

## 7. Thematic prospective scenarios 'Rural development'

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### 7.1 Scenario base 'Rural development'

#### 7.1.1 Present situation and trends in agriculture and rural areas

##### **Agriculture**

Agriculture experiences substantial *structural changes*. Cost-intensive technological progress leads to higher agricultural productivity and production. This causes an increasing supply on the markets. The increased supply, together with the competition with producers from abroad causes a spill-over, a decrease in prices and consequently a decline of farmers' revenues. In this way a vicious circle is set in motion. Important indicators for this structural change are the number of farms and farm size.

In the EU-15 the *number of farms* dropped from 7.4 million in 1995 to 6.8 million in 2000. Small farms (0-5 ha) dominate with 3.9 million in 2000. Only 0.6 million farms are larger than 50 ha. In the CEECs farming is characterised by a large number of holdings: 9.2 million (30% more than in the EU-15). Cultivated land, however, amounts to 50 million ha (40% of that in the EU-15).

Concerning *farm-size* a distinction must be made between the physical and the economic size. In 2000, the average area of a farm in the EU-15 was 18.7 ha. The difference between the Member States, however, is remarkable. The smallest average farm sizes existed in Greece (4.4 ha) and the largest in the UK (67.7 ha). In all CEECs the share of small holdings in the total number of farms is high: from 42% in Latvia to 97% in Bulgaria. Most of the small farms are subsistence or part-time farms. Large farms (more than 50 ha) include mainly commercial companies and co-operatives.

The Standard Gross Margins (SGM) of a holding is a measure for its economic strength. From 1989 to 1997 the average SGM in the EU-15 rose in all Member States, most of all in the Netherlands, Belgium and Denmark. In 1997, the average SGM per holding was highest in the Netherlands, followed by Denmark, the United Kingdom, and Belgium. In 2000, in the new member states, Slovenia has, by large, the highest SGM, followed by Cyprus and the Czech Republic.

Regarding *agricultural production* the following trends can be observed:

- The production of *major crops* continued growing. Community support to cereals, oilseeds and protein seeds as well as the fall of the number of cattle induced an increase in the crops for sale. The CAP reform in 1992 only modestly affected these major trends.
- *Permanent crops* decreased. The main reason was the pulling up of vines intended for ordinary wine production. This results partly from Community support. Wine production concentrated on the name areas (quality wines). The orchard surfaces decreased in the northern Member States but remained constant in the southern Member States.
- Between 1975 and 1995, *surfaces still in grass* decreased by 12% in the EU-9. The cattle and sheep rearing areas in plains were most affected. Only some cattle-rearing areas (Ireland, Limousin, Umbria) saw their surfaces still in grass increasing. The period was marked by the milk quotas (1984) and the decline of livestock-farming resulting from it.

With regard to *rural areas* five different categories can be distinguished:

- *Rural areas in urbanized regions* are situated in the periphery of important agglomerations, especially in the Pentagon and near the large cities. Many of these areas profit from the presence of residential areas, industrial estates, and recreational amenities. They are affected by high socioeconomic dynamics in terms of population density and urbanisation. This reinforces the trend towards scattered settlements and increased pressure on land-use.

- Many coastal areas near the Baltic, the North Sea, the Atlantic Ocean, and the Mediterranean have a well developed tourist industry and can be characterized as *rural areas attractive for tourism*. The same is true for mountain areas in the Alps, the Pyrenees and to a lesser extent in the Tatra. The tourist industry contributes to a high economic viability. Moreover, it causes the in-migration of many young people from the surrounding areas. In high seasons, however, tourism puts nature, landscape and environment under pressure.

- *Rural areas with a variety of activities* are for instance situated in Devon in the United Kingdom, in regions in the Middle of France, and in the Po area in Italy. These areas are highly dependent on rural activities but additional activities, like service for out-door recreation, manufacturing or local crafts, generate additional incomes. Socioeconomic viability is moderate. It is uncertain whether agriculture will survive or the economic structure will become more diversified. Landscape elements are developed to some extent in these areas.

- *Rural areas where agriculture dominates* are less diversified than the rural areas with a variety of activities. These areas can be divided into two subcategories. Areas in which agriculture is highly productive and in which the processing industry plays an important role are e.g. found in Bretagne in France and in England. Their socioeconomic viability is moderate or high. Intensified and large-scale agriculture, however, puts the environment under high pressure. Areas in which agriculture is traditional and has a low productivity are found in Galicia in Spain, in Poitou-Charentes in France, and most of the CEECs. Their socioeconomic viability is low. In these areas environment is under low pressure.

- *Rural areas with low accessibility* are located in the middle and high mountains, isolated plateaus, and peripheral areas, e.g. in Northern Scandinavia and South-Eastern Poland. They are characterised by large natural landscapes and small scale cultural landscapes dominated by marginalised agriculture. Out-migration of younger people causes an aging of the population. This is sometimes further enhanced by the in-migration of retirees. Many of these areas lose the critical mass which is necessary for the maintenance of services and infrastructure.

Rural areas are affected by different but related trends. This varies, however, significantly according to their physical, socioeconomic, demographic and other characteristics.

- *Towards the post-productivist country-side*. Changes related to this trend are e.g. growth of alternative farm activities and increasing investments in the quality of the environment. Rural areas are commodified by marketing their characteristics. Especially rural areas with a variety of activities or with low agricultural productivity are subject to this trend.
- *Changing role of agriculture and food-supply chains*. The CAP reforms stimulated a shift from the agri-industrial towards the multi-functional model of food-supply chains. Animal diseases and food scandals put food quality, food security and animal welfare high on the agenda. As a result, more attention is paid now to the origins of food and to the production methods applied, especially in rural areas in urbanized regions.

- *Towards consumption of different ruralities.* Many rural areas have turned to out-door recreation or tourism. This is not only true for rural areas attractive for tourism but also for rural areas where agricultural productivity is low or with a variety of activities. The urbanites visiting rural areas and the regular residents can be regarded as consumers of different ruralities. This may pose a challenge on the prevailing culture.
- *Localities as resources of identity formation.* The self-identification of rural areas is a key to spatial development. The constructed identities must fit local needs and extra-local opportunities. Rural areas with natural, cultural and other assets, e.g. rural areas attractive for tourism, with low agricultural productivity or with a variety of activities, gain importance.

### 7.1.2 Past and present EU policies

The CAP has its foundations in the *Treaty of Rome* (1957) establishing the EEC. Self-sufficiency was a prime objective of the fledgling Community. The common market, with its protected external borders, was established to counter the fluctuations in the availability and prices of food and to raise the level of production. Principles commonly cited were market unity, community preference, and common funding. The most important measures were – and still are – income support, price support, import tariffs, and export subsidies.

The CAP was so successful that within 20 years Europe produced more than enough food for its own population. Exports were rising sharply and surpluses mounting ('butter mountain', 'milk lake'). The Council Directive on Less Favoured Areas (1975) introduced an explicit territorial dimension into the CAP. It provides payments to farmers in areas characterised by permanent handicaps. In 1988 the LFA scheme was incorporated into the Structural Funds.

It became increasingly clear, however, that the production growth was achieved at the expense of nature and environment in Europe and the distortion of the international markets. Milk quota was introduced in order to limit milk production. Income subsidies were linked to measures like set-aside, and agri-environmental measures were implemented to stipulate environmental conditions to other measures. This led to some new territorial aspects in the CAP.

In the beginning of the 1980s Regional Policy began in earnest. Funding was used to finance schemes for – among other aims – the development of rural areas with few alternatives to agriculture. In 1988 the budget was doubled and there was a shift from individual project support to a programme-based approach. The following objectives were relevant for agriculture and rural areas: *Objective 1* ('Structural adjustments and development of less developed regions'), *Objective 5a* ('Speeding up the adjustment of agricultural and fisheries structures'), *Objective 5b* ('Facilitating development of rural areas'), and *Objective 6* ('Promotion of development in regions with exceptionally low population density'). The Community Initiative LEADER was introduced to encourage integrated local development strategies.

The system of protected European markets was in danger of collapsing under the weight of its own success and was becoming too expensive to maintain. The pressure for reform was intensified by the GATT and WTO negotiations. In response to this, more efforts were made to mitigate the negative side effects. The EC began a shift in expenditure from production support to income support and rural development.

The MacSharry reform (1992) was a milestone in this process. The reform decoupled agricultural payments from production levels and introduced the set-aside system. *Agenda 2000* (1999) was another milestone. It defined two pillars of the CAP. *Pillar 1* contains

among other things:

- commodity market support with intervention buying or private storage aids
- direct payments, often with quotas and area ceilings to limit expenditure
- supply management tools such as quotas on milk supplies and compulsory arable set-aside
- other elements such as environmental or animal welfare requirements

*Pillar 2* covers measures aimed both at the agricultural sector and the wider economic development of rural areas throughout the EU. Support offered under these measures can cover:

- improving farm incomes and production conditions of farmers
- less favoured areas and areas subject to environmental constraints
- agri-environmental measures
- investments to improve production, processing and marketing of forestry products
- measures promoting the adaptation and development of rural areas

'Modulation' was introduced to switch funding from Pillar 1 to certain elements of Pillar 2. This implied a further shift in favour of rural development. The mid-term review defined some additional changes in the CAP, which were also needed to accommodate the expansion of the EU with ten new Member States. Despite all reforms the CAP still remained a costly endeavour: in 2002 agricultural expenditure accounted for 45% of the EU budget.

Since 1999 the new Member States received aid from the pre-accession programme SAPARD. SAPARD interventions were oriented towards three bottlenecks: the regional capital supply (e.g. by providing support to agricultural holdings), the regional market potential (e.g. by improving processing and marketing), and the geographical position (e.g. by improving rural transport infrastructure) (IRS, 2004). After their accession Pillar 1 direct payments were phased in gradually. The new Member States receive substantial payments for rural development.

Regarding the Structural Funds, the end of the 1990s marked the emergence of a new approach. Budgets were not only cut but also concentrated in order to increase their effectiveness. The six priority objectives were reduced to three. Objectives relevant for agriculture and rural areas are:

- *Objective 1* ('Development and structural adjustment of areas most lagging behind')
- *Objective 2* ('Economic and social conversion of areas facing structural difficulties')

Although the CAP was primarily designed to improve the productivity of agriculture it has significant territorial impacts. Its impact on agriculture and rural areas varies from region to region depending on specific physical, socio-economic, and other conditions:

- A certain limitation of over-production has occurred. For instance cereal production in the EU-12 declined from 170 million tonnes in 1992 to 165 million in 1995. The fall in intervention prices increased the strength of the market. Because of that, productions with industrial purpose, e.g. colza, strongly increased and intensified. Moreover, new crops competitive on international markets appeared, e.g. flowers in the Bergamo Province.
- Partly due to market forces and partly owing to the CAP, a dualisation of agricultural production has taken place. Concentration and an intensification of production occurred in the most fertile areas and more extensive agriculture and agricultural abandonment took place in the LFAs. In the new Member States, the existing dualisation is also a major problem.
- Intensified arable and dairy farming have caused serious damage to landscapes and environment in open fields, polders and deltas. The scaling-up of production has also occurred most profoundly in the open fields. In many British areas bocage landscapes were changed into open fields. There are also many areas in which agriculture is

marginalising, e.g. high and low mountains.

- Pollution by agriculture is reduced but not stopped. The intensification of certain agricultural productions, in particular in the field of cereals, is still topical and the expansion of irrigation also contributes to it. The intensification of livestock-farming in or near the cereal areas is also noticed. A number of positive developments, however, can be observed as well. Between 1992 and 2001, for instance, 500,000 ha have been afforested.

Regarding SAPARD priorities varied between countries. In Poland and Slovakia improvements of the agri-food business was the main priority. In Latvia and Hungary most resources were invested in farms. SAPARD had a stronger impact on territorial cohesion in countries like Poland, with large areas dependent on agriculture, than in countries like the Czech Republic, where significant steps towards the restructuring of agriculture had already been made (IRS, 2004).

The Structural Funds generate different effects on different levels. Rural and other areas outside the Pentagon (especially in Greece, Portugal and Spain) receive substantially more assistance than areas inside. The bulk of the assistance, however, goes to urban areas although sparsely populated rural areas receive most spending per capita. While contributing to territorial cohesion on the macro level it works against it on the meso level. On the micro level, e.g. in rural areas like Calabria and Toscana, the Structural Funds contributed to the stabilisation of settlement patterns and the strengthening of the regional and local levels of government.

### 7.1.3 Driving forces behind agriculture and rural areas

Key factors behind *structural changes in agriculture* are:

- In the last decades the *markets for agricultural products* were characterised by increasing globalisation. At the same time real food prices and the proportion of income spent on food declined. These dynamics put farmers' revenues under pressure and gave an impulse to the scaling-up of production in order to lower production costs. At the same time, however, the demand for quality products increased, creating niches for regional and organic products.
- The global markets for agricultural products are seriously distorted by export subsidies and import tariffs. Although many developing countries are able to produce against relatively low costs they are hindered in gaining their market shares. *WTO negotiations*, aiming at the removal of these market distortions, may put small farms and farms in less favoured areas further under pressure.
- *EU Enlargement* is another factor with an impact on agricultural production. After the enlargement by 10 new Member States in 2004 the arable area of the EU doubled and over 100 million food consumers and 9.2 million farms were added to the internal market. For farmers in the old and in the new Member States this implies growing markets but also increased competition.
- The factors just mentioned stimulate *technological innovations* in the agricultural sector. Increased competition makes investments in cost-intensive innovations like new machines, fertilizers, herbicides and fungicides necessary in order to maintain and gain market shares. Technological innovations in their turn lead to higher agricultural production.
- Some sorts of agricultural production demand large amounts of *energy*. Rising energy prices may therefore generate increasing production costs. This is especially true for greenhouses demanding much energy for heat and light in order to stimulate the growth of crops. At the same time demand for sustainable energy like biomass and wind energy is growing, providing new opportunities for farmers and rural areas.

Main factors behind the *development of rural areas* are:

- The rise of the *experience economy* is a driving force behind the 'post-productivist country-side' and the 'changing role of agriculture and food-supply chains'. With rising incomes more consumers are willing to pay for safe and high quality food products, alternative farm activities like landscape management, and the quality of the environment.
- *Migration* has a significant impact on the socio-economic viability of rural areas. The loss of younger people and the in-migration of retirees have left many rural areas as 'aging areas'. As a result these areas may lose the critical mass which is necessary for the maintenance of services and infrastructure. This is especially true for peripheral rural areas.
- The increasing amount of *leisure* has an impact on the 'consumption of different ruralities'. The number of urbanites 'consuming' rural areas has increased significantly in the last decades. The same is true for the time they spent in rural areas.
- The significant increase of *mobility* has the same impact. Many rural areas have turned to out-door recreation and tourism now as an alternative development strategy. The commodification of local resources like natural landscapes and cultural heritage has helped to strengthen the base in large parts of rural Europe.

Reforms of the CAP, RDP, and the Structural Funds are stimulated by the following factors:

- *Interest groups*. In the 1945 – 1975 period, agricultural interest groups formed an effective lobby for the introduction and the further development of the CAP. In the 1975-2004 period, NGOs (environmental groups and third world groups) became more and more effective.
- *Animal diseases*. Epidemic diseases like BSE and FMD caused large economic negative impacts and large collective investments in order to combat the diseases. In the subsequent CAP reforms more and more attention was being paid to these issues.
- *WTO negotiations*. The GATT and WTO negotiations aim at realising more open and competitive global markets for agricultural and other products. The pressure for CAP reforms was significantly intensified by these negotiations.
- *EU Enlargement*. Almost every entry of a group of new Member States into the EU generated larger budgets and adaptations of the CAP, RDP, and Structural Funds. The accession of the CEECs, however, implied that the same budget for Pillar 1 payments must be divided by more farmers because it was decided to freeze the budget until 2013.

#### **7.1.4 Scenario hypotheses**

Two scenarios have been developed for the theme 'Rural development': 'Open Market' and 'Sustainable Rurality'. Both scenarios are from the prospective policy type, assuming that policy changes will occur and exploring the territorial and other impacts of these changes. The scenarios represent two different 'schools' in thinking about the reforms of the CAP, RDP and other EU Policies: the 'liberalization model' versus the 'European model'.

In 'Open market' the evolution of agriculture and rural areas is mainly driven by market forces. This is the result of the outcomes of the WTO negotiations and a deliberate EU-policy aiming at reducing subsidies, with the exception of payments contributing to the improvement of R&D. Criteria for food safety and the environment are only implemented to the extent that this can be done in a cost-effective way. Ecological sustainability is implemented at a low pace. Rural development is considered to support agriculture and tourism and abolished at last.

In 'Sustainable rurality' competition, environmental conditions and territorial cohesion are stimulated by policies in order to transform the enlarged internal market into a 'sustainable economy'. Criteria for food safety, animal welfare and the environment are respected. In cases of conflict with economic growth, priority is given to these concerns. Rural development is considered to support the economic competitiveness of rural areas but also social cohesion and the quality of the environment. Economic diversification in rural areas is actively promoted.

### 7.1.5 Sources of information

As sources of information we have first of all used the results of other ESPON projects (mainly 1.1.2 'Urban-rural', 2.1.3 'CAP impact', and 2.2.2 'Enlargement'). But in order to complete missing information we have also used additional sources.

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## 7.2 Thematic prospective scenarios

### Two prospective policy scenarios for the period 2006 - 2030

The description of the trends in part I looked more than 25 years into the past. The same is true for the description of the most relevant policy developments and the driving forces behind these changes. The two scenarios presented in part II look instead 25 years into the future. First 'Open market' will be presented and after that 'Sustainable rurality'. Both scenarios are of the prospective policy type, assuming specific policy changes and exploring the territorial and other impacts of these changes. By doing this they may provide important information for decision-makers.

The rationale behind the presentation of 'Open Market' and 'Sustainable Rurality' is that both scenarios explore two alternative policy options which play an important role in discussions among policy-makers and scientists about the CAP and RDP reforms. Both policy options imply a transition of the agricultural sector from a highly protected and heavily subsidized sector into a liberalized or sustainable sector.<sup>31</sup> The scenarios represent two different 'schools' in thinking about EU Policies: the 'liberalization model' versus the 'European model'.

In order to present the policy changes and their expected impacts in a clear way, both scenarios assume the same trends regarding some contextual factors.<sup>32</sup> Regarding *global competition* and the outcomes of the *WTO negotiations* it is assumed that the American and European trade blocks are both willing to liberalize the world economy (Van Egmond et al., 2005). Most developing countries are positive about liberalization as well, in particular as far as agricultural products are concerned. WTO agreements are made on building more open and competitive global markets and also on *the possibility* to implement criteria for food safety, animal welfare and environmental protection ('non-tradables').

In both scenarios it is assumed that *average temperatures* in Europe will rise by one degree Celsius until 2030. This projection is the average of the IPCC scenarios (IPCC, 2001). It is expected that global warming has noticeable impacts on the conditions for agricultural production in the scenario period: more droughts and water shortages in southern Europe, more flooding in areas along great rivers, and more summer and winter storms. The mid latitudes and northern Europe can, however, profit from the temperature rise and the growing seasons are lengthened.

*EU-enlargements* are assumed to be primarily driven by economic reasons (market size, competition) and political reasons (safety, stability) (De Mooij & Tang, 2003). In both scenarios Bulgaria and Romania enter the EU in 2007. The EFTA countries Iceland, Norway, and Switzerland join in 2015. And after a more or less successful transition, the Balkans, Turkey and the Ukraine enter the EU in 2025. This latest enlargement implies a large extension of agricultural land and rural areas, most of which, however, don't perform economically well. Significant efforts are assumed to prepare these candidate countries for their entry. Special trade relations are settled with Russia and the African Mediterranean countries.

<sup>31</sup> A transition is a structural change of a sector or society as a whole, involving various mutually related developments on different aggregation levels and taking a time span of at least one generation (Rotmans et al, 2003).

<sup>32</sup>A sensitivity analysis could be carried out in order to explore the impacts of the policy changes under alternative assumptions about these trends.

In both scenarios *welfare* is assumed to increase on the global as well as on the European level. The breakthrough of the 'knowledge economy' causes an increasing consumption, not only of (agricultural and other) products and services but also of (landscape and other) experiences (Klijn, 2005). Consumption patterns are, however, hardly predictable because they depend to a large extent on new trends and fashions. Therefore the first scenario assumes materialistic, diverse, and irregular consumption patterns and the second one in-materialistic, less diverse and more regular patterns.

Concerning *demography* it is assumed that after a decreasing rise of the total population of Europe there is a fall after 2020. This is caused by a downward trajectory of fertility rates and a further rise of life expectancy. The proportion of Europeans above the age of 65 increases significantly. The age at which full retirement starts rises above 70. The ageing of the population influences settlement and consumption patterns. More wealthy people settle in rural areas and spend a large part of their incomes on housing in a green environment and on travelling.

Finally, it is assumed that the EU will take the *Lisbon Strategy* seriously in a context of sustained discrepancies between its own economic performance and that of other world economies such as those of the US, China, and India. The implementation of the strategy differs, however, in both scenarios. The first being focused on economic welfare for Europe in general and the second on the territorial potentials of the various European regions, in line with the conclusions of the Rotterdam Conference of Ministers responsible for territorial cohesion (November 2004).

## **7.2.1 Scenario 'Open market'**

### **7.2.1.1 Scenario hypotheses**

In this scenario, market forces play an important part in the evolution of rural areas, in particular in the agricultural sector. This obviously results from the outcomes of the WTO negotiations (liberalisation of international markets), but is also exacerbated by a deliberate EU-policy aiming at reducing its support to the agricultural sector and to rural development in general, with the exception of fields of activity which contribute to the improvement of competitiveness and growth, such as R&D and technological development. The breakthrough of the 'knowledge economy' on the global scale implies that the European agricultural sector has to cope with the introduction of one product innovation after the other on the international markets, e.g. genetically modified raw materials and food products (Dammers et al., 2003). This is a reason to significantly enhance investments in R&D. Environmental and food safety criteria are only implemented to the extent that they stimulate the competitiveness of the agricultural sector and that this can be done in a cost-effective way. Ecological sustainability is not denied but in cases of conflict with economic growth, it is only implemented at a low pace. Rural development assistance is considered to support agriculture and tourism as economic sectors.

### **7.2.1.2 Driving forces**

Driving forces leading to an open market for *agricultural products* are:

- *WTO negotiations*, aiming at the removal of market distortions caused by import tariffs, export subsidies, market price support, and income support.
- *EU enlargement*, leading to a growing internal market for agricultural products but also to increased competition among farmers in Europe.

- Investments in the *Trans European Network*, improving the mobility and thereby the competition between farmers inside and outside the EU.
- *Technological innovations* in the agricultural sector, strengthening the market position of competing farmers.

Main factors behind increasing commodification of and competition between *rural areas* are:

- With the rise of the '*experience economy*' (going hand in hand with the breakthrough of the '*knowledge economy*') consumers are more willing to pay for experiences related to rural areas.
- The increasing amount of *leisure* further stimulates this tendency to 'consume' rural areas (country weekends, vacations).
- The significant increase in *mobility*, caused by the investments in TEN-T and the increasing car-ownership (especially in the CEECs), has the same impact.

Key factors stimulating the liberalisation of the *CAP and related EU policies* are:

- The fact that the CAP is still a very costly endeavour – 45% of the EU budget flows to the CAP.
- The incidental but very expensive and drastic measures to combat *animal diseases*, like BSE and FMD.
- The *WTO negotiations*, putting significant pressure on the EU to reduce import tariffs and export subsidies as well as market price support and income support.

### **7.2.1.3 Contextual elements of the transition to an open market**

By 2006 the EU was for the fifth year confronted with a low economic growth rate. The midterm assessment of the Lisbon Strategy had at the end of 2004 revealed that the targets of European competitiveness could not be reached without a serious reconsideration of the efficiency of EU policies, following in that some conclusions of the Sapir Report published in 2003. The increase of the unemployment rate resulting from the progress of globalisation and in particular from the acceleration of enterprise relocation towards low-wage countries outside Europe was a determining factor for the reconsideration of all EU policies as to their economic efficiency.

A tense debate took place at EU level and within the Member States, in which roughly speaking two policy coalitions were involved. One coalition consisted of those members of the EC and the EP, Member States, and business groups wishing to achieve the Lisbon Strategy by the '*liberalization model*'. According to this model agriculture should liberalize and rural areas should valorise their '*territorial capital*' in order to enhance their competitiveness and economic welfare in general. Another coalition consisted of those members of the EC and the EP, Member States, environmental and third world groups wishing to achieve the Lisbon Strategy by the '*European model*'. According to this model agriculture and rural areas should develop in a sustainable way along the lines of the Göteborg Strategy formulated in 2001.

After several years of debate the coalition promoting the '*liberalization model*' proved to be most influential. At the end of 2008, a decision was made on the EU level that, after the reforms of *Agenda 2000* (1999) and the proposal of the EC in 2004, the CAP and RDP would be reformed in a different direction. Import tariffs and export subsidies as well as market price support and income support would be cut down. Agriculture would be treated as any other economic sector. Because of the urgency of the Lisbon Strategy the reforms would be implemented in a short period. The same decision was made regarding the Structural Funds.

The 'liberalization coalition' was supported by the fact that during the WTO negotiations the US, major developing countries like India and China, and the Cairns Group of agricultural exporters put the EU under pressure to liberalize its markets for agricultural products (Rollo, 2003). The coalition used the pressure from these actors as an argument to overcome resistance by opponents in Europe. Besides, more and more members of the EC and EP and Member States became convinced that the CAP was too much a burden for the EU budget. The burden would even become heavier if it wasn't reformed prior to further enlargements of the EU, especially the enlargement with the Ukraine and Turkey. Furthermore, the agrarian lobby became aware that the sector can only survive in a globalizing economy if it becomes more competitive and demand oriented.

#### **7.2.1.4 The open market strategy**

The reforms of the CAP, Rural Development Policy, and the Structural Funds in the 1992-2005 period were only limited to some adaptations of existing policy measures, like a reduction of market price support (compensated by an increase in income support), or the introduction of new policy measures, like production quotas and set-aside measures. It was decided, however, that in the 2007-2020 period the policy objectives as well as the policy measures should be rapidly and radically changed (Griffiths, 2002). In little more than 10 years agriculture was transformed from a highly protected and heavily subsidized sector into an open and competitive (economic!) sector. Liberalisation, deregulation, and freedom to innovate played an important role in this transition process.

The main objectives of the reforms were to reduce the 'excessive' transfers from tax payers and consumers to agriculture, to stimulate the application of production factors (land, labour, and capital) where they are most productive, to make the agricultural sector more competitive on the world market and to reduce overproduction and other market distortions (Kol, 2002). Criteria related to food safety, animal welfare, and environmental protection would only be implemented to the extent that they didn't hinder economic competitiveness or that they were forced by consumer concerns. Three reforms can be considered as milestones in the liberalization process.

##### *Reform of 2010*

The midterm review of 2010 marked the beginning of the liberalization process. In that year it was decided to gradually reduce tariffs and export subsidies to 75% compared to 2005. Despite the decision of the heads of state in 2002 to freeze the budget for Pillar 1 until 2013, it was now also decided to reduce the budget to € 30 billion (80% of the budget for 2005).<sup>33</sup> Moreover, the budget had to be divided among a greater number of farmers because Bulgaria and Romania had entered the EU in 2007. It was also decided to further shift direct payments from market support to income support. The European Food Authority was established to control food safety (Massink & Meester, 2002). A guideline obliged farmers to insure themselves against animal diseases. The EU would now longer pay in cases of calamities. Environmental measures were reduced to a minimal level.

The budget for Pillar 2 (rural development) was reduced to € 4 billion in 2013 (90% of the budget for 2005). At the same time priorities changed. Most of the budget was spent on the stimulation of the wider rural economy (axis 3), especially on the diversification of economic activities and the improvement of infrastructure (mainly roads and digital networks) (AIRDR, 2004). The entrepreneurial capacity and local initiative were mobilized. By organising competitions for project ideas and providing training programmes innovative projects were triggered and facilitated. Commodification and marketing of the natural and

<sup>33</sup> All amounts are expressed in constant 1999 prices.

cultural heritage was considered a key issue. Farmers could play an important role in this. A significant part of the budget was spent on stimulating the competitiveness of the agricultural sector (axis 1). These payments worked as accompanying measures to the reduced Pillar 1 payments. Payments on land management / environment (axis 2) were significantly reduced because they were from now on considered the responsibility of national and regional governments. The same priorities were set for LEADER.

The objectives of the Structural Funds related to rural areas became more concentrated on the new Member States. This is true for Objective 1 (promoting the development of and structural adjustment of areas most lagging behind) as well as Objective 2 (supporting the economic and social conversion of areas facing structural difficulties). Like Rural Development Policy triggering innovative projects played an important role. The payments for rural areas (funded by EAGGF) were reduced to € 2.5 billion (90% of the budget for 2005).

#### *Reform of 2014*

Another significant step in the liberalization process was made in 2014. This reform marked the beginning of a period in which liberalization was accelerated. From 2014 until 2017 tariffs and export subsidies were further reduced to 30% compared to 2005. The budget for Pillar 1 was further reduced to € 15 billion in 2017 (40% of the budget compared to 2005). Market price support was even abolished; only income support remained. Measures to stimulate food quality and animal welfare were considered to be the responsibility of farmers, retailers and consumers. Regulations in the field of animal welfare were abandoned for the same reason.

The budget for Pillar 2 measures was further reduced to € 2.5 billion in 2017 (50% of the budget for 2005). In order to stimulate the general welfare of Europe priority was given to the economically most successful rural areas. Wider rural economy (axis 3) became further concentrated on tangible factors like the diversification of economic activities and the improvement of the physical and digital infrastructure (roads, ICT). Competitiveness of agriculture (axis 1) was intended to stimulate technological and other innovations in agricultural productions. Land management / environment (axis 2) was further reduced.

From now on the Structural Funds were first of all applied to the economically most successful rural areas *in the new Member States* since the EU was convinced that the institutional capacity of the less successful areas was too weak to absorb EU funds successfully (IRS, 2004). Like Pillar 2 of the CAP the budget for the Structural Funds applied to rural areas was further reduced to € 1.5 billion (50% of the budget for 2005).

#### *Reform of 2017*

The liberalization process was completed by the reform of 2017. At the end of the programme period 2014-2020 the import tariffs and export subsidies were almost completely abolished. Tariffs of 3 or 4 % were considered appropriate for a normal economic sector (Kol, 2002). Export subsidies were reduced to 5% compared to those in 2005. The Pillar 1 payments were reduced now to € 4 billion (10% of the budget for 2005). Pillar 2 measures were further reduced to € 1 billion (20% of the budget for 2005). Stimulation of the wider economy of rural areas was considered first of all the responsibility of the national governments.

The Structural Funds were almost completely reduced to pre-accession aid. From now on they were only applied to stimulate the economically most successful rural areas in the *candidate countries*. They should stimulate these countries to prepare themselves for their entry into the EU. Because of long negotiation processes, however, the Balkan countries, Turkey, and the Ukraine didn't enter the EU before 2025. The Structural Funds applied to rural areas were further reduced to € 0.5 billion (20% of the budget for 2005).

### 7.2.1.5 Impacts of the strategy

The open market strategy generated large *macro-economic impacts*. At the end of the transition period production factors (land, labour, and capital) were to a great extent applied where they were most productive in Europe. Gylfason (1995) calculated that this would generate 3 percent additional economic growth in the EU-12. In scenario 'Open market' this impact could be comparable. The enormous transfers from consumers / taxpayers to agriculture were almost completely stopped. In 1999 these transfers amounted €120 billion (Kol, 2002). In the scenario the reduction of transfers was even larger because the new Member States abolished their protective measures as well.

The abolishment of import tariffs and export subsidies generated large impacts for the developing countries. Swinbank et al. (1999) calculated that developing countries could generate € 20 billion per year extra welfare if the EU abolished its protective measures, three times the amount of the development aid they receive per year. In the scenario the impact was even larger because the New Member States abolished their import tariffs as well. Countries that used to enjoy preferential access to protected Western markets, however, suffered from the opening up of the borders (Massink & Meester, 2002).

- **Territorial and other impacts**

#### *Macro level*

Regarding *agricultural production* the vicious circle set in motion in the last decades of the 20<sup>th</sup> century was further intensified by the open market strategy. This causes substantial structural changes in the direction of further intensification and scaling-up. New technologies (machines), chemicals (fertilizers, herbicides), and (genetically modified) crops were frequently introduced. Land from farms who didn't survive was bought on a large scale. This caused a fall in the number of farms and a substantial rise in the average farm-size. In the 2005 – 2030 period the UAA was almost quadrupled from 20 to 80 ha. The SGM rose even more than in the 1990s.

The intensification and scaling-up of production were most dominant in *large-scale arable and dairy farming*. Large-scale farming decreased in Northwest and Southern Europe but increased in most of the CEECs and Turkey where land-prices were much lower. *Intensive cattle farming and horticulture*, however, profited from the highly developed infrastructure in urbanized regions of Northwest Europe. Further scaling-up and clustering of farms and greenhouses reduced production costs (energy, waste, and transport). This enabled them to produce more efficiently for the world market. In the metropolitan areas, particularly in the Pentagon, possibilities for agrarian *nature and landscape management* were limited because RDP was almost completely abolished. Besides, increased competition made it difficult for farmers to combine these activities with efficient agricultural production. *Experience farming* didn't break through because only a small number of farmers were able to do this in a profitable way. In the peripheral areas of the CEECS and South and North Europe *subsistence farming* played a significantly more important role.

The trends of agriculture developing in the most fertile areas and giving up less-favoured areas and areas in urbanised regions, which was already dominant in the 1990s, was significantly intensified during the scenario period. The surface of agricultural land decreased in the EU-15 due to higher efficiency of productive areas and to significant rises in land-prices in urbanized regions. Subsequently, former agricultural surfaces were naturally replaced by woodland. In the countries like Poland, Romania, Turkey and the Ukraine the surface, however, increased because land-prices were low and many natural areas were cultivated. The production of *major crops* continued growing, especially cereals,

fodder crops and energetic crops. The demand for renewable energy (biomass and bio-fuels) increased because of the rapid increase of world oil prices. *Surfaces still in grass* decreased because large parts were changed into arable land. *Permanent crops* decreased rapidly. Orchard surfaces for instance further decreased in northern Europe but increased in Southern Europe and in Turkey because of the introduction of better irrigation techniques and genetically modified trees. These trends caused a reduction of *territorial cohesion*. The discipline of the market led to a further dualisation generating outspoken 'winners' and 'losers' among farmers and rural areas. This was only limited to some extent by the fact that CAP measures benefiting richer areas most were almost completely abolished.

*Rural areas in urbanized regions*, particularly in the Pentagon and in the metropolitan areas in the CEECs and Southern Europe, benefited economically from the further growth of residential areas, industrial estates etc. At the same time they were affected by increasing population and urbanisation causing more urban sprawl. *Rural areas with a variety of activities* also developed further in the Pentagon and in other metropolitan areas in Europe. Many of these areas, which were successful in selling luxury homes for retired people or building invented traditions, like 'shopping castles', flourished economically. In *rural areas attractive for tourism* mass-tourism became booming business. Especially at the Mediterranean and Black Sea coasts and in the Alps and Carpathian mountains local resources were commodified and marketed successfully. *Rural areas where agriculture dominates* developed in different directions. Areas with fertile land in the Basin of Paris and in large parts of Poland and the Ukraine became economically more successful because of the (further) industrialization of production. In these areas food production competed with the production of energy crops. In Southern Europe, however, areas with less favourable conditions were confronted with the abandonment of large surfaces of agricultural land, causing an intensified downward spiral ('desertification') (Clout, 1998). *Rural areas with low accessibility* were also facing a genitive spiral. Regional actors in the North of the Nordic countries and in the East of the CEECs were not very successful in commodifying their local resources. As a result, many young people out-migrated, causing an ageing of the remaining population. All these trends caused a further reduction of territorial cohesion on the macro level (AIRDR, 2004).

*Natural areas* were seriously affected. Particularly in the CEECs and Turkey many natural areas were cultivated. The EU measures for afforestation were almost completely abandoned. These trends were only compensated to some extent by some regional governments and NGOs investing in nature development and by the abandonment of agricultural land, which led in some areas to natural afforestation, thus improving the potential for biomass energy production. In the open fields (e.g. in the Basin of Paris) and in the polders and deltas (e.g. in the Netherlands) scaling-up of production led to the removal of many *landscape elements*. In Western France and on the British islands many bocage landscapes were changed into open fields. The *environment* was also affected. Crop production was intensified by the increased use of nutrients, pesticides, and irrigation. This tendency was only limited to some extent by the introduction of genetically modified crops and new production techniques. The intensification of livestock-farming caused increased production of manure and emissions of ammonium. This was further enhanced by the abolishment of the cross-compliance principle. The abandonment of farmland in the Alps and the Carpathian Mountains, however, led to lower risks of avalanches, landslips, and mud-floods because of the growth of natural vegetation.

#### *Meso level*

On the national level the scenario implies also a trend towards less territorial cohesion. The trend even accelerated during the scenario period. This is true for agriculture as well as for rural areas. In the urbanised regions of the Member States, parts of land, among which high quality arable land, was given up to the ongoing process of urbanisation. But the remaining agriculture was highly profitable since intensive cattle farming and horticulture both

increased their production for the world market. In the most productive rural areas agriculture became also more profitable but in rural areas with less favourable production conditions agriculture increasingly marginalized.

The socio-economic viability of *rural areas in urbanized regions* increased during the scenario period. As part of the urbanisation process they became more and more urbanized themselves. The same is to some extent true for several *rural areas attractive for tourism* and *rural areas with a variety of activities*. The first mentioned became more urbanised by developing an extended tourist and commercial infrastructure and the last mentioned by building homes for retired people and developing service industries. At the same time the socio-economic viability of some *rural areas where agriculture dominates* and *rural areas with low accessibility* was rapidly going down. Marginalising agriculture and decreasing employment caused increased migration of younger people to urbanised areas.

#### *Micro level*

In many regions of Europe territorial cohesion was enhanced. Rural and urban areas became more and more economically, socially and culturally interlinked with one another. In rural areas in urbanized regions this was caused by the ongoing process of physical and mental (sub)urbanisation. The same is true – although to a lesser extent – for rural areas with a variety of activities because of the homes for retired people which were built and the service industries which were developed. The towns in these areas functioned more and more as regional economic, social and cultural centres. In other regions, however, territorial cohesion was going down. In rural areas in which agriculture had a weak production structure the negative spiral caused larger economic, social and cultural differences between urban and rural people.

#### **7.2.1.6 Final territorial image**

In 2030, a decade after the transition of the agricultural sector the image of the EU is quite different from that in 2005. The Union has been substantially enlarged. Its borders have been shifted a long way to the East, Russia, Syria, and Iran now being the new neighbour states. The entry of Bulgaria and Romania in 2007 and especially the entry of Ukraine and Turkey in 2025 have significantly extended the surface of agricultural land. Agriculture is characterized by a high measure of dualisation. Large-scale arable and dairy farming decreased in Northwest Europe but increased more in the CEECs and Turkey because agricultural conditions in terms of land-prices are much better there. Intensification and scaling-up of production has led to large-scale dairy and arable farms in these countries. Intensive cattle farming and horticulture are concentrated in Northwest Europe because the highly urbanized character of this region and the highly developed infrastructure enable them to efficiently produce for the world market. Experience farming occurs only on a small scale in urbanized regions. And nature and landscape management by farmers has almost completely disappeared.

Rural areas are characterized by a very high measure of dualisation as well. Most of the rural areas in urbanized regions have become urbanized themselves. This means that many rural areas where agriculture dominates have changed into rural areas in urbanized regions. Rural areas attractive for tourism have extended significantly. The enlargement of the EU has created many opportunities to exploit new coastal areas, like the Black Sea coast, and mountain areas, like the Carpathian and Balkan mountains, for mass-tourism. The intense dualisation of agriculture and rural areas has become most clearly visible in rural areas where agriculture dominates. Most of these areas are dominated by large-scale industrialised farms. These areas are densely populated and socio-economically viable. Other areas, however, are characterized now by large surfaces of abandoned farmland, many of which are now eroded or naturally forested. The same is true for rural areas with low accessibility, like the Northern parts of the Nordic countries. Socioeconomic viability and

population density in these areas are very low. In the CEECs many natural areas have been changed into farmland.

### **7.2.1.7 Summary**

After being confronted for several years with a low economic growth rate the EU decided that the Lisbon Strategy could not be achieved without a serious reconsideration of the efficiency of EU policies. In a tense debate the policy-coalition promoting the open market strategy proved to be most influential. This coalition was supported by the WTO negotiations, the fact that the CAP was felt too much a burden for the EU budget, and the awareness of the agrarian lobby that the sector should become more competitive on the world market.

The open market strategy transformed the agricultural sector rapidly into an open and competitive economic sector. This happened in three stages: a preparation stage, an acceleration stage, and a realisation stage. During the implementation Pillar 1 and Pillar 2 measures were first gradually and then more rapidly reduced and finally almost completely abolished. In order to implement the process successfully and to provide farmers and rural areas the opportunity to adapt to the free market the implementation was stretched-out over a period of more than a decade.

The liberalization of agriculture had substantial impacts on general welfare. It stopped the large transfers from consumers/taxpayers to the agricultural sector and generated more economic growth in Europe and in the developing countries. With regard to agriculture and rural areas, however, territorial cohesion decreased substantially, particularly on the macro and meso level. The average farm-size rose substantially. Large-scale arable and dairy farming decreased in Northwest Europe but increased more in the CEECs and Turkey. Like intensive cattle farming and horticulture they were very successful on the world market. Experience farming and agricultural nature and landscape management, however, hardly survived. Rural areas in urbanized regions, which were attractive for tourism or with a variety of activities were very successful in terms of socioeconomic viability and also became more populated, but many (less successful) rural areas in which agriculture dominated or with low accessibility were faced with a downward spiral. The intensification and scaling-up of agricultural production and the booming of mass-tourism severely damaged nature, landscapes and the environment.

## 7.2.2 Scenario 'Sustainable rurality'

### 7.2.2.1 Scenario hypotheses

In order to stimulate the transformation of the enlarged internal market into a sustainable market, competition as well as environmental conditions and territorial cohesion are stimulated. The EU gives priority to a further integration of agricultural, regional, and other sectoral policies. Spatial development policies play an important role as a reference for the integration and coordination policies in rural areas. This takes the shape of a sophisticated system of cooperation between the different sectors. The CAP and RDP are reformed in an economically, socially and ecologically sustainable way. Criteria for food safety, animal welfare and environmental protection are given priority even when they conflict with economic growth. The reason for this is that the EU considers ecological and social sustainability as preconditions for economic sustainability. In the same way, rural development is considered to support the economic competitiveness of rural areas but also job creation, social cohesion in rural areas and the quality of the environment. To this end, the economic diversification of rural areas is actively promoted. This implies, however, that some protectionist elements of the CAP are maintained.

### 7.2.2.2 Driving forces

Driving forces behind the transition to a sustainable *agriculture* are:

- *WTO negotiations*, aiming at the reduction of market distortions caused by import tariffs, export subsidies etc. and at the same time stimulating the implementation of 'non-tradables'.
- *Consumers*, becoming more capable of steering production in the direction of organic and regional products by their spending behaviour and becoming more aware of that.
- *Technological innovations*, not only leading to higher agricultural production but also to reduced pollution and reduced water-use for irrigation.
- Rising *energy prices*, stimulating the building of (sustainable) agro-production parks and leading to a growing demand for biomass.

Important factors behind the development towards sustainable *rural areas* are:

- Because of the rise of the *experience economy* consumers / tax payers are more willing to pay for a higher quality of landscapes and the environment in general.
- *Migration* of urbanites and retirees to rural areas has an impact on the socio-economic viability of these areas but also on the demands for the quality of the landscape and the environment.
- This tendency is further stimulated by the increasing amount of *leisure* providing people more opportunities to spend time and money in attractive rural areas.

Key factors stimulating the sustainable character of the *CAP and related EU policies* are:

- *WTO negotiations*. The US and other countries put significant pressure on the EU to reduce protective measures.
- *EU Enlargement*. The accession of the CEECs is a stimulus to increase the budget for Pillar 2 in order to protect the natural and cultural heritage in the rural areas in these countries and to improve their socio-economic viability.
- *Interest groups*. Environmental groups, third world groups and other NGOs become more effective in lobbying for policy changes in the direction of sustainability.
- *Animal diseases*. Epidemic diseases like BSE and FMD contribute to the effectiveness of the lobbying activities of interest groups.

### **7.2.2.3 Contextual elements of the transition to sustainable rurality**

Like in the 'Open market' scenario, the EU was by 2006 for the fifth year confronted with a low economic growth rate. The midterm assessment of the Lisbon Strategy in 2004 revealed that the targets of European competitiveness could not be reached without a serious reconsideration of the efficiency of all EU policies. The increase of unemployment resulting from further globalisation and in particular from enterprise relocation towards low-wage countries outside Europe was a determining factor for the reconsideration.

Like in 'Open market' a tense debate took place at EU level and within the Member States, in which two policy coalitions dominated. One coalition promoted the 'liberalization model' and the other one the 'European model'. Unlike the first scenario the coalition promoting the 'European model' now proved to be most influential. At the end of 2008, a decision was made on the EU level that the reforms of *Agenda 2000* (1999) and the proposal of the EC in 2004 were considered as first steps in the direction of a more fundamental reform of the CAP and RDP in a sustainable direction. Social and ecological sustainability were considered as preconditions for economic sustainability. More market principles would be introduced in the agricultural sector but in a framework of regulations for environmental protection and social security. In order to successfully implement the reform and to provide agriculture and rural areas the opportunity to adapt to the new conditions this would happen in a gradual way. The same decision was made regarding the Structural Funds.

The 'sustainability coalition' was supported by the growing awareness of the environment. Incidents like more frequent droughts and heat waves in Southern Europe, excessive rainfalls and floods in Northwestern and Eastern Europe, and retreating glaciers in the mountain areas convinced more and more people that the climate was changing. The incidents 'proved' that the environment should be considered as a precondition for economic and other human activities. New outbreaks of animal diseases like BSE and MFD gave further impulses to this vision. Besides, after the enlargement of 2004 the EU faced a great challenge regarding territorial cohesion. At the time of their entry the new Member States were at only 40% of the average GDP of the EU-15 and Bulgaria and Romania were even at less than 30%. Furthermore, in the subsequent WTO negotiations the EU was put under increasing pressure by the US, the Cairns Group of agricultural exporters and major developing countries like China and India to liberalize its markets for agricultural products (Rollo, 2003). At the same time agreements were made to give more weight to 'non-tradables'.

### **7.2.2.4 The sustainable rurality strategy**

The reforms of the CAP, RDP, and the Structural Funds in the 1992-2005 period were limited to some adaptations of existing policy measures, like a reduction of market price support and an increase of income support, or the introduction of new policy measures, like production quotas and set-aside measures. It was decided, however, that in the years to come not only the policy measures but also the policy objectives should be fundamentally changed. In subsequent steps the agricultural sector would be transformed from a largely protected sector putting nature, landscapes and the environment under high pressure into a sustainable economic sector. Liberalisation within a framework of regulations ('licence to produce') and freedom to innovate within certain limits played an important role in this transition process (Dammers et al., 2003).

The main objectives of the reforms were to make agriculture and rural areas sustainable, to improve the quality and quantity of the natural and historical heritage, to make the agricultural sector more competitive on the world market, and to reduce the huge transfers from consumers / tax payers to agriculture. In cases of conflict between economic growth and the implementation of criteria related to food safety, animal welfare, and the

environment, priority would be given to these criteria. In order to achieve the 'transition towards sustainability' successfully and to provide farmers and rural areas the opportunity to adapt to the new conditions the transition was implemented in a gradual way. The following reforms were milestones in the transition process.

#### *Reform of 2010*

The aim of the reform of 2008 was to prepare the transition process. In this phase some policy changes were implemented in the direction of liberalization within the framework of regulations. Import tariffs and export subsidies were reduced to 90% of their original value.<sup>34</sup> Budgets were further transferred from Pillar 1 to Pillar 2 (modulation). The budget for Pillar 1 (commodity market support and direct payments) didn't change in absolute terms because the heads of state had decided in 2002 to freeze the budget at the level of € 37.5 billion until 2013.<sup>35</sup> The reform implied, however, a relative reduction of the budget because a consequence of the entry of Bulgaria and Romania in 2007 was that the budget had to be divided among a greater number of farmers. Besides, it was decided to further shift the direct payments from market support to income support. Regulations in the field of environment, animal welfare, animal health, and food quality (cross-compliance) now became compulsory for all Member States.

The budget for Pillar 2 (rural development) was gradually increased to € 7 billion (150% of the budget for 2005). At the same time priorities changed. Most of the budget was spent on the stimulation of the wider rural economy (axis 3), especially on the diversification of economic activities by stimulating various non-farming activities, e.g. in the tourist and service sectors. Co-ordination between public authorities was stimulated by subsidizing rural development perspectives. Cooperation between public authorities, NGOs, and business became conditional for payments. Investments were made in the tangible (roads, ICT) as well as the intangible infrastructure (institutional capacity), particularly in the CEECs. A significant part of the budget was spent on land management / environment (axis 2), which was concentrated on *maintaining* nature and landscape and preventing the abandonment of farmland. Competitiveness of agriculture (axis 1) was concentrated on increasing competitiveness of the sector, *respecting* criteria for animal welfare, environmental protection etc.

The budget for the Structural Funds related to rural areas (EAGGF) was increased to € 4.5 billion (150% of the budget for 2005). The priority objectives were concentrated on the *improvement* of economic, social and territorial cohesion, especially in the new Member States. This is true for Objective 1 (promoting the development of and structural adjustment of areas most lagging behind) as well as Objective 2 (supporting the economic and social conversion of areas facing structural difficulties). Regional Policy, like Rural Development Policy, was also aimed at stimulating the co-ordination and co-operation among actors.

#### *Reform of 2014*

The reform of 2014 marked the beginning of a period in which the 'transition towards sustainability' was accelerated. Import tariffs and export subsidies were further reduced to 60% of their 2004 value. For the first time in history it was decided to reduce the budget of the CAP not only in relative but also in absolute terms. Moreover, budgets were further transferred from Pillar 1 to Pillar 2. In the period until 2023 the budget for Pillar 1 (commodity market support and direct payments) was gradually reduced to € 22.5 billion (60% of the budget for 2005). Market support was almost completely abolished in this period; only income support remained. Criteria for environmental protection, animal health, animal welfare, and food quality were increased.

<sup>34</sup> All percentages presented in this section are relative to the budget level in 2004.

<sup>35</sup> All amounts are expressed in constant 1999 prices.

The budget for Pillar 2 (now defined 'integrated rural development') was now increased to € 11.5 billion (250% of the budget for 2005). A sophisticated system of co-ordination and co-operation on the regional level was introduced. This system consisted of integrated rural development perspectives, made by regional innovation networks, facilitated by regional knowledge centres, and implemented with the aid of regional development funds (Smeets & Blom, 2002). Wider rural economy (axis 3) was concentrated on further diversification of economic activities, e.g. by stimulating high-tech and foot-loose small and medium-sized enterprises (SMEs). Land management / environment (axis 2) was concentrated on *improving* nature and landscape and preventing the abandonment of farmland. Competitiveness of agriculture (axis 1) was not only concentrated on increasing competitiveness of agriculture but also on respecting *higher* criteria for animal welfare, environmental protection etc.

Regional Policy was gradually integrated with Rural Development Policy. The budgets for the Structural Funds related to rural areas were increased to € 7.5 billion (250% of the budget for 2005) and added to the budget for Pillar 2 (total amount: € 19 billion per year). The payments aimed at *further improving* economic, social and territorial cohesion in the new Member States. Payments were first of all applied in rural areas with a high growth potential.

#### *Reform of 2024*

The 'transition towards sustainability' was completed by the reform of 2024. In the period until 2030 import tariffs and export subsidies were further reduced to 30% of their 2004 value. Pillar 1 payments (commodity market support and direct payments) were reduced to € 11.5 billion (30% of the budget for 2005). Further reduction was avoided in order to be able to cope with the irregularities characteristic for the agricultural sector (Griffiths, 2002). This was considered necessary because of the climate change and its impacts on weather conditions (droughts, floods). A desire for a certain level of protectionism was, however, also at play. Concerning the direct payments income support was maintained for farmers in less favourable areas in order to guarantee a level playing field and to prevent the abandonment of farmland in these areas.

Budgets for Rural Development Policy (Pillar 2) and Regional Policy were further increased to a total amount of € 23 billion (300% of the budgets for 2005). The system of co-ordination and co-operation on the regional level was further improved by stimulating the ambitions during the making and implementing of integrated rural development schemes. Mutually learning by working visits and round-table meetings and facilitating by so-called flying brigades (teams helping to tackle bottlenecks in the process) played an important role (Dammers et al., 2004). The priorities of the three thematic axes of RDP were maintained.

#### **7.2.2.5 Impacts of the strategy**

The sustainable rurality strategy generated large *macro-economic impacts* but not as large as the open market strategy. The reason for this is that the transfers from consumers / taxpayers to agriculture were only reduced to 30% compared to 2005 in this scenario instead of 10% in the first scenario. If the sustainable rurality strategy was implemented in 2005 at once, transfers of approximately € 85 billion would have been avoided.<sup>36</sup> In the scenario the reduction is, however, larger because the new Member States abolished their protective measures as well. The welfare impacts for Europe in the scenario are less than the 3 percent additional economic growth (compare Gylfason, 1995). But again there is a welfare impact now in the new Member States as well.

<sup>36</sup> All amounts are expressed in constant 1999 prices.

As has been remarked before, developing countries could generate € 20 billion extra welfare per year if the EU abolished its protective measures completely (Swinbank et al., 1999). In the scenario the impact is on the one hand limited because the import tariffs and the export subsidies were 'only' reduced to a level of 30% compared to 2005. On the other hand the impact is enhanced because the EU counts much more Member States at the end of the scenario period. According to a rough estimation, developing countries could gain approximately € 15 billion per year. Developing countries that used to enjoy preferential access to protected Western markets would suffer less than in the first scenario.

#### *Macro level*

The vicious circle, set in motion in the last decades of the 20<sup>th</sup> century was intensified but not so much as by the open market strategy. The reason for this is that agriculture was not completely left to the mercy of the world market. Nevertheless, the number of farms decreased and the average farm-size increased gradually but certainly. This is especially true in the CEECs and later in Turkey. Although small farms no longer dominated in these countries, many of them survived, e.g. by alternative income resources. In the period 2000 – 2030, the UAA in the EU-15 was almost tripled from 20 to 60 ha. The SGM increased more than in the 1990s.

The concentration and scaling-up of *large-scale agriculture* was moderated. Arable and dairy farming increased most in rural areas with low land-prices in Poland, the Baltic States, and the Ukraine. In Northwestern and Southern Europe both types of farming decreased. Many *intensive cattle farms and horticulture* settled on agro-production parks, mainly in the Pentagon. Scaling-up and clustering reduced production costs and provided possibilities for recycling manure, waste etc. Regulations for animal welfare, however, limited further intensification. *Experience farming* broke through in the metropolitan areas inside and outside the Pentagon and in rural areas with small-scale landscapes in East and South Europe. Consumers' preferences for organic and regional products and for services provided by farmers (camp-sites, training facilities) increased. RDP facilitated farmers to professionalize themselves (Van Eck et al., 2002). The growing demand for cultural landscapes provided opportunities for *agrarian nature and landscape management*, particularly in small-scale landscapes. The increased and intensified programmes for rural development made *subsistence farming* more and more superficial in the peripheral regions of the CEECs.

The trend of agriculture developing in the most fertile areas and giving up less-favoured areas and areas in urbanised regions was first limited and later even reduced. The surface of agricultural land decreased to a certain extent in the EU-15 because in urbanized regions land-prices rose. In Eastern Europe and in Turkey the surface, however, increased because land-prices were low and 'waste land' was cultivated. The production of cereals, fodder crops, energy crops and other *major crops* increased moderately. New farming technologies and chemicals made increased production without excessive pollution possible. Moreover, several genetically modified energy crops were introduced. Large parts of the *surfaces still in grass* – but not as large as in the first scenario – were changed into arable land. Regarding *permanent crops*, orchard surfaces decreased in Northwestern and Eastern Europe. They increased, however, in Southern Europe and in Turkey because better irrigation techniques were introduced and orchards were cultivated for experience farming and landscape management. The trend of reduced *territorial cohesion* was first limited and later changed into a tendency of increased cohesion. The principle of liberalization within a framework of regulation was successful to a great extent, particularly the measures stimulating diversified farming.

*Rural areas in urbanized regions* in the Pentagon and even more those around the metropolitan areas outside the Pentagon benefited from the further growth of residential areas, cultural amenities etc. At the same time, they were affected by further population

and urbanisation. *Rural areas with a variety of activities* developed throughout Europe, particularly in Finland, Poland, the Czech Republic and Spain. Investments in the tangible infrastructure (including park-like environments) and intangible infrastructure made these areas attractive for knowledge intensive SMEs and wealthy urbanites (households with children as well as retirees). *Rural areas attractive for tourism* flourished without putting the environment under too much pressure. This was not only true for coastal and mountain areas but also for small scale landscapes, like the 'bocages' in France and the UK and the 'montados' in Spain and Portugal. *Rural areas where agriculture dominates* diversified. In the fertile areas of France, Germany, Poland and the Ukraine, agricultural production further modernized. In these areas food production increasingly competed with the production of energy crops. In Eastern and Southern Europe rural areas, stimulated by RDP and Regional Policy, became economically more diversified. Some *rural areas with low accessibility* were successful in commodifying and marketing local resources, particularly rural areas with large-scale natural landscapes in the North of the Nordic countries and the East of the CEECs. Luxurious forms of nature-tourism were developed together with the necessary tourist infrastructure. Other rural areas, however, continued to face a negative spiral because of their lack of institutional capacity. Like agriculture, the trend of reduced *territorial cohesion* was first limited and later changed into a tendency of increased cohesion. Only some rural areas with low accessibility lagged behind.

*Natural areas* increased in this scenario. Although nature in the CEECs and Turkey was changed into farmland this was more than compensated by afforestation and nature development on less productive and abandoned farmland in these countries. Increased agricultural productivity was combined with development of *landscape elements*. In the open fields, where intensification and scaling-up dominated, farmers were paid to develop large scale landscape elements. Agro-production parks, where intensive cattle farming and horticulture concentrated, were also embellished with landscape elements. Many bocages and other small-scale landscapes were restored. Increased agricultural productivity was also combined with reduced *environmental* pollution. The introduction of new techniques and chemicals and the increase of organic farming played an important role in the decreasing use of chemicals. The recycling of manure and waste in agro-production parks reduced pollution as well. Compulsory cross-compliance and subsequent enhancement of agri-environmental payments further stimulated this tendency. Afforestation and extensive farming on abandoned farmland in the Pyrenees, the Alps and the Carpathian Mountains reduced the risks of avalanches, landslips etc.

#### *Meso level*

On the national level the same tendency could be observed as on the macro level regarding territorial cohesion. In the urbanised regions of the Member States parts of land were given up to urbanisation but not so much as in the first scenario. The remaining agriculture continued to be profitable since intensive cattle farming and horticulture as well as experience farming gained market shares. In the most productive rural areas agriculture became more profitable because of further modernisation and the introduction of energy crops. In the most productive areas of the CEECs agriculture became even more profitable than ever before. In rural areas with less favourable production conditions marginalization was limited by diversification of activities.

The socio-economic viability of *rural areas in urbanized regions* increased but not so much as in 'Open market'. The attractive park-like environment in many of these rural areas attracted small-scale enterprises and urbanites. In many Member states *rural areas attractive for tourism*, *rural areas where agriculture dominates* and *rural areas with a variety of activities* also improved their socio-economic viability. This was stimulated by sustainable tourism, modernisation of agriculture, and diversification of economic activities respectively. Many *rural areas with low accessibility* improved their socio-economic viability

as well by stimulating luxurious forms of nature-tourism. Several rural areas with a weak institutional capacity, however, lagged behind.

#### *Micro level*

In many regions of Europe the same tendencies regarding territorial cohesion could be observed as on the macro and meso level. Rural and urban areas became more economically, socially and culturally interlinked with one another than in the first scenario. In rural areas in urbanized regions this was caused by the process of urbanisation. The same is true – although to a lesser extent – for rural areas with a variety of activities because of the homes for retired people which were built and the service industries which were developed. Only in some rural areas with low accessibility, particularly those which were not successful in mobilising enough institutional capacity, territorial cohesion continued to go down.

#### **7.2.2.6 Final territorial image**

In 2030, after the transition of the agricultural sector, the image of the EU is quite different from that in 2005. The EU has been substantially enlarged. Its borders have been shifted a long way to the East. The entry of Bulgaria, Romania in 2007 and especially the entry of the Ukraine and Turkey in 2025 have significantly extended the surface of agricultural land. Arable and dairy farming have increased in these countries because agricultural conditions in terms of land-prices and wages are better. In Northwestern and Southern Europe, however, both types of farming have decreased. Many large scale farms have developed here. Intensive cattle farming and horticulture are concentrated in agro-production parks in the Pentagon because the highly urbanized character of this region and the highly developed infrastructure enable them to efficiently produce for the world market. Experience farming takes place in urbanized regions and in small-scale landscapes. Nature and landscape management by farmers is also found in small-scale landscapes.

Many rural areas in urbanized regions have become urbanized themselves, but not so many as in the first scenario. Some rural areas where agriculture dominates have changed in their turn into rural areas in urbanized regions. Rural areas attractive for tourism have extended moderately. The enlargement of the EU has created new opportunities to develop tourism and outdoor recreation in coastal areas, like the Danube delta, but also in small-scale landscapes, like Bohemia. The dualisation of agriculture and rural areas has noticeably been reduced. Although the most fertile areas in Europe are dominated by large-scale dairy farming and to a lesser extent by arable farming, both farm types are not as dominant as in the first scenario. Abandoned farmland also occurs to a much lesser extent. Various rural areas with low accessibility, like the North of the Nordic countries and the East of Poland, are preserved for luxurious forms of nature-tourism. In the CEECs a limited surface of natural areas has been changed into farmland. This has been more than compensated by nature development in other areas.

#### **7.2.2.7 Summary**

After being confronted for several years with a low economic growth rate the EU decided that the Lisbon Strategy could not be realized without a serious reconsideration of the efficiency of EU policies. In a tense debate the policy-coalition promoting the sustainable rurality strategy appeared to be most influential. This coalition was supported by the growing awareness of the environment (which was in its turn stimulated by several incidents related to climate change), the fact that the EU after the enlargement of 2004 faced a great challenge regarding territorial cohesion, and the increasing pressure of the WTO to liberalize the markets for agricultural products.

The sustainable rurality strategy transformed the agricultural sector to a large extent into a sustainable economic sector. This happened in three stages: a preparation stage, an acceleration stage, and an implementation stage. During the implementation Pillar 1 measures (commodity market support and direct payments) were significantly reduced but at the same time Pillar 2 measures (now defined as 'integrated rural development') were strongly enhanced. In order to implement the transformation successfully and to provide farmers and rural areas the opportunity to adapt to the new conditions, implementation was stretched-out over a period of a generation.

The sustainable rurality strategy had large impacts on general welfare but not as large as the liberalization strategy. It reduced the large transfers from consumers/taxpayers to the agricultural sector and generated more economic growth in Europe and in the developing countries. Regarding agriculture and rural areas the same tendencies could be observed on the macro, meso and micro level. The trend of reduced territorial cohesion was first limited and later changed into a tendency towards increased cohesion. Many large-scale dairy and arable farms moved to the CEECs and Turkey. Dairy farming and intensive cattle farming were successful on the world market. Experience farming and agricultural nature and landscape management were successful on regional markets. Arable farming, however, lost market shares. Rural areas in urbanized regions, which were attractive for tourism or in which agriculture dominated experienced increasing socioeconomic viability and further population growth. The same is true for many rural areas with a variety of activities and some rural areas with low accessibility. Only rural areas with low accessibility which were not able to mobilise enough institutional capacity lagged behind.

### **7.2.3 Main issues resulting from the scenarios**

The open market strategy and the sustainable rurality strategy generate various issues for policy-makers on the EU-level and other levels of decision-making. Some important issues are mentioned below together with their links to the policy-options in the ESDP (between brackets). Most of these issues are related to both scenarios although not to the same extent:

- Mobilisation of the local recourses ('territorial capital') of the various rural areas in Europe.
- Promoting diversified development strategies sensitive to the local potentials of rural areas (13, 21).
- Promoting and supporting information exchange between rural areas in the enlarged EU (16).
- Exploitation of the development potential of tourism in rural areas (18).
- Preventing downward spirals in rural areas with low socioeconomic viability.
- Commodifying and marketing of cultural landscape and other local qualities of rural areas (53).
- Guaranteeing a minimum acceptable level of environmental protection in rural areas (14).
- Preventing the dissemination of genetically modified plants and seeds.
- Preventing abandonment of farmland or using it in other productive ways.

#### **7.2.4 Possible ESPON indicators for the rural development scenarios**

The 'ESPON-Database' contains the following key indicators and variables related to agriculture and rural development. The indicators are the same for both scenarios.

##### *Agriculture*

- Total agricultural areas: percentage of total area which is UAA.
- Agricultural area by main crops: percentage of UAA which is arable, fallow, under permanent crops or permanent grass.
- Average farm-size per region: hectares of UAA per holding and SGM per holding.
- Agricultural subsidies per region: value of agricultural subsidies per hectare UAA.
- Pollution: value of fertilizer input per hectare of arable land.

##### *Rural development*

- Location of rural areas: urban – rural typology.
- Land-use in rural areas: arable land, pastures, permanent crops, heterogeneous agricultural areas, forests, open spaces with little or no vegetation, inland waters, inland wetlands, marine waters, marine wetlands, and seas and oceans.
- Wealth and income in rural areas: GDP in PPS per inhabitant and GDP in PPS per inhabitant in EU average.
- Population in rural areas: population density, population by age groups, percentage share of population in the ages over 65, and migratory balances pr 1.000 inhabitants.
- Rural development subsidies per region: not available yet.