areas of the EECONET and some new areas were included for the following new European Union member states: Sweden, Finland and Austria. The map provides information about areas presenting threats to, and opportunities for nature conservation as a result of interaction with rural processes.

Generally speaking Europe's wetlands and lowland nature reserves are threatened by intensification while mountain areas are facing the threat of extensification which could lead to marginalisation.

All of the processes of intensification described represent potential threats to the different types of nature areas which have been mentioned.

The high production of manure and the liberal use of pesticides, characteristic of industrialisation, cause severe environmental damage to all types of nature area which have been mentioned. Because industrialisation requires comparatively little land, however, the problems can be dealt with relatively easily.

Spatial concentration and increase in scale are causing people to leave because of land restructuring, water management and intensive land use, and are particularly damaging to wetlands and lowland nature reserves. Mountain areas are less affected because they are not very suitable for these types of agricultural developments. The conflict between an increase in scale and lower-level mountain chains is evident in northern Europe, especially in Germany (Hesse, Baden-Württemberg and Bavaria) and the United Kingdom (Scotland) and in higher mountain areas reaching 2 000 metres the conflict is concentrated in the areas still suited to agriculture, that is in the wide valleys.

Pluriactivity and the new economic agents can be seen as threats or opportunities depending on the more specific nature conservation conditions in which they occur and depending on the specific form they take.

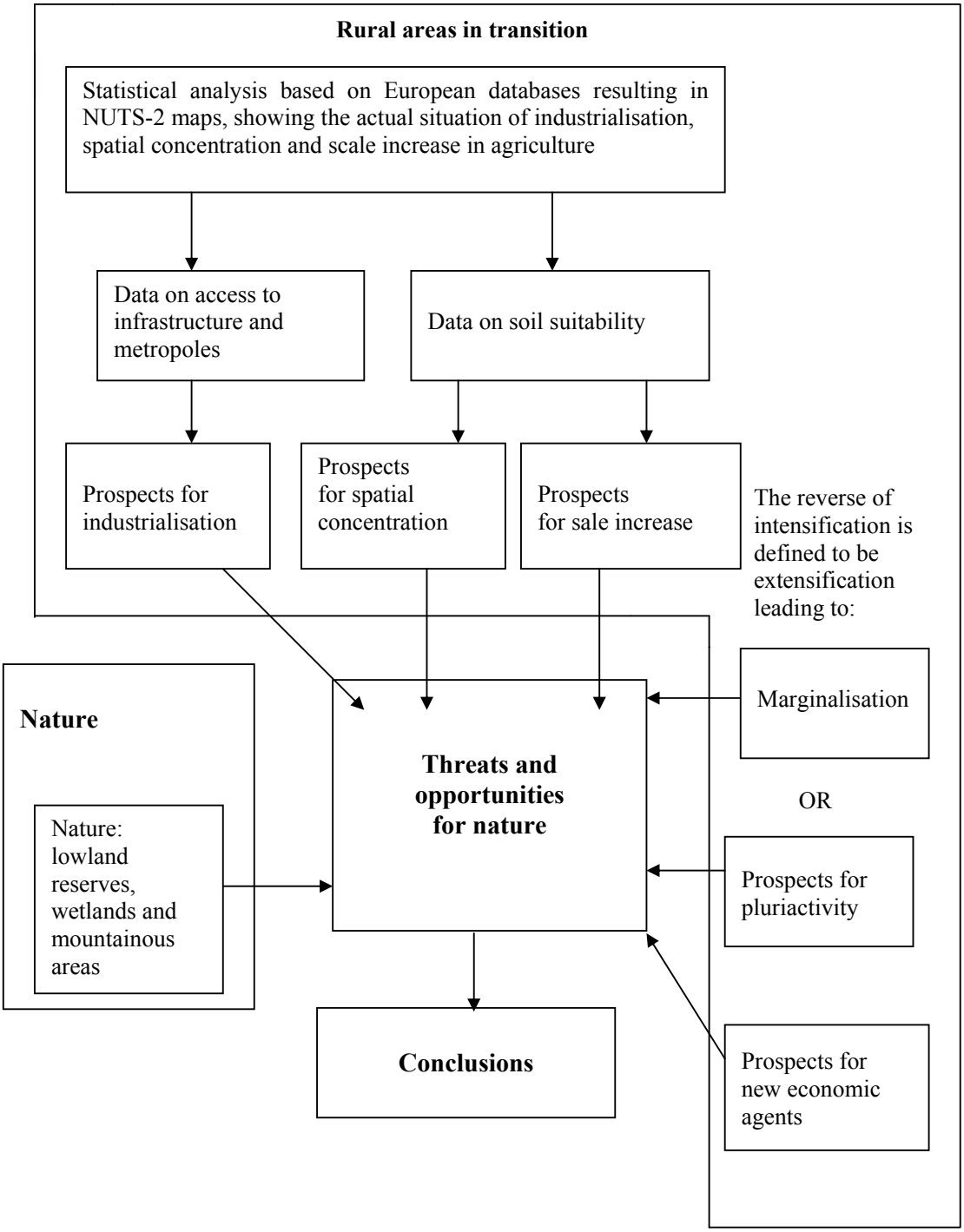
In general, agricultural extensification is an excellent opportunity if agricultural land use can continue in a traditional way by producing results that are beneficial to nature. When land abandonment occurs, it is still possible for nature to be developed in a positive way, but this requires careful supervision. This is particularly true if the desired form of nature development is dependent on agricultural management. In this situation land abandonment can be regarded as a threat.

6. Conclusions: rural processes and nature

Europe is characterised by enormous biodiversity. It is vital to protect this in a sustainable way. This paper has shown that there are many threats to Europe's biodiversity, but at the same time there are prospects for it as well. In general it can be stated that wetlands are threatened by increase in scale and mountain areas by extensification and particularly marginalisation. With regard to the other landscape categories the picture is more varied. The suitability of large areas of the EU for commercial timber production can be a threat to nature values. The threats vary, of course, according to type of landscape and also the location.

The following chart (Figure 1) makes it clear that it is not easy to assess the various processes simply in terms of threats and opportunities. With respect to the three intensification processes, the effect on regional nature values can, in general, be gauged. For the majority of the areas undergoing extensification the issue is less clear: firstly, because different prospects can be possible in an area; and secondly, because it is not easy to establish what effect particular developments will have on nature.

Figure 1: Rural areas in transition



Objectives need to be identified in all areas of interest for nature conservation. The Bird Directive together with the Habitat Directive are very important guidelines for identifying these objectives. It is therefore essential that the member states designate their habitats and take responsibility for developing a spatial network of habitats so that areas that are of interest for nature conservation interest will become protected areas of Natura 2000.

It is extremely important to identify the areas where nature management by farmers is needed to protect semi-natural habitats. This study has outlined the first approach, which is the selection of important areas on a European scale.

Areas where nature conservation will be difficult to achieve because of intensification processes require spatial policy plans, which designate nature protection areas and buffer zones.

Areas undergoing extensification need spatial policy plans to identify where nature management by farmers has to continue and where nature development will be an objective. In the case of the latter, it is necessary to ensure that the surrounding areas will not be damaged, for example, by avalanches, erosion or flooding and so on, to the extent that human activities are no longer possible.

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The role of regional planning policies in rural areas: the point of view of the Network of Spatial Research Institutions in Central and Eastern Europe

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The Network of Spatial Research Institutions in Central and Eastern Europe (CEE Network) organised a conference on the topic "Towards a Spatial Development Strategy for Europe – The role of spatial planning policy for rural regions" in Bled (Slovenia) from 21 to 22 September 1998. This paper summarises the main results of the conference and presents the point of view of the CEE Network on regional planning policies in rural regions within the ongoing process of European integration.

1. Background

The Network of Spatial Research Institutions in Central and Eastern Europe is an informal co-operation network founded in 1992 on the initiative of the German Federal Ministry for Regional Planning, Building and Urban Development. The network's main objective is to carry out joint research on European spatial planning and development, and for the participating institutes to exchange information on current research topics and the results of these, so as to encourage co-operation between these institutes. Other aims include setting up a regular consultancy service in the field of spatial research policy and developing joint research projects in the different central and east European countries.

In 1997, at the CEE Network's last conference in Budapest, the participating institutions discussed the opportunities and prospects for a joint European Spatial Development Perspective. The Council of Europe's "Guiding Principles for Sustainable Spatial Development of the European Continent until the year 2000" initiative was particularly well received. It became clear that the Network of Spatial Research Institutions in Central and Eastern Europe was the right organisation to support the development of this European strategy and work actively towards its implementation by means of research.

In Budapest, the development of rural regions was selected as one of the next main fields of research for the CEE Network. It was considered an important challenge for a sustainable European Spatial Development Perspective. The conference on rural areas was organised this year with a view to developing the European Spatial Development Perspective, through dialogue between spatial research institutions and governmental institutions.

The conference in Bled aimed to bring together researchers from the CEE countries to discuss their study results and to compare similar problems in spatial research arising from rural regions, as well as to foster new research projects between these institutions. The conference

venue was chosen in line with Council of Europe activities, so that the standpoint of the research institutions of the CEE Network could be transferred into a political arena.

2. Topics for discussion

A key question raised in connection with this field of research is: what is the basis for European spatial planning strategies for rural regions? The presentations will begin by setting out the background and prospects for the guiding principles for the sustainable spatial development of the European continent. Concepts regarding the development of rural regions in western Europe are also of importance. Experiences arising from the ESDP process will therefore be presented.

Furthermore, the institutional conditions and potential strategies for developing rural regions will be on the conference agenda, as well as trends in spatial development and settlement structures of rural regions in central and eastern Europe.

During the CEE Network conference, working groups will look at different areas under the general topic heading "Creating European Spatial Development Perspectives for rural regions" thus encouraging closer dialogue between partners in the network.

The following topics will be at the centre of the discussions:

Differentiation of various types of rural regions

Examples of proposals in this working group are:

- classification of rural regions in Ukraine according to the extent of the impact of the Chernobyl disaster on the region, and prospects for development;
- tasks for spatial planning policy in rural regions in southern Russia.

The changing role of small and medium-sized towns in the development of rural regions

Examples of suggested topics for this working group are:

- changes in the role of small towns in Latvia;
- the regional context of small-scale urban and rural development.

Privatisation and its effects on rural regions

Examples of proposals for this working group are:

- privatisation and its effects on rural regions, highlighting the transformation of agriculture – case-study of the Czech-Bavarian borderland;
- privatisation of agriculture in the Kaliningrad region, in the context of sustainable development.

The three working groups will concentrate on the following questions:

- What are the challenges facing rural regions in central and eastern Europe?
- What are the possibilities for, and risks involved in, the development of rural regions?
- Which strategies are useful for the sustainable development of rural regions in Europe?

To support the contribution made by junior research fellows in central and eastern Europe, in particular, young researchers have been invited to present their studies to the working groups. A competition will take place prior to the conference to select which papers will be presented. So far, twenty-five young researchers from ten CEE countries have entered this competition to try and have the opportunity to present their research findings at the conference.

The results of the working groups' findings will be a further step towards creating new development prospects for rural regions under the "Guiding Principles for Sustainable Spatial Development of the European Continent" programme. The working groups' discussion will also focus on the role of general co-operation between members of the network in carrying out the programme. Hence conclusions will be drawn as to which principles will be needed.

Furthermore, in order to maximise the efficiency of the institutions' research, the CEE Network will make suggestions for possible future research activities within the context of the ongoing processes of European spatial development strategies. This reflects the CEE Network's support for the transnational exchange of results of research on the projects of the Community initiative INTERREG II C at the conference.

A comprehensive strategy for the development of rural areas in Europe

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1. The context

Rural development in European countries is heavily influenced by the general state of the economy in these countries and by their interaction with the global economy. The prospects of increasing demand for types of farm produce taking up a large proportion of rural land, the size of the rural population and urbanisation are all obvious factors influencing the future of rural areas.

Rural areas are undergoing change, transformation and evolution. Their population has changed somewhat in the past twenty years, but remains substantial; this no doubt explains why rural development is regarded as a social problem, with governments, to a greater or lesser degree, becoming increasingly interested in determining the function and the future of rural areas.

The interest shown by decision-makers in drawing up and implementing new strategies for developing rural areas is therefore not an entirely new phenomenon, but has grown steadily in Europe over the past fifteen years. Those with long memories will remember the initiatives organised by the Council of Europe in 1987 and 1988 as part of its European Campaign for the Countryside; the conclusions and recommendations of this campaign were published in 1989. In 1988, the European Commission published its famous report on "The Future of Rural Society" (Communication of the Commission to the Council and the Parliament, 22.7.88). The OECD, for its part, set up a Rural Development Programme in 1990 following its studies dating from the early 1980s on the public management of rural areas (see reports on Rural Public Management, New Trends in Rural Policymaking, New Ways of Managing Services in Rural Areas, etc.).

More recently, the meeting organised by the European Commission in Cork (Ireland) in 1996 represented a milestone in the planning of new rural development strategies in Europe. Of particular importance were the huge strides made in recognising rural development policy and the role of agricultural policy in relation to rural development. The conference also stressed the need to breathe new life into rural development policies, in the interests of society, to make rural areas more attractive for their inhabitants, so as to allow them to live and work there, and to continue to promote sustainable rural development in an international context.

Whether as part of discussions on the European Union's "Agenda 2000" communication, WTO negotiations or preparations for the enlargement of the European Union, most European countries are searching for new rural development strategies. What is the current state of affairs vis-à-vis these strategies? What is their position in relation to agricultural policies?

What recommendations can be made to European countries on planning "the right strategies" for rural development?

1.1. What do we mean by rural development?

Some people regard the adjective "rural", like "urban", as a generic term covering a wide variety of situations; indeed, a variety of definitions are given by different countries in Europe and elsewhere. Many European countries still consider the word "rural" to be bound up with activities in the primary sector, particular types of land use, distance from urban centres and so on.

In Austria, there is no official definition of a rural area; in France, rural areas are areas which are not urban; in Greece, rural areas are defined as areas with fewer than 2 000 inhabitants; in Portugal, rural areas are areas which are not urban or do not have an urban centre.

However, during the 1990s, some countries agreed on the meaning of the term "rural". It is now widely accepted as a spatial or territorial concept. The term does not indicate any particular type of land use, or a level of economic development, or a specific industrial sector. Rather, rural development concerns all the inhabitants, all the land and all the other resources of the countryside and small populated areas situated outside the sphere of direct economic influence of large urban centres.

1.2. The challenge of rural development

The gap between rural communities and many urban communities in Europe is widening, according to a number of criteria relating to economic and social well-being. Even in European countries where this gap is not striking, long-term analyses indicate that the situation may change for the worse in the relatively near future.

Rural areas cover over 90 per cent of national territory in Europe and contain on average one third of the total population, a proportion that rises to more than 40 per cent in some European countries, such as the Slovak Republic, Slovenia, Albania and Romania. The problems facing states with regard to rural areas not only relate to the ability of these areas to adapt to structural adjustments, but also concern changes to their physical environment.

Table 1: Proportion of the total population of various countries living in rural areas

Country	Proportion of population employed in the agricultural sector Percentage 1989	Proportion of population employed in the agricultural sector Percentage 1995	Proportion of total population living in rural areas Percentage 1995
Czech Republic	9.9	4.7	25.3
Estonia	12.0	7.0	29.9
Hungary	17.9	8.5	37.2
Slovak Republic	12.2	7.1	43.0
Poland	26.4	25.0	38.1
Slovenia	11.8	10.4	49.7[a]
Latvia	14.6	17.4	31.0
Lithuania	17.6	23.5	32.0
Bulgaria	18.1	22.0	32.2
Russia	12.9[b]	14.7	27.1
Ukraine	19.5[b]	22.2	32.4
Albania	49.9	64.6	60.0
Romania	28.2	35.7	45.1

a. 1994 instead of 1995.
b. 1990 instead of 1989.

Essentially, the challenge for rural areas consists in promoting a better balance between economic opportunities and social situations at national level without destroying the important aspects of the rural heritage and without restricting market forces that lead to improvements in the performance of the national economy.

Faced with this challenge, many rural areas are likely to experience profound changes to their socio-economic structure in reaction to the constraints imposed by the growing integration of the global economy, the use of new technologies, in particular information technologies, and the emergence of environmental concerns relating to structural changes in the agricultural sector.

1.3. The role of agriculture in rural areas

Since 1992, the Agriculture Ministers of the OECD countries have recognised the important role played by agriculture in rural development. The above table shows clearly that the agricultural sector represents over 17 per cent of the employed population in Poland, Latvia, Lithuania, Bulgaria, Ukraine, Albania and Romania. In other European countries, relatively few people are employed in the agricultural sector; the proportion is below 5 per cent in Belgium, Denmark, France, Germany, the Netherlands, Sweden, Switzerland and the United Kingdom, while the average proportion in the European Union countries is 5.1 per cent. In these countries, traditional sectoral policies such as agriculture appear increasingly unable to stimulate development in rural areas. Furthermore, agricultural policies, particularly in European Union countries, have proved extremely costly, both for the taxpayer and for the

consumer. Such policies are based on supporting market prices that apply throughout the entire area, regardless of differences in the level of development. This is more beneficial to regions that are already prosperous and contain large farms than to less privileged regions which are actually in greater need of financial support.

Table 2: Total funds spent on agricultural policies in some European countries

Country	1995	1996
European Union		
Ecus (billions)	106.00	94.70
US$ (billions)	138.60	120.30
Czech Republic		
Kcs (billions)	10.32	6.60
US$ (billions)	0.39	0.24
Norway		
NKr (billions)	23.84	21.71
US$ (billions)	3.76	3.36
Poland		
ZI (billions)	9.51	15.48
US$ (billions)	3.92	5.74
Switzerland		
SwF (billions)	8.63	8.23
US$ (billions)	7.30	6.66

At their April 1998 meeting, the Agriculture Ministers of the OECD countries emphasised that "beyond its primary function of supplying food and fibre, agricultural activity can also shape the landscape, provide environmental benefits such as land conservation, the sustainable management of renewable natural resources and the preservation of biodiversity, and contribute to the socio-economic viability of many rural areas".

In other words, agricultural policies and rural development policies are both suitable means of achieving specific objectives. If rural development policy and agricultural policy are given their rightful roles, they may complement each other and promote the public interest together in a harmonious rural environment, both ecologically and culturally.

1.4. The environment and rural development

The beauty of the countryside and the cultural heritage can provide new possibilities for economic activity and employment. Rural areas contain the bulk of our natural resources and our cultural heritage. These amenities represent positive outward signs and are increasingly in demand. They may contribute to economic development insofar as, in many rural areas of Europe, they represent potential sources of comparative advantages in job-creating sectors such as leisure and tourism.

2. What is at stake for European countries?

Bearing in mind the definition of the term "rural", the role of agriculture in relation to rural development in European countries, and the cost-related problems of agricultural policy in many European countries, we ought to remind ourselves of what is really at stake for these countries, in particular the central and east European countries and the New Independent States.[1]

How can a direct transition be made from former planned economies to wide-ranging integrated strategies for developing rural areas? How can these countries avoid the negative effects of traditional agricultural policies pursued in European Union countries?

The new tendency to slant strategies towards rural development should make it possible to lower the cost of subsidising agriculture, to encourage diversified forms of income, to promote enterprise and the development of small rural businesses, and, of course, to curb the rural exodus.

It is also advisable for countries in transition, especially those who have applied for membership of the European Union, to follow developments in the Union's Common Agricultural Policy as closely as possible. Some European Union member states believe that aid for farmers should be granted differently, with more support for activities in rural areas. The Commission itself has hinted that in future, support for central and east European countries will be orientated much more towards rural development than towards agriculture as such. Much thought should therefore be devoted to determining the "right strategies" for developing rural areas.

2.1. Two initial observations on planning rural development strategies

The first observation is concerned with the diversity of rural areas and the second with rural indicators.

2.1.1. The diversity of rural areas

As Theme 2 of this conference clearly shows, rural areas in European countries and elsewhere are not all identical and there are considerable differences between rural areas within any one country. Their potential for development cannot be assessed independently of their cultural, social and economic context and their physical environment. Each rural area is unique. However, in order to determine strategies for their development, most countries should set up a typological classification of their rural areas, thereby acknowledging that even if such areas are not identical, they may be grouped together so that development strategies may be devised which best meet their concerns and the needs of their inhabitants. A look at various existing typologies in European countries reveals that rural areas are increasingly being classified according to their economic situation.

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1 In this context, the expression "central and east European countries" covers Albania, Bulgaria, Croatia, Romania, Slovakia, Slovenia and the three Baltic states (Estonia, Latvia and Lithuania), as well as the Czech Republic, Hungary and Poland, which are also members of the OECD. As far as the expression "New Independent States" is concerned, in this context it refers only to Russia and Ukraine, which are members of the Council of Europe.

Therefore, using a typology devised by the OECD, rural areas may be divided into economically integrated rural areas, intermediate rural areas and remote rural areas. These may be defined as follows:

– remote areas are generally areas where population density is low, incomes are low and the average age of inhabitants is relatively high. They are heavily dependent on primary sector employment and generally have an unsatisfactory provision of basic services;
– as for intermediate rural areas, the economic and social vitality of the various communities within these areas varies greatly. Their economies are generally dependent on a mixture of activities in the primary and secondary sectors. In many countries, the largest farms are to be found in intermediate areas;
– economically integrated areas have witnessed a growth in population and are generally situated near urban centres. With regard to employment, they rely on one or several activities in the secondary and tertiary sectors, although agriculture still plays a certain part. These areas are also affected the most by threats to the environmental, social and cultural heritage.

2.1.2. The need for good rural indicators

No policies can be credible and worthwhile for the decision-makers unless they rely on a certain number of indicators allowing policy to be planned and implemented. Rural development presents a complex problem, since it is the concern of several different sectors and cannot therefore be described in terms of one economic sector alone, such as the agricultural sector. However, since rural development concerns the inhabitants and the land, indicators must be sought in these spheres. In this context, it is highly advisable for European countries searching for comprehensive rural development strategies to use good rural indicators.

The search for indicators should be based on existing territorial units. The OECD has devised a method for collecting and processing information, using data on two levels, local and regional. The local level represents a very detailed territorial framework, allowing for analyses of rural development highlighting "similar" areas, whether rural or urban. The regional level represents a less detailed framework, allowing for a reliable analysis of problems on the level of the three types of regions mentioned above, which are all more or less rural.

Without going into the finer points of the OECD method, the density threshold used for both local and regional levels is 150 inhabitants per square kilometre. This allows a distinction to be drawn between rural and urban communities. In remote areas, as described above, which are regarded as essentially rural, over 50 per cent of inhabitants live in rural communities. In intermediate areas, regarded as relatively rural, the rural population represents between 15 per cent and 50 per cent of the total population. Finally, in economically integrated areas, regarded as essentially urbanised, less than 15 per cent of inhabitants are classified as rural. This typology devised by the OECD allows different rural areas to be defined on the basis of population, as illustrated in Table 3.

Table 3: Population according to types of region in some European countries, 1990

Country	Population in rural communities	Population according to types of region		
		Essentially rural	Relatively rural	Essentially urbanised
	Percentage of national population	Percentage of national population		
Turkey	59	58	30	12
Norway	59	51	38	11
Sweden	43	49	32	19
Finland	55	43	37	20
Denmark	42	40	38	22
Austria	42	40	39	22
Ireland	43	47	15	38
Greece	37	42	24	34
Portugal	36	35	22	43
Czech Republic	29	15	57	28
France	37	30	41	29
Spain	30	17	46	37
Italy	22	9	44	47

Source: OECD.

This method also allows us to perceive other characteristics of different types of rural areas, such as the employment structure. National averages do not generally take account of the diversity of rural areas. By means of the typology described in the previous paragraph, we can see that the employment structure differs from one rural area to another, as the table below illustrates. In short, proposals for development strategies should indisputably take account of these differences, which can only be highlighted by using good indicators.

Table 4: Employment structure according to type of region in some countries (as a percentage)

Country	Sector	Percentage essentially rural regions	Percentage relatively rural regions	Percentage essentially urbanised regions
Czech Republic 1991	agriculture	23	13	3
	industry	41	48	41
	services	37	39	56
Hungary 1990	agriculture	27	12	4
	industry	34	42	38
	services	39	46	58
Poland 1993	agriculture	44	22	5
	industry	23	30	43
	services	33	48	52
Slovak Republic 1994	agriculture	22	13	4
	industry	42	48	29
	services	36	39	68

3. Comprehensive strategies for developing rural areas

Rural development strategies should be based on three central themes, covering economic aspects, social aspects and environmental aspects (or amenities).

- firstly, countries should make rural areas more competitive (improve their economic development), so that they can make their own contribution to national economic development. Increased competitiveness in the rural sector is likely to contribute to achieving the overall objectives of economic development at national level, which will have beneficial effects on the whole community. Strategies may, for example, consist in raising the net job creation level, promoting enterprise, or improving the economic performance of a particular sector (developing a particular product to fill a gap in the market);
- the second type of activity is aimed at enabling rural inhabitants to have a standard of living roughly comparable to that of the rest of the country. This strategy is a response to a general concern for social justice and equity. The aim is to allow citizens to opt for life in the country and a rural lifestyle while enjoying a standard of living comparable with that of the rest of the population. Strategies here may consist in reducing the considerable disparities in average income and "underemployment", and ensuring that rural populations have more or less satisfactory access to basic services. In practice, this aim needs to be qualified somewhat. All European countries accept that it is neither possible nor desirable to seek to protect all rural communities; the aim of rural development policy is to guarantee a minimum standard of living;
- finally, another essential strategy for developing rural areas consists in listing, enhancing and/or protecting the key elements of the national heritage, whether man-made or natural, in rural areas (administration of property in the public interest). These rural amenities often result from the interaction between human and natural activity over many generations. Rural inhabitants do not always manage to benefit from these amenities because they are regarded as public property, hence the lack of a market and prices reflecting their true value. Although these amenities may be exploited by market forces in some cases, such as the development of tourism, in certain situations governments need to implement specific policies and instruments to subsidise the provision of these amenities: objectives for rural development in some European countries).

To sum up, strategies for developing rural areas should address three types of problems: job creation, opening up rural areas and enhancing amenities.

Responses to these problems:

3.1. A two-tier approach

A two-tier approach would comprise both general measures relating to features common to all rural areas and measures adapted to the specific characteristics of each type of rural area: remote, intermediate and economically integrated areas. These areas can be identified by means of indicators.

General measures, usually taken on a national scale, include macroeconomic policies to promote economic growth and various schemes designed to make rural communities less isolated, in such spheres as education, modern communication methods, transport systems and energy supply.

These general measures should be complemented by specific measures, adapted to each type of area: remote, intermediate and economically integrated areas. For example:

- for remote areas, services and infrastructures should be developed, provided, of course, that the cost per unit or per inhabitant is not too high; ecologically rich and unique areas should be preserved, in view of their interest to the community;
- for intermediate areas, which are traditionally farming areas: since net job creation in the agricultural sector will become increasingly negative as productivity rises, attempts should be made to find strategies for creating jobs in other sectors and diversifying economic activity. If agriculture is still viable in a particular area, strategies should consist, for example, of developing means of transport to connect the area to the nearest town, in developing products to exploit a particular gap in the market;
- finally, for economically integrated areas, which have fewer development problems than the other two areas, strategies should seek to enhance or preserve the natural or cultural heritage.

3.2. A more in-depth assessment of the impact of sectoral policies

Countries traditionally have recourse to a whole range of measures for developing rural areas; each of these measures may benefit rural development (agricultural or environmental policies, for example), but the extent to which any one of these policies might interfere with another, whether positively or negatively, has rarely been studied. Nor have many adequate assessments been made of the impact of a particular policy on an area or the well-being of its inhabitants. It would be advisable for European countries to look more closely at the impact which policies have on rural development, using good indicators and taking into account the type of area concerned: remote, intermediate and economically integrated areas.

3.3. Strategic considerations

New strategies for developing rural areas should in future focus more on the capacity for initiative and enterprise at local level. Measures to facilitate the adoption of strategies of this kind and to ensure the provision of the resources needed to implement them are important aspects of a rural development policy. Activities to assist local development, taking into consideration the interests of the particular local community, improving local capabilities, encouraging autonomy and promoting the emergence of an entrepreneurial culture, are to be encouraged.

Furthermore, there are new opportunities in practically all sectors, not merely in those experiencing rapid growth, such as leisure and tourism, but also in those that are in decline, such as agriculture. Efforts may be devoted, for example, to devising new products and positioning products for specialised markets. It is essential for business projects to be rooted in the local context, taking into consideration the resources and the costs of such opportunities. Obviously, no single sector will be able to solve all the economic problems in rural areas, but all sectors may play their part.

In cases where there is limited potential for development, cost-effective measures to ensure a minimum level of services should be adopted, in particular education and health measures aimed at preserving and developing human resources.

All this provides a clear illustration of the need to devise comprehensive, co-ordinated and integrated strategies, striking a balance between demographic, economic, social and environmental aspects, as outlined in the table below:

Population	**Social well being and equity**
density	income
change	housing
structure	education
households	health
communities	security
Economy and performance	**Environment and viability**
active population	topography and climate
employment	land use
different sectors	habitats and species
productivity	land and water
investment	air quality

4. Conclusion

Rural development concerns an increasingly wide range of people at all levels of administration, as well as in the private and voluntary sectors. Faced with this challenge, European countries should strive to achieve better co-ordination between all those concerned, while at the same time encouraging them to play a greater part.

Like any important subject, rural development policy requires its own institutional set-up. Its basic function is to identify and co-ordinate, within an appropriate framework, the issues affecting rural society, so that they are not treated as the mere by-products of a sectoral approach.

The authorities at intermediate and local level have a crucial role to play in rural development. Central administrations should be prepared to listen to intermediate and lower levels and their vital capacity for initiative and impulse.

I shall end with this institutional aspect since, in my opinion, it contributes greatly to the success or failure of rural development. This is particularly true in Europe, where decision-making bodies often find it hard to come to terms with new problems in society, such as the integrated development of rural areas, a subject which, let us not forget, concerns more than one in three citizens.

Appendix 1: Basic territorial units for collecting information on rural development in some European countries

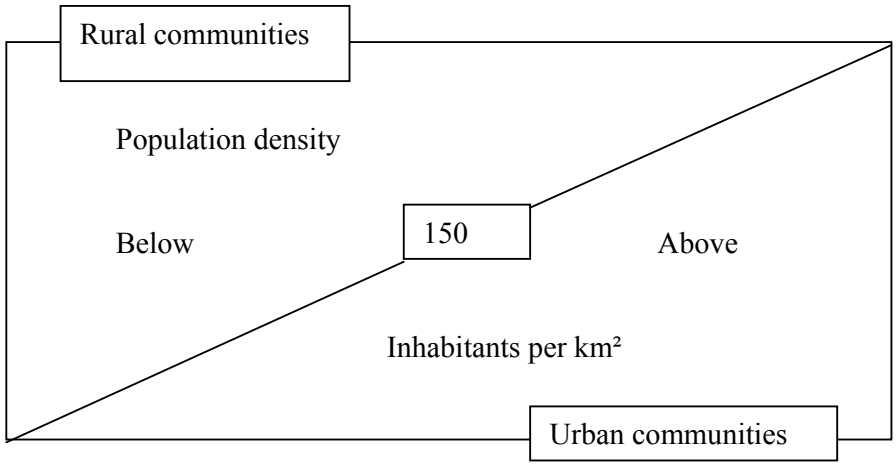
Country	Local level	Number	Regional level	Number
Austria	Gemeinden	2 301	Regionen	77
Belgium	Communes	589	Provinces	9(+2)
Denmark	Kommuner	276	Aemter	15
Finland	Communes	461	Small economic regions	82
France	Cantons	3 647	Départements	96
Germany	Kreise	543	Regierungsbezirke	47
Greece	Demoi	5 939	Development regions	13
Ireland	DED/Wards	3 440	Planning regions	9
Italy	Comuni	8 097	Provinces	95
Luxembourg	Communes	118	Country	1
Spain	Municipios	8 066	Provinces + Ceuta y Melilla	52
Sweden	Forsamlingar	2 587	Lan	24
United Kingdom	Districts	485	Counties/Local authority regions	65

Appendix 2: Typology of rural areas

Regional level

Essentially rural (remote) regions >50%	Relatively rural (intermediate) regions 15-50%	Essentially urbanised (economically integrated) regions <15%

Local level



Appendix 3: Objectives of rural development policy in some European countries

Czech Republic	Restoration and preservation of rural life and rural traditions
European Union	Article 130a of the Treaty establishing the European Community states that the Community "shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions, including rural areas".
Finland	The objectives of rural policy are to ensure the viability of rural communities throughout the nation, to improve rural living conditions to the level of urban living conditions, to reduce disparities in income and employment in the various rural regions, and to ensure that sufficient numbers of people remain in villages.
Poland	The definition of regional policy to assist rural areas encompasses a wide range of issues and deals with social and economic problems in all branches of the economy concerned with the countryside and small towns or pursuing their stated objectives there.
Hungary	Rural development policy is part of regional policy, which aims in particular to promote the harmonious socio-economic development of the regions.
Switzerland	The development of rural areas is based on spatial planning and regional policies; the former is concerned with physical planning of land use, while the latter aims to rectify regional disparities. The new REGIO Plus Programme is designed to promote the diversification and development of local potential for innovation, and to increase the competitiveness of rural areas.

Keeping rural areas attractive to young people

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1. Rural areas on the agenda

The globalisation of the economy and society has put the countryside back on Europe's political agenda for the 1990s. Quite rightly, it is back in the news. And it is surprising to see how uninvolved young people are. Yet one of the major problems of rural areas is the lack of young people with initiative and the urge to innovate. That rural areas in Europe are affected by ageing and the drift to the towns is self-evident. Sustainable development of the countryside is hard to visualise without youth. In eastern Europe, on the other hand, there are still many young people, but they no longer believe in a promising future. Yet unless young people with visions of the future can be galvanised into action, efforts to plan development programmes will prove illusory. So there is something in the popular saying that "The future belongs to the young".

Sustainable development of rural areas in Europe is on the agenda of this Ljubljana colloquy and of the ministerial conference to be held in Hanover in 2000. The guiding principles to be decided on in Hanover are of crucial importance to us young people because they will directly shape the setting in which we live for at least a generation. So it is clearly in our interest to express our views. A spatial planning and development policy will be all the more comprehensive and consistent if it reflects the aspirations of the new generation.

In many ways rural areas are not very attractive to young people, for instance because of the limited training and employment opportunities and the shortage of leisure activities. Since the early 1990s Europe has been geared to freedom of movement and freedom of establishment. So it is logical that most young people, especially those with initiative and a desire to innovate, should migrate to more attractive regions, even if they are secretly still very attached to their home country.

Today's policy-makers are proving clear-sighted, in terms of sustainable development, in tackling this drift away from the countryside, although this is not the first attempt to curb the trend. Adults do what they think best for young people. But doing so can only end in failure because the essence of young people's demands at the close of the twentieth century is going unheard. Their chief demand is to be taken seriously. Taking them seriously means:

– listening to what young people have to say;
– bearing their views in mind in the decision-making process;
– showing young people the results of their contribution.

2. A few characteristics of youth

One reason why young people, especially in rural areas, are often not taken seriously, systematically listened to or involved in decision-making is the distinctive character of the "youth" phase of life and the way in which youth is organised in rural areas.

2.1. "Youth" status

"Youth" status has developed only in modern society. In the past, the shift from childhood to adulthood was quite abrupt. Nowadays, the quest for an occupation and the vocational training process last a long time and are often complex.

Age limits for young people are defined in different ways. In this report, young people are understood to be those who have gone through puberty (who are adult in terms of bodily functions) but have not yet found a fixed place in society (between the ages of about 15 and 25).

2.2. Separation – a double challenge

In this phase of their lives young people in the process of growing up separate from their parents and take two important steps: firstly, they start to decide by themselves who they are and what they want to commit themselves to in life (personality/identity development), and secondly they seek out their own place in society and redefine their whole personal relationships network (integration). This process is more fraught with pitfalls in rural areas because of the radical changes in scales of values caused by globalisation. The trend is even more marked in the former communist countries because of changes in the political system.

2.2.1. Personality development

Adolescents possess many talents of which they themselves are unaware, and that is why they do a lot of fairly uninhibited experimenting. This innate reflex is important. If it is thwarted because the environment does not want to allow young people the freedom they need, this potential will dwindle away in time, or else the person will seek a more favourable environment. However, this does not mean uncritical acceptance of every experience. If taken seriously, a committed dialogue between young people and older people normally leads to forms of consensus and a learning process for all those involved.

2.2.2. A place of one's own and a new network of relationships

When they are young, life requires people in rural areas to be highly independent. They have to be mobile to travel to vocational school or a higher education establishment in a town where they often stay all week. During this time they have to meet their needs with the money available, often working on the side. At the same time, they come up against youth-oriented marketing, which is always more aggressive, and have to learn to form their own opinions and make their own choices. Modern society encourages and demands very early independence among young people in rural areas, especially in eastern Europe. But if they want to take part in the discussion of important decisions, their independence is suddenly unwelcome.

It is a proven fact that an environment in which young ideas are constantly discouraged is highly unattractive to young people. They either emigrate or become resigned, at a very sensitive time in their lives. In both cases, they are lost to the region as "pillars" of development.

As they strive to integrate into rural and village life and find their place in society, young people are therefore torn between adjustment and opposition. At the same time they are still in situations of dependence (key words: training, finance, emotional ties) and do not yet have enough self-confidence to be able to show it as adults do. What young people need is areas of freedom, in the dual sense of physical areas of their own and room to experiment with alternatives which would otherwise be impossible in a traditional environment. They must also be able to display their independent status as young people.

2.3. The fear of manipulation

If young people express a "desirable" opinion, it is fairly easy to put it across to the decision-makers and obtain the relevant information. Conversely, if their opinion is undesirable, it is immediately assumed that they have allowed themselves to be manipulated. Young people are granted no capacity for holding individual opinions – in an era when almost every young person surfs on the Internet and has access to floods of unfiltered information of all kinds. At the same time, especially in the countryside, many adults' knowledge of modern information techniques more or less amounts to using a computer as a typewriter.

Hence a profound distrust. This is the bane of young people's and adults' lives, breaking up any chance of mutual understanding. And there is no discussion as dangerous as one avoided out of fear or ignorance. Here too, a suitable approach is to seek active information and open dialogue.

2.4. The complex spectrum of rural youth organisations

In western Europe between the two wars, and especially after the second world war, youth groups emerged from a wide variety of circles. The outcome was an extremely complex spectrum. The "traditional" rural youth organisations that appeared after the war were initially young farmers' associations. Some remained so, while others have turned into organisations catering for all the young people of a given region, some of whom are still farmers. But they are still far from bringing together all the young people in rural areas. In many countries rural

youth organisations set up and supported by the Catholic Church are also very active. And in many youth organisations such as the Protestant Scouts or the Young European Federalists (JEF), the key reference is more to an ideal than to a region. Unfortunately, co-operation still leaves much to be desired.

In central and east European countries rural youth groups were set up as soon as the regimes changed. Though some of these groups existed before and are patterned on the western rural youth movement, they are essentially different. The concept of "rural youth" should therefore be used with caution.

The current range of European rural youth organisations is as follows:

Pan-European groups:

- European Committee for Youth Farmers' and 4H Clubs (ECYF4HC);
- International Movement of Catholic Agricultural and Rural Youth in Europe (MIJARC-Europe);
- Rural Youth Committee of the European Confederation of Agriculture (CEA-JR).

European Union grouping:

- European Council of Young Farmers (CEJA).

Here too, unfortunately, co-operation is far from perfect. The initial projects are under discussion. A major catalyst has been the co-operation undertaken a year and a half ago with the Committee on Agriculture and Rural Development of the Parliamentary Assembly of the Council of Europe. Co-operation in defining "guiding principles for sustainable spatial development of the European continent" would (virtually as a side-product) help us make a significant step forward.

2.5. Financial dependence

Last but not least, young people are almost always financially dependent on their parents and/or a grant because they do not yet have the qualifications and skills which would enable them to earn their living on the market. Youth unemployment statistics show that even completing vocational training or higher education affords no guarantee of finding a job. The situation is almost desperate in rural areas in eastern Europe. This may seem commonplace and is regarded as perfectly normal, but it has important practical consequences and should therefore be pointed out here.

One of those consequences is that most of the time, young people and their organisations have only very little money. They admittedly obtain support, but in doing so often lose part of their independence. And this financial support is also becoming increasingly scarce. Often, though, these financial constraints mask a lack of information and know-how about where to obtain money.

2.6. Self-confidence pyramid

To sum up, it is important to get to know young people and their organisations if one wishes to co-operate with them. Young people must be given their own status, which must be equal to that of adults but with a content specific to youth.

The questions and problems that arise can be explained with the help of the "self-confidence pyramid": underlying the financial problems that beset young people and their organisations there is often the difficulty of accessing relevant information. Behind this is usually inadequate organisation, which is very marked where rural young people are concerned. But underlying that is a further, more fundamental difficulty: the still unconsolidated self-confidence of people who have a great potential and are seeking their own identity and position in a society deeply shaken by changing values. By way of comparison, the Red Cross, for example, does not have its own resources either, but nevertheless has access to substantial sources of funds. It has the necessary information to gain access to money. It obtains this information because it is powerfully organised. And its organisation is strong because it has the necessary self-confidence based on an unshakeable identity.

So if these young people's status is to be brought alive, they must be given the necessary areas of geographical and conceptual freedom to occupy under their own responsibility – and then be obliged to occupy them! This approach is guaranteed to succeed for every region keen to remain attractive to its young people.

3. Integrating into a society divided between tradition and modern life

Spatial planning, participation, co-operation, creating and using areas of freedom – all this must be viewed from a certain perspective and in a certain context, which affects the decision-making process and the way in which projects are carried out. This fact is often underestimated, although it is of considerable significance for the attraction of a region.

3.1. Culture of progress and survival

Long-standing traditions and values are still alive in many parts of Europe, which are often criticised for being reluctant to innovate. This is a mistaken view, since almost every household in those areas has a television set which shows that biological and technical progress is filtering into agricultural practices. The writer John Berger describes this way of thinking as "reactionary" and attributes it to the "culture of survival". These people regard themselves as survivors, while others have failed and left. All innovations are judged by the yardstick of whether they would have made life possible or easier if they had already been available before. If the answer is "yes", there is an innovation process; if it is "no", the novelty is rejected. For young people this means that:

– they are not allowed to take part in decisions about the future because they lack the legitimacy – the experience conferred by age – for such participation;
– the ideas put forward by young people are not usually taken seriously.

During their training, young people latch on to another way of looking at survival, which John Berger describes as the "culture of progress". Here novelty is viewed as a good thing until proved otherwise. This leads to orientation problems because of the clash between two worlds:

– the industrial-urban world, with training, occupations, media, leisure activities and consumption;
– and the rural-village world with social control, links with daily life, mutual support between neighbours, role distribution, taboos, tradition, confidentiality and secrecy.

There are few points of contact between these two worlds. For young people in the countryside, there are few examples of and opportunities for linking up experiences between the two worlds. School largely ignores the problem. Girls, for whom tradition closes off almost all opportunities for experimenting, come up against the greatest difficulties: how can one be surprised that they no longer want to marry farmers ? That is surely the perfect illustration of a region's failure to attract.

This generates orientation problems for adults as well as young people in rural areas. The tidal wave of globalisation is playing havoc with the values of the survival culture. Young people are suspected of wanting to overthrow the "intact" traditional way of life. And their demand for freedom and room for manoeuvre naturally seems cynical to adults.

At this point attempts to establish co-operation between the two parties call for a very cautious approach. Creating an atmosphere of trust is a matter of skill, understanding, patience and time.

3.2. Social and economic breakdown in rural areas in the former communist countries

In the former communist countries of Europe few long-standing traditions have survived and they can no longer be regarded as alive in rural areas. This makes the social and economic breakdown in rural areas still more serious. The orientation problems stemming from the change in political system are at least as disturbing as those caused by the clash between a culture of progress and a culture of survival, with comparable effects.

These regions will not survive without outside financial help. And the efforts made will yield results only if this support is based on the thinking underlying the self-confidence pyramid (see section 2.6) and relies upon young people with initiative and vision who succeed for love of their region.

3.3. Understanding and appraising

We all have an automatic defensive response to innovation. Each signal, experience or feeling comes up against a personal appraisal pattern. Where possible, this operates in such a way as to obviate the need to alter the pattern. For example, one only looks at an object for as long as it takes to classify it. But ultimately it is of no interest to know whether the appraisal or the appraisal strategy makes sense.

If it is impossible to classify without altering the pattern, then we prefer minor changes in order to minimise or even avoid inner conflict. People use a wide range of protective strategies to deal with inner conflict: they ignore information, avoid situations which would bring them up against unwanted new experiences or alter the meaning of the information they have (rationalising).

The automatic response of (over) hasty appraisal and protection from inner conflict grows stronger with age. The younger people are, the more open and flexible their appraisal pattern remains. It becomes more complex and rigid with time.

Understandably, young people voicing their ideas create uproar when established decision-makers are unused to being with them. Working with young people means permanent inner conflict for adults. Nonetheless, these conflicts are usually enriching and give one a chance to refine on one's own appraisal strategies. But it takes resolve. There can be no learning process without a will to act.

3.4. Regional orientation of rural youth

The situation in terms of schools, leisure opportunities and the mobility imposed by our system on rural youth causes young people to be divided between village and town. They organise into gangs rather than village groups, with the result that they neither really break with their place of origin nor really become integrated into the town.

Added to this is the fact that young people and their parents often remain financially interdependent. If the family's financial base is narrow, young people contribute to the family income; conversely, the family helps them meet the financial obligations arising from the need to become independent. Young people benefit greatly from these financial relations; as the family pays for their keep, they can concentrate on their desire for independence (for example, buying a car). This helps to anchor them and makes it easier for them to integrate into the adult world (in the village): on the other hand, they lose some of their freedom, which may generate conflicts.

Regional mobility and the provision of facilities for meeting people at regional level allow young people to conquer an area of freedom whose horizon is no longer confined to the traditional life of the village. There must be a systematic search for places where young people can be free, and this must be taken into account in spatial planning if the intention is for young people to contribute to the development of the community.

4. Spatial planning – planning areas of freedom

As early as the 1950s research on the countryside demonstrated that young people remained in a rural environment if their youth status was recognised and if they had appropriate facilities either inside or outside the village community. These two aspects are now of even more crucial importance to the regions, so young people's access to places where they can be free is a key component of a sustainable development and spatial planning policy. It is not enough to rely on chance to create such places.

In this respect the publication of the *European Charter on the Participation of Young People in Municipal and Regional Life* is a landmark. These principles must now be carried further by the guiding principles under discussion.

4.1. Integrating rural development policy and youth policy

Two basic references should be incorporated into the guiding principles; they appear in the final declaration of the symposium on "Youth participation in rural development" held in Strasbourg in March 1998:

– guaranteeing an integrated approach to rural development policy and youth policy;
– building up and reinforcing co-operation between public institutions and non-governmental organisations to achieve joint objectives in rural development policy.

4.2. Youth participation in spatial planning decision-making

The principle of youth participation was established for the first time at European level in the *European Charter on the Participation of Young People in Municipal and Regional Life*. Unfortunately the Charter does not explicitly mention spatial planning, although this is precisely a social process designed to plan the future life of the community. In this sense spatial planning is of particular importance to young people.

In spatial planning markedly divergent interests often have to be weighed up, but the decision has to be complied with. The discussions, held between well organised social groups, are usually difficult. Rural youth, which is poorly organised and lacks self-confidence, is hardly ever involved. It is not an essential talking partner, since young people and their organisations do not have specific issues at stake in planning measures. This makes it particularly difficult for them to defend their interests. The other, well organised social groups may, for instance, be easily tempted to withhold the available information. The logic of the self-confidence pyramid precludes real youth participation (see section 2.6).

So clear rules have to be laid down for co-operation between young people and adults in spatial planning. The following principles are conducive to a fruitful participation process.

Deciding together on the goals and approach

Young people must be able to make their wishes known at the outset of the planning project. What are the issues that interest them? What do they want to co-operate in? Is there a need for youth infrastructure facilities? The authorities' and young people's representatives must seek a consensus on the issues of common interest to be tackled and the approach to be adopted. The timetable drawn up must leave room for this.

Establishing an atmosphere of trust

Co-operation can hardly be visualised without mutual trust between very different partners. Creating an atmosphere of trust calls for skill, patience and time. Besides dispelling prejudice, it is essential to agree on ways of regulating thought and expression to help bridge a cultural gap which is often very wide. Only then can effective communication start.

Open distribution of responsibility

Management of and responsibility for the joint project must be shared, with everyone's capacities in mind.

Young people will identify more closely with the joint planning, which means their common future, if they bear full responsibility for it: that is a key element of a region's attraction.

It is untrue that young people are unwilling to take responsibility or are unaware of interrelationships. They intuitively realise, almost faster than adults, what problems stand in the way of the future and what kind of solutions should be found. Their greatest difficulty lies in expressing this intuitive understanding in intelligible arguments. Young people often lack enthusiasm for co-operation because adults half-heartedly give them token responsibility, then at the crucial point do everything without them. That is why openness is of special importance. There must be an open written record of the origin, amount and use of the financial resources used and the work done, with all the attendant rights and duties.

Managing co-operation and publishing the results

Information exchange and regular meetings are prerequisites for anticipating any difficulties that may arise in co-operation. Indicators can also be established to help monitor co-ordination and communication. The results must be published in all cases, together with the arrangements planned for implementing them.

Consolidating achievements

Co-operation pursues educational as well as material goals. Every opportunity must be taken to help young people learn. But they are not the only ones to learn: their older partners also learn a great deal if they have confidence in young people.

The results achieved through joint effort should not disappear once the spatial planning process has ended. These efforts are poorly rewarded – in terms of sustainable development – if their implementation is stymied. The credibility of all that has been said and done is at stake.

4.3. Youth participation in drawing up the European guiding principles

These proposals are bound to go too far for many established decision-makers, especially – unfortunately – in rural areas. They are not excessively demanding proposals, but ideas with some vision. We would ask these people if it is still acceptable today for the European continent to go on neglecting the potential of youth in this way, when globalisation is subjecting the continent's rural regions to such immense hardship, especially in central and east Europe. The Minister-President of the Land of Saxony has probably already asked himself the question: he recently said that every new avenue should be seen as an opportunity because no one can say today which one will lead to success.

The "guiding principles for sustainable spatial development of the European continent" are a vision, a blueprint for Europe's future spatial development. Participation is now a prerequisite for this, not a luxury, because the more their views are ignored, the less attractive young people in the late twentieth century find the area concerned. This point is at least as significant in terms of attraction as leisure facilities or infrastructure.

It would be a very important signal if the Council of Europe were to bring youth participation alive in these guiding principles. Together with young people, it would take a decisive step towards making rural areas attractive to their inhabitants, and it would give a wonderful

incentive to young people. In future, no authorities or decision-makers could go on claiming that involving young people in spatial planning is an impossible task. Taking them seriously cannot be ordered, but it can be experienced.

With the support of the Youth Directorate, pan-European youth organisations can be said to have established very fruitful co-operation with the Committee on Agriculture and Rural Development of the Parliamentary Assembly of the Council of Europe. Our proposals for amending Recommendation 1296 (1996) on a European Charter for Rural Areas were all accepted! This experience and all the proposals made can provide the basis for young people's participation in drawing up and finalising the "guiding principles for sustainable spatial development of the European continent".

To sum up, decision-makers wishing to keep rural areas attractive to young people should bear one thing in mind: young people need areas of freedom where they can feel alive, and these areas need to be determined by a concerted approach based on honouring commitments. Pan-European youth organisations would be pleased to be able to open up this path towards consensus with the Council of Europe institutions. "To do good things, one doesn't need to be a genius," said Montesquieu more than 200 years ago, "one just needs to be with other people".

CONCLUSIONS

by Mr Welf SELKE
Chairman of the Committee of Senior Officials of the CEMAT

PROSPECTS FOR THE DEVELOPMENT OF RURAL AREAS IN EUROPE

In the four years following the fall of the iron curtain, the Council of Europe has welcomed eighteen new member countries, representing 286 million Europeans. Better integration between the old and the new member countries and their regions has now become a very important political goal for the coming decades. This process is supported by a spatial development project through the elaboration of a spatial development strategy for the European continent. An initial document entitled "Guiding Principles for the Sustainable Development of the European Continent" will be discussed by the ministers responsible for regional and spatial planning at their next meeting in the year 2000.

The Ljubljana seminar focused on a key issue of spatial development in Europe – the future of rural areas – and recognised the importance of rural areas as a vital element of a European identity. In the new member countries in particular, a significant part of the population still lives in rural areas and is largely dependent upon income from agriculture, forestry and fishing. This is the main difference in relation to the situation in the old member countries, where alternative sources of income have gradually developed.

The prosperity of rural areas and, in particular, the reduction of disparities are very important priorities for ensuring the regionally balanced, and sustainable development of our continent. The main objective of an integrated spatial development policy to maintain sustainability and vitality in rural areas should be to enhance and develop their economic, ecological and socio-cultural functions, which are highly interdependent. The rural population, especially the younger generations, should participate actively and take the initiative in these processes:

– economic functions should be promoted through the development of the rural economy, including a viable agricultural and forestry sector supported, where appropriate, by multiple job-holding, recreation activities and tourism, the promotion of SMEs, and the enhancement of other endogenous resources (renewable energy resources, niche products, handicrafts, etc.). Appropriate measures should be taken to provide rural areas with services and infrastructures and to encourage the use of information technology. Technical and vocational training and educational and employment opportunities should be developed and expanded in rural areas, in order to maintain the population and even to promote its growth in these regions. Small and medium-sized towns should also be promoted as service providers for their rural hinterland and as a location for SMEs;

- the ecological functions of rural areas should be preserved through the sustainable use of land, water and air, and the protection of biodiversity and landscapes (for instance, through the creation of landscape parks). Agriculture, forestry and tourism have particular tasks to fulfil in relation to the ecological functions of rural areas, in particular in avoiding and preventing environmental deterioration. The ecological management of rural areas should be enhanced by preserving the diversity of natural and man-made landscape elements to increase the regeneration and self-purification of the environment as well as to control the processes leading to deterioration;
- the socio-cultural function of rural areas should be promoted through the consideration of specific rural features, the preservation of the positive values of rural society and the enhancement of the countyside's cultural and historical characteristics as well as amenities. Specific measures in this respect should concern the promotion of the rural and historical heritage and the strengthening of regional cultural identity. Local services to the population, including public transport, should be strengthened.

The seminar participants pointed out that rural areas in Europe, while facing a number of common significant challenges, are characterised by their great diversity. Specific strategies for rural areas should therefore be recommended but should not be carried out in isolation. In this respect, urban-rural relations should be promoted through support for small and medium-sized towns and regional centres to ensure the continued vitality and diversity of rural regions.

In the present context of economic globalisation, maintaining attractive and dynamic rural areas should be regarded as a significant political spatial development objective for the overall territorial cohesion of Europe. Rural development management should therefore be improved and strengthened at various levels to mobilise those working in rural areas and at national governmental level to ensure convergence and interaction between the various policies contributing to rural development.

The seminar participants asked the Council of Europe to forward these conclusions to the Parliamentary Assembly, the Congress of Local and Regional Authorities and to the ministers responsible for regional and spatial planning in Council of Europe member states, requesting them to consider these conclusions and recommendations in their political activities.