ESPON
EUROPEAN SPATIAL PLANNING OBSERVATION NETWORK

ESPON Project 2.1.3

Part 1 – Executive Summary

The Territorial Impact of CAP and Rural Development Policy

Third Interim Report
August 2003

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Part 1

1. Executive Summary

1.1 Background and aims of the project

The Second Report on Economic and Social Cohesion (January 2001) called for cohesion policy to promote a more balanced and more sustainable development of the European territory, in line with the European Spatial Development Perspective (ESDP). As part of this, it identified the need for further work on the territorial impacts of sectoral and structural policies, of which one of the most important (in budgetary, economic, environmental, social, political and cultural terms) is agricultural and rural development policy. ESPON Project 2.1.3 sets out to help fulfil this research requirement, through an analysis of the territorial impacts of the Common Agricultural Policy (CAP) and rural development policy.

The project commenced in August 2002 with the overall aim of deepening the understanding of territorial impacts of the EU's Common Agricultural Policy and Rural Development Policy (CAP/RDP) through the provision of a standardised database and an analysis of territorial trends covering the EU-15 and neighbouring and accession states. This is the Third Interim Report (TIR) for the project. Building on two previous Interim reports submitted by the project team in October 2002 and March 2003, it presents the progress and findings in the first year of the project to August 2003.

1.2 Advanced Analysis of the Effects of the CAP and Rural Development Policy

Chapter 2 begins by describing, from a territorial point of view, the agricultural sector and rural areas of the EU-27 in terms of core indicators. Analyses of ten indicators (Maps 2.1 to 2.10) highlights considerable differences in farm structures, land use and production methods across the EU-15. When considered across the extended EU territory, the differences are even more marked. The share of agriculture in total employment is still generally four times higher in the CEECs than in the EU, but national situations and dynamics are very different (the Czech Republic, Slovakia, Slovenia and Estonia have a relative low share of agricultural employment). Reduction of this share has generally slowed down and sometimes even reversed (Romania, Bulgaria). In the latter cases, this goes hand in hand with the growing semi-subsistence sector (Pouliquen 2001: 38). Other key issues identified for the accession countries include change sin land use and farm structures.

Changes in land use in the accession countries depends on the kind of property status and the nature of transformation occurring. In general, land seized by the state during the Communist era is being returned to private hands. This can result in a highly fragmented land ownership structure and encourages short-term forms of exploitation, such as excessive logging, heavy grazing at high altitudes and cropping on unstable slopes (CEI 2001: 8). While, the assessment of the European Commission expects no significant shift of dominant land use patterns, land abandonment is becoming a growing problem in some regions while in others, the intensity of agricultural production is predicted to increase.

In general, the farm structures in the candidate countries are unfavourable. The CEECs have to cope with inappropriate organisation structures and/or fragmentation of agricultural supply. Large number of small farms exist alongside semi-subsistence farming and an emerging commercial farming sector (dualism of structures). This has an important influence on the spatial trends of agricultural production. Large company holdings have developed from the former state and collective farms. They carry out most of the "modern" part of agricultural production. They are commercial, concentrated and relatively capital-intensive production units, their labour productivity slowly increasing but on a level much lower than that of professional holdings in the European Union.

Chapter 2 proceeds to describe and analyse the EU's Common Agricultural Policy (CAP) and Rural Development Policy (RDP), first in general and then in relation to its territorial components and enlargement aspects in particular. For this project, the scope of the CAP/RDP is taken to be the interventions in farming and farming-related activities (e.g., farm forestry and tourism, and food regulation). These interventions, undertaken by the Commission's DG Agri, can be via expenditures from the European Agricultural Guidance and Guarantee Fund EAGGF, through market price support and/or via relevant EU Regulations and Directives.

CAP Objectives

The original objectives of the CAP were laid down in Article 39 of the 1957 Treaty of Rome and in the conclusions of the 1958 Stresa conference. The Article 39 objectives were (and are, since the Treaty remains in force, though subject to re-interpretation: see below):

- increasing agricultural productivity
- ensuring a fair standard of living for farmers
- stabilising markets
- guaranteeing food security
- ensuring reasonable prices for consumers.

These objectives were not considered immediately and directly from a territorial viewpoint, although obviously the original CAP was designed to support the rural population of the Community of Six relative to the urban population, which at that time was enjoying unprecedented economic growth and prosperity. However, the underlying philosophy of the Common Market as a whole was to exploit comparative economic advantages, which include spatial differences in farming productivity in terms of soil quality, climate, distance from markets, etc.

In pursuing these Treaty of Rome objectives, three "principles" were commonly cited, and are still referred to, though sometimes in different terms as common pricing (or market unity), community preference and common funding (or financial solidarity). None of these principles carry obvious territorial characteristics, and indeed they each imply an increased degree of common rather than differentiated treatment across the entire EU area, e.g. in terms of free flows of goods.

As problems in operating the original CAP emerged – primarily surpluses of certain farm products, and escalating expenditures – additions and modifications were made to the above objectives and principles, via new CAP measures or via formal Treaty commitments. The most relevant of these to the present study was the introduction of Less Favoured Area (LFA) payments. Thus, in 1975, Directive 268 authorised the definition of certain agricultural regions as "mountainous" or "less favoured" areas, entitled to special direct payments to ensure "the continuation of farming". This marked the important departure - especially in the context of the present study - from the common policy treatment of farming in different parts of the Community. Further relevant measures included agri-environmental payments.

The most recent sect of objectives set out in the 2002 Mid-Term Review of the CAP, and recently re-stated in the Explanatory Memorandum to its Long-Term Policy Perspective (COM(2003)23), argued that EU agriculture should aim for enhanced competitiveness, more market orientation, more sustainability, a better balance of support, and strengthened rural development. These recent lists of CAP objectives emphasise the multi-purpose nature of policy, but also its general lack of territorial character and focus.

Policy Measures: from Pillar 1 to Pillar 2.

Agenda 2000 defined two "Pillars" of the CAP and envisaged a gradual shift of expenditure from Pillar 1 to Pillar 2. Pillar 1 comprises market support measures, direct payments and

supply management tools: this occupies the bulk of the CAP budget. Pillar 2 covers structural and so-called rural development measures (though almost all are for farmers) such as LFA payments, agri-environmental measures and aids for farm investment, modernisation, and diversification. Interestingly for this study, the proposed shift from Pillar 1 to Pillar 2 is also sometimes presented as a shift from a 'sectoral' to a 'territorial' approach to rural policy. Regulation 1259/1999 gives Member States discretion for 'modulation' to switch funding from commodity support to certain elements of Pillar 2, and obliges Member States to meet 'environmental protection requirements' in market organisation.

The CAP/RDP is financed by the European Agricultural Guidance and Guarantee Fund (EAGGF, or FEOGA), which accounts for about 50% of the total EU budget. The two Sections of the EAGGF are each subject to separate financial guidelines, or upper limits, determined at the Berlin Summit as for the period 2000-2006. Details are provided in Tables 2.1 and 2.11 of the report

Enlargement Aspects
Most accession states have been preparing their agricultural sectors and policies for EU entry and CAP adoption, e.g. by instituting CAP-like support systems, and seeking liberalised trade with the EU-15. The territorial aspects of agricultural and rural development policies in the CEECs are therefore complex, with significant differences between conditions in the early 1990s and now.

SAPARD provides applicant countries with the possibility of funding projects under a wide range of measures. Of these, taking all 10 countries together, investment in processing and marketing is the most popular, with 26% of the total public aid, followed by investment in agricultural holdings and investment in the rural infrastructure, each at just over 20%. Next comes the group of measures of diversification, with around 11%. Of the 9 other measures in the programme, none averages more than 4% of the total public aid. Although the balance differs from programme to programme, in virtually all of the candidate countries the share of public aid accounted for by the three most used measures is over 60% of the total.

Current and future investment in rural infrastructure such as transport and water facilities part-funded by the ISPA pre-accession scheme may well have additional spatial implications for agricultural and rural areas in the CEECs, through improved communications, and better water supplies.

SWOT of CAP and RDP
On the basis of the preceding discussion, an extended SWOT analysis of the CAP and RDP is presented in relation to territorial cohesion. For this exercise ESDP aims are taken as the benchmark. Policy aims of the ESDP relevant for the CAP/RDP include the central aim "of achieving a balanced and sustainable development, in particular by strengthening economic and social cohesion" (ESDP 1999, p.17) This general aim is reflected in three aims of spatial development, all of which are relevant to the CAP and RDP: economic and social cohesion; prudent management and development of Europe's natural and cultural heritage; and a more balanced competitiveness of the European territory (ESDP 1999). The findings are summarised in section 2.3 of the report

SWOT of Territories
A SWOT of territories is also presented, leading to identification of problem regions. Such an analysis is highly dependent on the level of geographical unit chosen and the different aspects of socio-economic development which are included. For the purposes of this study, the strengths, weaknesses, opportunities and threats are considered in relation to three different structural fund areas, areas with two different development trajectories (dynamic and lagging), and three different LFA types. The findings area summarised in Table 2.6.

Many of the aspects highlighted in the SWOT of territories were discussed in the Second Cohesion Report and are reflected in the priorities for the economic and social cohesion. Although this confirmed the view that some convergence of EU regions has taken place, it also stressed the need for on-going support for regions with the most lagging economies. Moreover, while cohesion between countries at the national level has advanced substantially, there is concern about weak development at the regional level and the considerable divergence between regional development.

CAP/RDP, Polycentricity and new urban-rural relatons
Chapter 2 concludes by considering the relationships between the CAP/RDP, polycentricity and new urban-rural relations. The discussion describes how, within the emerging new spatial development paradigm, the role of CAP and rural areas is often neglected.

Polycentric development promotes the enhancement of the accessibility of urban and rural areas through better infrastructure on the one hand, and the improved assignment of functional tasks of urban-rural relationships on the other. The key questions are thus whether there are any elements in the CAP and RDP regulations which addresses these issues and what might be the probable outcomes of such promoted accessibility for rural areas.

Analysis of the existing effects of the CAP and RDP is complicated by the highly diverse application of CAP and RDP measures and the fact that effects tend to be different according to type of measure and the degree of its spatial impact. Pillar 1 measures are essentially top-down measures and seem unlikely to enhance the development of self–containment and responsibility. In contrast Rural Development Regulation (Reg. 1257/99) offers some new scope for governments to tailor measures more effectively to meet the varied local needs of rural areas, at least from the conceptual level for programming. In particular, the Article 33 measures in the RDR provide countries with instruments to increase the scope of action of farmers and people in rural areas. However, on average only about 10% of funds of the RDP are foreseen for these measures in the EU, In addition, most of these measures are only eligible for the farm sectors (Dax 2002).

1.3 Analysis of the Territorial Impacts of the CAP and RDP

Chapter 3 reports the first results of the territorial impact assessment (TIA) of the CAP and RDP in the EU. Analysis is based on an application of the TIA method described in Chapter 1. In particular, the results are based on a statistical analysis of indicators and data at NUTS 3 level over the period 1990 to 2000, augmented by findings from an EU-wide review of literature. The absence of a realistic counterfactual or "without CAP" scenario means that analysis is confined to considering how support is/has been distributed and implemented between areas of Europe and the way in which *changes* in the CAP have impacted on regional economies in different ways.

A key factor that needs to be borne in mind when considering the results is that the CAP is but one of many external factors influencing farm-level decisions and agricultural and rural development. At this stage of the project it is difficult to separate out, from all of the other factors, those changes which can be attributed solely to the existence of the CAP and RDP. The second year of the project will explore in more depth the causal relationships between the incidence of CAP and RDP and different impacts across European territory.

A set of hypotheses on the territorial impact of the CAP and RDP was presented in Project 2.1.3's Second Interim Report, grouped into categories based on our classification of CAP and RDP measures. Such a grouping was made on the grounds that each of type of support (market price support, direct income payments, agri-environmental payments etc.) has played a distinct role within the CAP reform process and may have given rise to territorially distinct effects. The structure of this chapter is based on this approach.

An initial hypothesis developed by the project team was that **the incidence of the CAP is not consistent with the economic or social cohesion objectives of the EU**. To test this proposition, the level of Pillar 1 and Pillar 2 support received by farmers was regressed against GDP per inhabitant, unemployment rates and population change in each NUTS 3 region. In this and subsequent analyses, Pillar 1 support is defined as the sum of the value of market price support (MPS) and direct income payments received by farmers. Table 3.1 reports summary results in relation to indicators of economic cohesion (GPD per head and unemployment rates).

Table 3.1 The relationship between CAP support and economic cohesion indicators, 1999

	GDP per inhabitant	Unemployment rates
Pillar 1 per AWU	-	-**
Pillar 1 per ha	+**	-**
Pillar 2 per AWU (FADN)	+**	-**
Pillar 2 per ha (FADN)	+**	-**
Pillar 2 per AWU (RD)	-	-**
Pillar 2 per ha (RD)	-**	-**

Note: ** means significant at the 5% level

In all but two cases, the results were statistically significant. The results indicate that in 1999 both total Pillar 1 and total Pillar 2, as estimated from the FADN database, were distributed in such a way that they tend to benefit richer regions and also regions with lower unemployment rates. They thus support the hypothesis that the incidence of CAP support is not consistent with the economic cohesion objectives of the EU. The findings support the Second Cohesion Report which asserted that the least prosperous regions which account for around 20% of the EU population get less than their share of CAP support. The only result which is consistent with the objective of economic cohesion relates to Pillar 2 support as measured through the apportionment of national rural development expenditure, although even here the results are ambiguous with higher support accruing to regions with lower unemployment rates.

The relationship between the CAP and social cohesion objectives of the EU was investigated by regressing the level of Pillar 1 and Pillar 2 support against the population change in each NUTS 3 region from 1995 to 1999. Again the results (summarised in Table 3.2) suggest a conflict between the strategic objective of improving social cohesion and the distribution of Pillar 1 support: CAP Pillar 1 support in 1999 was higher in areas where population growth had been most rapid. The results in terms of Pillar 2 support are more ambiguous with only one estimate significant, but this also shows levels of support estimated from funds for RD measures positively associated with the rate of population growth.

Various reasons have been proposed to explain why Pillar 2 instruments favour the richer areas of the EU. These include:
differing National priorities,
the uneven allocation of RDR funds, and
difficulties co-financing RDR expenditure in poorer countries (Dwyer *et al.* 2002)

A second key hypothesis developed by the project team was that the impact of the CAP on regions in Europe is mainly visible through the CAP's impact on **farm types** where farm types are differentiated by both economic size and enterprise mix**.**

Considering first the relationship between farm size and CAP support, it is widely recognised that CAP Pillar 1 support accrues disproportionately to intensive large-scale farmers. This is because to date it has been coupled (either directly or indirectly) to the level of output. Analysis of the data confirms an association between the distribution of Pillar 1 support

measures among NUTS 3 regions and average farm size: regions with larger farms received higher levels of CAP support. Thus, 42% of regions receiving the lowest level of support fell into the smallest farm size category while 64% of those regions receiving the highest level of support fell into the two largest average economic size categories. However, the distribution of Pillar 2 support was found to be far less dependent on farm size. Since small farms are more prominent in southern regions of the EU, these results suggest an uneven territorial distribution of Pillar 1 support across Europe.

However, the situation is more complex because support varies between commodities and, in general, does not differentiate between production conditions. To take this into account, Table 3.5 reports the results from a multivariate analysis of the relative importance of different factors on the distribution of support across Europe. The key explanatory variables investigated were farm size, land cover (as a proxy for the productive capability of the land and farm type) and the peripherality of the region. The results show that, controlling for other factors, average farm size is a significant factor in explaining the level of CAP support received by NUTS 3 regions. In the case of Pillar 1 support, regions with larger farms get higher levels of support. In contrast, higher levels of Pillar 2 support tends to go to regions with smaller average farm sizes.

A key finding for this study was that the location of a region (as measured by an EU-wide peripherality index) also played a significant role in explaining the level of CAP support received by a region in 1999. In the case of Pillar 1 support, decreasing peripherality (increasing accessibility) was positively associated with higher levels of support: after controlling for farm size and land cover, the more accessible regions in the EU received higher levels of Pillar 1 support. The opposite effects for Pillar 2 support were found: the least accessible regions received, on average, higher levels of support. From a spatial policy perspective, these findings confirm that although Pillar 1 measures are aspatial, they have very discernible spatial impacts.

In relation to **structural adjustment**, the project team hypothesised that the CAP has affected the scope of structural change in agriculture but this has been highly differentiated across space. In particular, it was believed that structural adjustment is faster in areas of higher agricultural potential because of technical bias and the greater market orientation of agriculture in more favoured regions. Analysis of NUTS 3 data between 1990 and 1998 did not find any significant relationship between the level of Pillar 1 and Pillar 2 support and the rate of structural change in the sector. It also failed to find a relationship between the rate of structural change and general economic growth in a region. However, the literature offers a more differentiated account of the way in which the CAP affects structural change, and some of the main elements are summarised in Chapter 3.

In relation to **farm household pluriactivity**, the literature indicated that rates and patterns of farm household pluriactivity vary widely between and within member states, and that the CAP is a relatively minor factor. Regression analysis backed this up with findings that the relationship between the level of CAP support received by a region and extent of part time farming was not statistically significant. Interestingly, the strength of the regional economy was found to be negatively related to rates of part time farming: in other words, part time farming was more prevalent in poorer regions of the EU than richer regions. In an EU-wide study of farm household pluriactivity, Bryden *et al.* (1993) stress that it is the combination of internal and external factors that ultimately determines whether a farm household will be pluriactive. Studies from Ireland, Germany and Austria (but not Scotland) indicate that higher levels of pluriactivity occur in peri-urban areas or in high amenity areas where there are strong 'pull' factors encouraging members of farm households to obtain additional sources of income. In contrast, pluriactivity levels tend to be low in rural areas that are not accessible to alternative sources of employment. In weaker rural areas this tends to lead to higher levels of out-migration. Pluriactivity is consequently a highly complex, diverse process.

Since the early 1980s it has been frequently alleged that the CAP has created or at least has contributed to various different negative effects for society. The two **negative externalities** that came through most clearly in the review of literature were:
Ecological effects including a decrease of biodiversity and landscape quality; and
Social effects in particular population change in certain farmed areas.

In relation to the first of these areas, a weight of evidence was found in the literature that, by encouraging intensification and specialisation, the CAP has threatened the habitats of flora and fauna. The literature search found less evidence in terms of the social impact of the CAP.

Pillar 1 Measures
Our analysis distinguishes between the effects of the different elements of Pillar 1. Thus, single variable regression analysis was used to contrast the spatial incidence of MPS and direct income payments. The results, summarised in Table 3.8, suggest that of these various elements only market price support was distributed in a manner inconsistent with economic cohesion objectives. Crop-related direct income payments tended to be higher in areas with a low GDP per capita and with high unemployment rates. A similar pattern is evident in relation to direct income payments associated with livestock production (although this relationship is only statistically significant when considering support per UAA).

This analysis supports the argument that the introduction of direct payments has led to a more equitable distribution of support between regions of Europe (European Commission 2001). However, Buckwell (1996) argues that direct income payments remain problematic for two reasons. Firstly, the levels of payments have not been sufficiently linked to the income reductions associated with the lowering of commodity price supports, leading to over compensation of some farmers. Secondly, there has not been a clearly articulated rationale to support an indefinite continuation of such payments for a once-off policy change.

An analysis was undertaken to test whether the intensity of agricultural production in each NUTS 3 region is positively correlated with the incidence of market price support, having controlled for different enterprises and farm size. The results reported in Table 3.9 confirm that the spatial incidence of market support payments is positively related to the intensity of farming in regions. However, no statistical evidence of a relationship between changing farm intensity and level of MPS was detected.

The literature indicates that the territorial impact of the shift towards direct income payments is, like many of the other CAP impacts, tied strongly to the distribution of farm types across Europe. The shift towards a stronger market orientation is likely to be greatest in regions with high proportions of large, full-time, commercial farms. On the other hand, an increase in the provision of direct payments in regions with high proportions of small farms, or medium sized extensive farms, may lead to less focus on the market as payments become interpreted as the reward to farmers for providing a wider range of public goods.

Pillar 2 Measures
For the EU as a whole, LFA measures and agri-environmental measures dominate Pillar 2 of the CAP. However, the relative importance of various Pillar 2 measures varies widely between member states, reflecting amongst other things different national priorities and different national budget constraints. The territorial distribution of support through each of these categories is considered separately in this section, along with a number of specific hypotheses about how they impact on EU regions.

Given the objectives of the **LFA** scheme, it was expected that this would operate in a manner consistent with economic cohesion. In other words, LFA payments would tend to be higher in regions with lower per capita GDP and higher unemployment rates. Regression analysis,

however, found no statistically significant relationships between levels of LFA support and indicators of economic cohesion, although the signs of the parameter estimates were as expected (see Table 3.11). This may be because certain richer northern States prioritise the LFA scheme over agri-environmental, farm investment or early retirement schemes. Studies of LFA schemes in Austria, Ireland and Scotland do support the argument that such payments have helped to retain low income yielding sectors such as cattle and sheep in marginal areas.

Our statistical analysis reveals clearly that higher levels of **agri-environmental payments** accrue to richer areas of the EU. In other words, the distribution of agri-environmental payments does not seem consistent with economic cohesion objectives. The EU level findings can, however, be explained by the fact that richer EU member states tend to prioritise agri-environmental objectives more than poorer regions. Sweden and Austria, for example, allocate over 50% of their total RD funding to the agri-environment.

Analysis of the territorial incidence of **rural development measures** was constrained by a lack of information on policy expenditures. Studies suggest that some rural development measures, such as projects assisted under LEADER, have enhanced the quality of life in rural areas. LEADER projects activate the local people and help to identify new opportunities for the development of the region. With the support of European and national money, new jobs are created leading to an improvement of the quality of life. More broadly, endogenous development requires a thorough understanding of regional potential and a long lasting commitment towards integrated approaches that reflect the participation of local actors, and the institutional development of the region. Walsh (1999) argues that success is more easily achieved when rural development is seen as part of a more comprehensive strategy for integrated regional development.

Agricultural Policies in the Accession Countries
Most accession states have been preparing their agricultural sectors and policies for EU entry and CAP adoption by instituting CAP-like support systems, and seeking liberalised trade with the EU-15. The territorial aspects of agricultural and rural development policies in the CEECs are therefore complex, with significant differences between conditions in the early 1990s shortly after the start of transition to those expected in (say) the mid-2000s.

Policy data at NUTS 3 level relating to the CEECs was more scarce than that available for the EU-15. However, some preliminary regression analysis was carried out to test whether the national agricultural policies of some CEECs have been consistent with economic and social cohesion. The manner in which the market price support component of agricultural policy is distributed varies between the CEECs. In the Czech Republic, support in 1999 tended to be higher in areas with a low GDP per capita and with high unemployment rates, in accordance with objectives of economic cohesion. In contrast, in Poland, support was higher in areas with lower unemployment rates. No statistically significant results were found in relation to the distribution of MPS in Slovakia and Hungary.

1.4 The extent of Territorial Imbalances and Regional Discrepancies

Based on the findings reported in Chapter 3, Chapter 4 summarises the relationship between the CAP and RD policies and the strategic EU objectives of social and economic cohesion, environmental sustainability and more polycentric development in Europe.

Economic Cohesion
Analysis of the territorial incidence of CAP support in 1999 across the EU-15 suggested that both total Pillar 1 support (defined as the sum of MPS and direct income payments) and total Pillar 2 (comprising of LFA payments, agri-environmental schemes and other RD measures) were distributed in such a way that they tend to benefit richer regions with lower unemployment rates. In other words, the results implied that CAP support is not currently

distributed in a manner consistent with the economic cohesion objectives of the EU. The following summarises the findings relating to Pillar 1 and Pillar 2 support in turn.

The levels of total **Pillar 1**support in the EU are shown graphically in Maps 4.1 and 4.2. In the first, support is expressed per Annual Work Unit (AWU), in the second, per hectare of Utilisable Agricultural Area (UAA). The two denominators (AWU and per ha UAA) are not closely correlated due to differences in the land and labour intensity of different agricultural production systems. Thus, while Map 4.1 shows a concentration of Pillar 1 support per AWU in northern areas of Europe, the distribution appears more dispersed when expressed per ha UAA, as in Map 4.2. In this case, areas of northern Spain, parts of Italy and Greece are among the highest beneficiaries. In both cases, significant differences in the level of support received by farmers within national boundaries can be detected.

Analysis showed that CAP Pillar 1 support accrues disproportionately to large-scale farmers. This is because MPS and to a lesser extent direct income support has been coupled (either directly or indirectly) to the level of output. However, the territorial incidence of Pillar 1 support cannot be explained by the distribution of farm sizes alone since the level of support varies between commodities and, in general, does not differentiate between production conditions. Regression analysis found that key explanatory variables were farm size, land cover (as a proxy for the productive capability of the land and farm type) and the peripherality of the region (discussed further in section 4.5 below).

A different pattern of support was found when the two Pillar 1 policy instruments – MPS and direct income payments - were compared. Maps 4.3, 4.4 and 4.5 show levels of MPS, crop-related direct income payments and livestock related payments per AWU respectively. The spatial distribution of support under these three mechanisms were quite distinct and this was confirmed through statistical analysis. In particular, MPS was distributed in favour of richer regions, whereas crop-related direct income payments were found to be generally higher in areas with a low GDP per capita and with high unemployment rates. Direct income payments associated with livestock production were also found to be more equitably dispersed, with regions with lower levels of per capita GDP tending to get higher levels of support.

The strong contradiction between the distribution of Pillar 1 support and economic cohesion objectives can be attributed to the historic focus of the CAP on sectoral issues such as improving productivity and ensuring stable food markets. This narrow focus may have been appropriate in immediate postwar years, but no longer reflects the demands faced by rural areas. The partial shift from market price support to direct income payments following the MacSharry reforms has helped to weaken this contradiction, but not to eliminate it.

The level of **Pillar 2** support received by each NUTS 3 region was estimated in two ways:
Firstly based on the combined value of environmental subsidies and LFA payments received by farmers (derived from the FADN database),
Secondly, derived through the apportionment of funds for Rural Development measures, taken from Dwyer *et al.* 2002. Note that this shows budgets rather than expenditure.

Analyses using both measures came to approximately the same conclusion: the distribution of Pillar 2 CAP support also tends to favour the richer regions of the EU-15.

Maps 4.8 and 4.9 show the distribution of two elements of Pillar 2 of the CAP – LFA support and agri-environmental subsidies. Both are expressed on a per AWU basis. The latter shows a clear northern state bias and results from regression analysis found a positive association between the level of agri-environmental support received by e NUTS 3 region and its level of per capita GDP. No significant relationship between LFA support and per capita GDP or unemployment rates was found.

The reasons for the apparent inconsistency of Pillar 2 CAP support and the economic cohesion objectives promoted by the ESDP seem to result from differences in the use made of Pillar 2 measures by different Member States. It seems the richer regions of northern Europe tend to prioritise agri-environment and LFAs, whilst the poorer regions of the south and the accession countries prioritise agricultural development measures. Another source of regional and national disparities is the uneven allocation of EU RDR funds together with the co-financing requirements for Pillar 2 spending. Even when national and regional co-financing and modulation receipts are included, the levels of RDR expenditure per ha of UAA vary enormously from €3-400 pa in Finland and Austria to around €50 pa in the UK and Denmark. In addition, the RDR measures may be used least in the poorer areas of the EU because of a lack of match funding.

Social Cohesion
Analysis of the relationship between CAP and the Social Cohesion objectives of the EU was restricted by a lack of indicators available at NUTS 3 level. Regression analysis found a positive association between the level of Pillar 1 CAP support received by a NUTS 3 region in 1999 and population change in the preceding period (1995-1999). In other words, Pillar 1 support favours those regions with a growing population. The results in terms of Pillar 2 support were more ambiguous with only one of the four regressions finding a statistically significant relationship between levels of support and population change. However, in this case too the direction of the relationship suggested higher levels of Pillar 2 support were also tending to go to regions growing in population.

A general issue emerging from the literature is that the role played by agriculture in relation to the social wellbeing of rural areas goes far beyond its importance in terms of the numbers employed on farms, or the number of farm family members making use of and contributing to local services. Rather, there is increasing recognition of the symbolic importance of farming in rural life, the role farmers play in creating and maintaining landscapes and natural habitats, and the contribution of farm households and agriculture to local cultures. The relative importance of these externalities varies across space as does political recognition of their importance. This partly explains the differences in the current use made of Pillar 2 measures by different Member States discussed above.

Environmental sustainability
The CAP has been accused of adding to a number of environmental problems through its impact on farming methods. The intensification and specialisation of agricultural production that led to the loss of habitats for flora and fauna and has been associated, among other things, with river pollution, the eutrophication of lakes and methane gas emissions. Such impacts tend to be very territorially specific. However, in the absence of a "without CAP" scenario it is difficult to assess the extent to which the CAP is responsible for creating these negative environmental externalities. Our regression analysis found that having controlled for different enterprises and farm size, the intensity of farming in a region was positively associated with the level of MPS received by a region but no evidence of a relationship between changing levels of intensity and levels of CAP support was detected.

Polycentricity
In our work we hoped to operationalise the three territorial scales of spatial development – European; national; and regional/local – through a peripherality index within the EU, and travel time to national and regional centres, respectively. Unfortunately only the first was available from other TPGs in time for submission of this report.

Our analysis confirmed that the CAP has very discernible spatial impacts. In particular, we found that decreasing peripherality (increasing accessibility) was positively associated with higher levels of Pillar 1 support, while increasing peripherality (at the EU level) was associated with lower levels of Pillar 1 support. In other words, Pillar 1 support favours the

core of Europe rather than the periphery. The pattern of Pillar 2 support was found to be the opposite: the least accessible regions received, on average, higher levels of support.

Our analysis in Chapter 3 also shows that changes in the level of farm household pluriactivity are more strongly associated with variables reflecting the strength of the local economy than the level of CAP support. However, in general it was felt that the case study work proposed for the second year of the project will provide a stronger base for exploring the role of the CAP on patterns of spatial development.

1.5 Assessment of the Implications of Proposed Policy Reforms

In July 2002, the Commission brought forward its 2002 Mid-Term Review of the CAP. The Review included a number of CAP reform proposals which were re-stated in more detail and with some modification in the Commission's Long-Term Policy Perspective for agriculture. In June 2003, the Council of Agricultural Ministers reached agreement on a further major reform of the CAP. This reform seems likely to alter the situation both as regards EU enlargement and as regards the on-going WTO Doha Development Round, within which the EU and USA have subsequently (August 2003) agreed a compromise document in advance of the WTO meeting in Cancun, Mexico, in September 2003.

Chapter 5 summarises existing analyses of these reforms (mainly the original MTR proposals of July 2002, since little subsequent analysis has yet been reported). It starts in Section 5.1 with a description of the various official reform proposals, and in Section 5.2 summarises a number of published "impact" studies, mainly of the July 2002 proposals. In Section 5.3, the results of quantitatively analysing at a NUTS3 level some of the estimates from one of these studies (CAPRI) are reported. Finally, In Section 5.4, the implications of CAP reform for the accession countries in Central Europe are discussed.

The MTR proposals of July 2002 envisaged further cuts in support prices for crops and livestock accompanied by the replacement of the multitude of various direct payments by a single decoupled direct payment, related to historical levels of payment to each farm. "Dynamic [or degressive] modulation" would reduce all direct payments by 3% per year to an eventual 20% cut. However, a franchise related to AWUs would exempt around three quarters of all EU15 farms but affect under a fifth of all direct payments. A "capping" maximum of Euro 300,000 in direct payments would limit the payments to large farms. In its January 2003 proposals, some concessions were made to reduce the cuts for smaller farms.

Funds saved by these proposals would be distributed from the EU budget "to Member States on the basis of agricultural area, agricultural employment and a prosperity criterion, to target specific rural needs". This was expected to "allow some redistribution from intensive cereal and livestock producing countries to poorer and more extensive/mountainous countries, bringing positive environmental and cohesion effects". All such funds saved from Pillar 1 would be used by Member States to reinforce Pillar 2 rural development programmes.

The reforms actually agreed in July 2003 embody only partial decoupling of direct payments from production, with modulation rising only up to 5% by 2007. Details of the implementation of the reform package are still awaited.

The direction of current CAP reform (Agenda 2000 and the Commission's Long-Term Perspective proposals) can therefore be characterised by:

- lower market protection, especially for cereals but increasingly for milk, sugar and other products

- direct payments to farmers decoupled from production levels but linked (cross-compliance) to agri-environmental and other performance, and modulated (e.g. by size of total payments) to release funds for other purposes
- a stronger and wider "rural development policy", including food standards and animal welfare but also farmer and farmland diversification and environmentally valuable farming methods

In recent times, a number of "impact analyses" of CAP reforms have been undertaken and reported, several at the initiative of the Commission (EU 2003). The University of Bonn built the CAPRI model to assess the impacts of the Agenda 2000 reforms on NUTS2 regions, for example, comparing simulations for 2005 with and without the Agenda 2000 measures. For cereals, regional impacts were found to vary considerably, affecting especially NW France, all of Germany, N Italy, SE England, Denmark, southern Sweden and Finland, and the north east corner of Greece. Spain and Italy were favoured by a special agreement in Agenda 2000 concerning reference yields which resulted is substantially higher premia for cereals. For cattle, the impacts were felt most in Ireland, western UK, Brittany, Belgium, Netherlands and the adjoining regions of Germany, the Alps and most of Scandinavia. The CAPRI model was less clear about the impacts on Mediterranean crops because of a lack of relevant data. This model is now being updated and improved in a new project, CAP-STRAT.

The EU (2003) reports the results of six analyses of the impact of the MTR proposals, and each of these is summarised in Chapter 5 of this report. Each compares the simulation estimates of the situation in 2009 if the MTR proposals were implemented with those of the estimated "reference" situation for the same year if the CAP were unchanged (except for complete working out of the agreed Agenda 2000 reforms). While the studies vary in their methodologies and in their detailed findings, their overall conclusions concur. "The MTR proposals would display a rather favourable, though limited, impact on the income of the agricultural sector as compared to the baseline: all the impact studies show that the reduction in the level of agricultural production and the implementation of dynamic modulation would be broadly compensated by the resulting price rises (and the increase in the level of aids in the arable crops and rice sectors). Given that most of the savings from modulation (more than €3bn by 2009) can be assumed to return to the agricultural sector through the second pillar measures, the overall income of the agricultural sector should rise. However, diverging trends across the various commodities and regions may be expected, with most favourable developments projected in the animal sector (notably beef and pork)."

The EU report also suggests that decoupling in the accession countries should produce similar trends, "as producers' decisions would be driven by market considerations rather than by the maximisation of direct payments", and that the proposals "would enable the significant rise in agricultural income projected in the new Member States after enlargement to be secured."

It is only in the detail of the CAPRI reports that the divergent territorial impacts become clearer, and we have worked in cooperation with the University of Bonn to disaggregate the outputs of their model down to NUTS3 regions in order to study the relationship between CAPRI impact measures and the EU's social and economic cohesion objectives. These results were then analysed using mapping and linear regression techniques. Two CAPRI impact measures were considered in this analysis: CAP 92 premium payments; and farm Gross Value Added (GVA) plus CAP 92 premiums.

Map 5.1 shows absolute changes in CAP direct payments resulting from the MTR proposals, while Map 5.2 shows estimated absolute changes in farm incomes resulting from the MTR proposals, both at NUTS3 level. Map 5.3 shows absolute changes in an environmental measure (CO_2 equivalents) resulting from the MTR proposals. In almost all NUTS3 areas, increases are predicted in this indicator, especially in many western regions.

A second trio of maps show the same variables expressed as percentages of the reference level. CAP payments change by more than about 25% in relatively few regions, such as the Low Countries and parts of northern Germany and northern Italy (increases) and southern France and Austria (negatively). Farm incomes are only marginally affected, with changes of more than 5% apparent only in a small number of NUTS3 regions in France (mainly in the south) and Austria (both falls) and in some or all of Northern Ireland, Belgium, northern Italy, Denmark and Sweden (all rises). Of course, these percentage changes reflect the relative size of the MTR effects and the level of farm income in the base period (1997-99). As regards CO2-equivalent emissions, rises of over 40% appear in northern Sweden, northern Finland, the northern half of Ireland, and in small parts of several other countries.

In the first set of regressions, GDP per inhabitant and the unemployment rate, both in 1999, and the population changes between 1995 and 1998, were again used as cohesion indicators. The results (see Table 5.1) suggest that the MTR CAP reform proposals would have increased CAP direct payments more in those NUTS3 regions with higher GDP per inhabitant, i.e. the generally more prosperous areas. In this respect the MTR would work against cohesion. However, there was no statistically significant relationship with NUTS3 unemployment rates. On the other hand, the results also indicate that as a result of the MTR proposals, CAP premiums would have increased more, compared to the benchmark scenario, in those areas with more slowly growing populations in the late 1990s.

Regressions using farm GVA plus CAP direct payments showed no statistically significant relationship with GDP per head or with population change rates, but a weak but positive one with unemployment rate, suggesting that MTR CAP reform, if anything, would have increased this measure of farming prosperity in areas with higher unemployment. Moreover, levels of farm GVA plus CAP premiums would fall, as a result of the MTR proposals, in all OECD types except predominantly urban and lagging areas, and by approximately the same amounts. These results suggest that the MTR proposals' effects on farm profitability would have very little effect either way on economic and social cohesion at NUTS3 level.

Analysis of the impact of CAP/RDP reform in the accession countries is complicated by a number of factors, including:

- the broad socio-economic transition process towards a mature democracy and a market-based economy, which has a major influence on living standards
- the effects of EU accession itself, including free east-west trade within the EU-25 as well as domestic effects
- the precise way in which CAP reform will apply to these countries, following long and strenuous negotiations over the adoption of the "old" (Agenda 2000) CAP
- the considerable pre-accession aid being delivered to these countries by means such as the SAPARD fund (see Section 2.2.5), and the effect of the Europe Agreements and the growing commercial anticipation of successful enlargement in 2004.

It is anticipated that in the new member states, CAP reform would secure the income gains generated by enlargement which could reach up to 45%, when taking account of the phasing-in of direct payments and rural development measures (EC 2003a: 4). Yet the current policies of CAP seem hardly suitable for the structural problems of the CEECs. The discussion in the negotiation period has concentrated on issues of sectoral and spatial integration to the neglect of the circumstances of each accession country. Rural development policy attains particular relevance under these circumstances, since it is assumed that a great portion of regions in the CEECs will be affected by further spatial divergence tendencies.

In the run-up to accession, the application of direct payments has been especially controversial. The *pro* and *contra* arguments give an assessment of the prospected impacts:

the core argument in favour of the application of direct payments was that direct payments are part of the CAP *acquis*, and central to the concept of a single market for agricultural products. The Commission, however, concedes that the application of direct payments without adaptation could have some counterproductive side-effects, including negative impacts on restructuring, and creating considerable income disparities and social distortions in the rural societies of the new Member States, which might create imbalances both within rural areas (due to wide differences in land ownership) and between rural and urban areas, without adequately addressing the requirements of semi-subsistence farms.

The conclusion was to start direct payments at a low level combined with intensified support for restructuring, in particular through rural development actions. Direct aids for the new member states will be phased in over 10 years, receiving 25% of the full EU rate in 2004, with gradual phasing in until the year 2013. The new Member States will have the option to grant direct payments during a limited period in the form of a de-coupled area payment applied to the whole utilised agricultural area. On the basis of its total envelope of direct aids and its utilised agricultural area, an average area payment would be calculated for each country. The selection of the implementation model of the direct payments (full or simplified schemes, modulation) will have a decisive impact on the effects, including a spatial variation of the prospects for the development of agricultural sector. In addition, a package of rural development measures will be available to accession countries from accession onwards.

There are several studies which forecast scenarios after entry of the CEECs. These concur that a decline in livestock production and a modest growth in cereal and oilseed production would be the effect of accession (Pouliquen et al. 2001), but none of these impact studies considers the specific spatial implications. An impact assessment of the CAP reform proposals (which incorporates the effect of decoupling direct aids) forecasts for EU-25 that the UAA will rise more strongly than the resulting yields: The new Member States add about 38m hectares of UAA to the 130m hectares of the old Member States, representing an increase of 30%. The EU-25 would produce in 2006 about 30% more cereals with 42% more cereal area and 25% more oilseeds with 37% more oilseed area (EC 2003a: 12).

Rural regions in the enlargement area are affected especially by transformation problems. They show sharp economic spatial disparities and have few urban centres. To a certain extent, the mix of sharp declines in production and employment levels, poor infrastructure and poor transport accessibility could lead to a massive wave of out-migration from rural regions, and as a consequence, to the collapse of their socio-economic viability. Yet, in many CEECs the formulation of rural development policies is at a rather early stage and they are still mainly targeted at the agricultural sector and the basic rural infrastructure (OECD 1997a).

There is little tradition of spatial development and regional policies similar to those of many EU-states and as defined in the EU Structural Funds. This can be seen through the lack of spatial development and regional policy instruments and institutions as well as by the fact that in general independent regional levels in the political and administrative territorial system do not exist (EC 1999a: 48-49). The OECD notes that an effective, well-designed and suitably targeted institutional adjustment is crucial for rural development policies in the CEECs.

1.6 Interactions between CAP and other territorially-relevant policies

A primary objective of the ESPON Programme is "to contribute to a better understanding of the spatial dimension of the Structural Funds, cohesion policy and other Community policies, and national sectoral policies" (ESPON 2006 Programme, p. 9). While ESPON Project 2.1.3. is primarily concerned with the territorial impacts of the CAP with special attention to Rural Development Policy, it is also required to consider the interactions between this predominantly sectoral policy and other territorially relevant EU policies. Therefore, Chpater 6 of the report focuses on whether the CAP and RDP assists, complements, hinders or

contradicts the actions to achieve the goals and objectives of other policies that have an influence on territorial development and spatial planning, and also on the interactions of these policies with the CAP and RDP. Four policy areas are considered Structural and Cohesion Funds Policy, Environmental Policy, Transport and Communications Policy and Social Policy.

Structural and Cohesion Funds Policy
Although in broad terms, the CAP may have contribute to reducing disparities between rural and urban regions, it does not assist in reducing intra-rural disparities in incomes. The desirability of a transition to a more elaborate framework for sustainable and integrated rural development was first discussed at the 1996 Cork Conference on Rural Development hosted by the European Commission. The ensuing Declaration, which sought to lay the basis for 'making a new start in rural development policy', proved to be overly ambitious and had to be significantly altered in order to achieve the requisite level of political support.

The Commission proposals for Agenda 2000 introduced the notion of rural development as the Second Pillar of the CAP. However, by the conclusion of the negotiations over CAP reform, the commitment to a new approach to rural development was severely curtailed. The main outcome was the Rural Development Regulation RDR (1257/99). While to be welcomed as an initial step towards the more ambitious goal of sustainable and integrated rural development, the RDR amounts to little more than an amalgamation of pre-existing measures to provide support for activities close to agriculture (Dwyer et al. 2002). It does not provide a coherent basis for a truly integrated approach to rural development. In order to achieve the territorial goals associated with the Structural and Cohesion Funds, a higher level strategic approach to rural development is needed that will require closer alignment of the measures contained in RDPs with those in the Structural Fund Operational Programmes. There is also a need to

- Ensure that the allocation of rural development assistance attaches more emphasis to medium and long-term development potential based on strategies to combine endogenous and exogenous resources and that extend the range of supports beyond the farming community (Terluin and Venema 2003).
- Adjust the balance of support between CAP and RDP so that the outcomes from this policy area can become more supportive of economic and social cohesion goals.
- At the level of implementation there should be more objective assessment of the relative needs for rural development and more careful targeting of resources towards the elimination of market failures that work against the achievement of rural based public goods. These include the quality of food, soil, water and atmospheric resources, biodiversity, habitats and landscape and also the development of viable and sustainable rural communities and economies. There is also a need to ensure that implementation procedures facilitate greater local participation and permit sufficient flexibility to enable local customisation of strategies.

The challenges confronting agriculture and rural development in the accession countries are very large. There are many instances of dualistic production structures, as for example in Hungary (Ferenczi 2003), which require much greater emphasis on rural development programmes that are integrated at the level of regions with other support programmes. As in the EU territory, there is a very strong case for shifting from a sectorally defined commodity support framework to a broader territorially defined set of integrated support measures which will support a stable and efficient food producing sector that will be embedded in sustainable rural environments populated by sustainable rural communities.

The commencement of the implementation in autumn 2002 of the SAPARD Regulation for pre-accession countries provided an opportunity to support economic and social reforms in

these countries. Dwyer et al. 2003 have noted that the impact of SAPARD to date has been limited by the relatively small amount of resources devoted to it, start up delays and an emphasis on developing institutional capacity in the central administrations. Nevertheless, SAPARD has already had a significant indirect effect in encouraging a number of accession countries (for example Hungary) to introduce, as early as 1999, alternative approaches to rural development which are similar to the EU. As in EU15, there is a need for a reallocation of further resources towards rural development, which must be guided by strategies containing a more explicit territorial focus and which facilitate greater participation of a wider range of stake holders at local and regional levels. The adoption of a programme approach is a welcome initiative, but this needs to be developed further with more emphasis on integration across sectors and development dimensions at regional levels, and also with more resources for local and regional capacity building.

Interactions between CAP and RDP with Environmental Policy

Agricultural and environmental policies have evolved almost independently of one another. For most of the first thirty years of the CAP, the policy did not have any explicit environmental objectives. The development of EU environmental policy over the same period was very gradual and was mostly guided by a mainly reactive type approach. It is not surprising, therefore, that the productivist orientation of the CAP until the early 1990s supported increasing levels of intensification and specialisation which have resulted in a wide variety of negative environmental impacts. These include reductions in biodiversity, degradation and erosion of soils, contamination and excessive abstraction levels of water resources, air pollution by ammonia and greenhouse gases, destruction of wildlife habitats, and significant alterations to many distinguishing features of the European rural landscape.

The incidence of environmental damage due to late twentieth century farming practices is not confined to the EU, nor indeed can they be ascribed as being even primarily due to the CAP per se.. During the socialist era in Central and Eastern Europe agriculture and food production were promoted by government plans that paid little attention to the suitability of production systems to the local environment. The pursuit of objectives related to increased production resulted in more intensive landuse practices supported by inorganic fertilisers, and development of extensive drainage and irrigation schemes. While the levels of reliance on inorganic inputs remained much less than in the EU area there is evidence of considerable environmental damage.

Since the early 1990s the relationship between agriculture and environmental policies has changed significantly. On the one hand the importance of promoting more environmentally friendly farming practices has been adopted as part of the CAP objectives, and indeed the elaboration of the European Model of Agriculture with the concept of multi-functionality has identified new policy-relevant roles for farmers as custodians of many rural-based public goods. On the other hand, EU environmental policy is now guided by sustainability principles which place more emphasis on prevention supported by a comprehensive regulatory system and there is more explicit emphasis on integration between policy areas.

The Sixth Environmental Action Programme places considerable emphasis on the integration of environmental policy with other policies. The Programme provides a binding framework for the period up to 2010. Already a significant number of Community environmental measures affect agricultural production and establish standards which farmers are required to meet. These are frequently supplemented by national and regional measures. These standards are almost entirely established outside the CAP framework. Once they are adopted the role of the CAP is to assist in their enforcement by facilitating and encouraging farmers to adjust their farming practices to the changing expectations of wider society in regard to the environment.

Baldock *et al.* report from the Institute for European Environmental Policy (2002) have proposed a strategy for integrating agriculture and environmental policies which relies heavily on active pursuit of complementarities and synergies between the two policies. Under the Pillar 1 the authors propose:

- Amending or eliminating measures which under current circumstances provide incentives for environmentally damaging forms of production and other environmental pressures at a level which otherwise would not arise. These include aids for tobacco, cotton, sugar and also forage maize under the arable regime.
- Breaking the link in several sectors between the extent of support provided and the volume of production. A move towards decoupling should lead to more environmentally sustainable levels of livestock production, similarly a move towards area based payments for olive production could lead to a reduction in environmental risks.
- Making more substantive use of the principle of cross-compliance.
- Incorporating environmental considerations into marketing and food labelling policies associated with the CAP market regimes.

Pillar 2 provides an opportunity to significantly enhance the level of integration with environmental policy, though in order to do so effectively a significantly larger share of the CAP budget needs to be allocated to the Rural Development programmes. The following possibilities for Pillar 2 are propsed (Baldock *et al.* 2002):

- Agri-environment schemes that are designed to cater for local conditions have the potential to address a large number of environmental concerns. More attention is required in the identification of the reference levels of good farming practice, and to promoting the schemes in order to achieve higher take-up rates.
- Supports for sustainable farming in Less Favoured Areas should be adjusted to reflect local carrying capacities.
- Greater emphasis on targeting farm investment aid towards achieving environmental standards that may become mandatory in the future.
- More support for training, marketing and processing in order to encourage more sustainable land management and food production systems.

In Central and Eastern Europe, the SAPARD programmes provides an opportunity for applicant countries to include in their plans measures to support agricultural production methods designed to protect the environment and maintain the countryside. According to the EEA report on Europe's Environment (2003) many countries have included such measures in their SAPARD programmes but there have been considerable delays with implementation, and most countries have given higher priority to improving competitiveness of the agri-food sector than to agri-environmental measures.

Interactions between CAP and RDP with Transport Policy

The principal theme of EU transport policy that is of relevance here is the Trans European Networks (TENs) initiated in the 1990s. ESPON Project 2.1.1 has noted that 8 of the 14 priority projects of the TENs programme are located in peripheral regions, but that relatively large improvements in accessibility will translate into only relatively small increases in regional economic activity. In general it is anticipated that the impact of transport investments on economic development will be larger in regions with less developed networks than in the regions with dense and better developed networks. However, Project 2.1.1 cautions that the overall impact of transport investments will depend on the competitiveness of the regional economies: a peripheral area may benefit from better access to markets but its production may

also be subject to a higher level of competition from imports. These conclusions are particularly important for agriculture and rural development.

The CAP support system has protected EU producers from more competitively priced imports, and also through the intervention system for some products (e.g., beef) delayed restructuring towards high value added processing and thereby supported relatively inefficient sectors in some regions (e.g., Ireland). In these and other ways the CAP has probably restrained some regions from achieving their full potential and left weaker regions more at risk from increased external competition which is enhanced by improvements to inter-regional and international transport infrastructures. Some evidence for this scenario is provided by trends in the food retail sector where technological improvements related to maintenance of food quality, accompanied by transport improvements and also by the emergence of international food retail chainstores, have resulted in higher levels of competition for locally produced food products.

The trend towards a more market-orientated agriculture will lead to greater emphasis on competitiveness, which will in part be influenced by the costs of reaching markets. Thus for rural-based food processing industries, it is important that domestic transport policies of member states are coordinated with improvements to the international networks. Similarly, the marketing of products arising from farm diversification programmes will require transport systems that provide timely and cost effective access to the main centres of population.

In order to maximise the opportunities that may emerge from RDP, it will be necessary to ensure that the quality of local transport infrastructures is enhanced in order to facilitate spatial integration at the local and regional levels as well as integration with networks providing access to national and international markets. The quantity and quality of the domestically provided local and intra-regional infrastructure is probably at least as important for successful rural development as are the inter-regional and international networks, which are the main focus of EU transport policy to date. Thus, in summary, there is a need for better coordination and closer integration of supranational, national, regional and local transport policies that will enhance the competitiveness of agriculture-based and other rural enterprises.

CAP and Social Policy

The social concerns that are reflected in the CAP objectives, and which have been supported explicitly by measures such as the LFA payments, help to distinguish the European model of agriculture from its North American counterpart. The multi-functionality orientation of the policy since the late 1990s provides a basis for continuing to provide supports for the achievement of social objectives in rural areas. The shift towards decoupled direct payments may lead to a reduction in underemployment in the sector and facilitate more efficient regional labour markets in accordance with the objectives of European social policy. Similarly, the provisions for encouraging adaptation, diversification and training under the rural development programmes will contribute to the broader social policy objectives. Equally, the availability of Social Fund assistance via Structural Funds Programmes to support training and advisory services for farmers will facilitate the adjustments required by the CAP reforms as the policy adapts to an ecological modernisation orientation from its traditional productivist focus.

While the CAP can contribute to the achievement of EU social policy objectives at the broad inter-sectoral level, the implementation of particular CAP measures has contributed to increased levels of intra-sectoral social inequalities. For exmaple, the provision of supports via the Guarantee section of the EAGGF has in many cases contributed to highly polarized income distributions with large shares of the farming population earning very low incomes (Frawley et al. 2000). It is essential that rural development policies are guided by a stronger emphasis on the social dimension and on both horizontal and vertical policy coordination. The issues are more complex than providing basic income supports. A fragmented,

uncoordinated approach to address the symptoms of social disadvantage in rural areas is likely to lead to a vicious circle culminating in increasing numbers of socially excluded rural residents. There is therefore a need for more coordinated and integrated strategies that deal with social concerns as an integral component of sustainable rural development policies.

1.7 First Policy Recommendations

The principal conclusions from the first year of this ESPON project are that in aggregate the Common Agricultural Policy works against the ESDP objectives of balanced territorial development, and works especially counter to the objectives of economic and social cohesion. Moreover, in terms of polycentricity at the EU level the CAP appears to favour core areas more than it assists the periphery of Europe. In recent years the CAP has undergone a series of reforms, but it is not evident that these will ameliorate these conflicts of objectives to any great extent. Nevertheless, there is potential in the future for further reforms to make the CAP more consonant with the objectives of the ESDP, and these are suggested in this section.

This report therefore makes the following first policy recommendations:

- The priority should be to increase funds substantially for Pillar 2 of the CAP, while also seeking to reduce Market Price Support by far more than envisaged in the MTR.
- The RDR should be broadened to focus less on agriculture and more on sustainable rural development.
- The increase in the RDR budget should enable increased funding for both accompanying and non-accompanying measures without the need for additional Member State co-financing, since this inhibits the use of the RDR in poorer regions.
- Moreover, the entire RDR budgets for Member States, including Accession Countries, should be allocated according to criteria of relative needs for rural development and environmental management.
- There is scope for the RDR to enable greater subsidiarity, and thus for the EU and Member States to tailor Rural Development Policy more appropriately to the diversity of territorial needs across rural Europe, but this will require a broader menu of permitted measures, with encouragement given to innovation. It will also require attention to be paid to appropriate institutional structures for multi-level governance.
- Those operating at EU, national or regional level must set a coherent framework within which local development initiatives can best add value to top down approaches. In particular, they should secure co-ordination at the highest levels where mainstream policies and strategies are formulated, so that top-down policies can effectively be integrated at local level by local development agencies and so that vertical integration can be achieved between local, regional and national policies.
- Polycentric development seeks to address centralising forces at EU, national and local scales. At the EU level, the centralising forces of the single market are offset by the Cohesion Funds. At regional or local level, there may be an intellectual and political justification for the Rural Development Fund to be used to offset the centralising forces which operate within regions, targeting rural hinterlands within every region at the third level of polycentric development.
- It is likely that Rural Development Policy will be more effective if the role of intangible factors such as governance, innovation, social capital and knowledge assets are acknowledged.
- Information on CAP expenditure and implementation at regional level is poorly developed, and support to overcome this information gap is limited. It will be very important to support policy-making in future through improving the database so as to enable comparable European wide analysis, and this will require administration of CAP instruments to take into account the regional and territorial dimension.

1.8 First Propositions on the Institutional Aspects of Spatial Coordination and Integration

The CAP and RDP are far from harmonised with the goals and objectives of the ESDP, acting contrary to broad EU objectives of economic and social cohesion, and so revealing a lack of integration between different EU policies both at the strategic and the local levels. The ESDP (and the Rural World document) challenges us to move towards an holistic and integrated approach to both the understanding and the implementation of sustainable development. The need for this reform appears to be greatest in the poorest regions of the Community, eligible for Objective 1, where a "very high degree of sectorialisation" prevails (Robert et al, 2001), but is also required elsewhere.

The key elements of an integrated approach to local rural development are well understood and have been extensively documented. The OECD (1998), for example, sees this approach as "a means of integrating different policies and programmes at a local level, thus releasing synergies and improving co-ordination, and as a means of improving local governance through involving local people and networks in the formulation and delivery of policy." A number of these key elements have been summarised in the recent report to DG Regio on the Spatial Impact of Community Policies and Costs of Non-Coordination (Robert et al, 2001), as follows:

- It is related to a specific territory;
- It includes all sectors of the economy (agriculture, industry, services);
- It constitutes an integrated approach of governmental actions;
- It is necessarily based on the indigenous potentialities of rural areas;
- It is animated by a spirit of partnership and of dialogue between private and public organisations at regional and national levels;
- It is conceived according to the specific requirements and needs of the region concerned.

Robert *et al*. (2001) go on to review the experience of integrated rural development in the EU and conclude that the adoption of a truly integrated rural development policy is far from being obtained. "The persistence of problems as regards coordination and cooperation shows that considerable efforts are still necessary at all levels (Community, national, regional, local) and between these administrative levels" (Robert et al., 2001, 142). In this context, the report suggests the following:

- Institutional readjustments at Community, national and regional levels to allow the establishment of a correct balance between the various administrative levels associated with the sectoral and territorial policies affecting rural areas;
- Greater flexibility of operational programmes and Community initiatives, and even certain aspects of the CAP, to take account of the differentiated countryside, notably in the most fragile rural areas;
- Input into strategic objectives and visioning from local communities who "are the actors of any development strategy, the recipients of policies or of programmes."
- Partnership arrangements, at the operational level, which provide the mechanisms to guarantee an institutional framework for integration, both vertically and horizontally, "centred more on territorial than sectoral aspects."

The OECD (1998) has derived a simplified model from its study of the experience of local development in three Member States (Ireland, Spain and Portugal). This model, seen as an ongoing process of action, feedback and adjustment, is set out in Chapter 8 as a basis for further enquiry in the second part of this ESPON project. This OECD report also offers some guidance on the articulation of local development initiatives with higher level actors in

government and these appear particularly relevant for the integration of CAP and RDP with other EU policies.

1.9 Outline of Next Stages of Project 2.1.3

The remaining 12 months of the project will address the outstanding tasks set out in the work programme. These are as follows:

- further development of TIA method in light of results;
- finalisation of case studies to validate hypotheses/ initial findings;
- finalisation of advanced statistical analysis to validate hypotheses/ initial findings.

Modelling : further development of TIA and advanced statistical analysis.
There is considerable scope for further multivariate analysis of the database which we have compiled during the first year of this project's work, and details of our proposed further work are set out in Chapter 9. It would also be possible to undertake more detailed work using existing national datasets like FAS, FADN and other national surveys (taking just 2 or 3 case study countries) to offer a more fine-grained analysis at micro-scale. This would allow us to explore the role of national expenditures alongside those of the EU. Finally, we are keen to undertake an analysis of regional differences in farm income mobility within the EU-15.

Case Studies
The next major task is to undertake case studies of both selected rural areas and of commodities (thematic). Each of these is discussed in turn in Chapter 9. The choice of case study areas will be made at our October coordination meeting, informed by a short cluster analysis of NUTS3 regions in terms of their development trajectories. Within the selected case study areas we intend to focus on two principal issues, both highly relevant to policy:

- studies of farm household adaptation to changing policies and associated pluriactivity;
- examples of good practice in territorial rural development.

In terms of thematic case studies, there are a range of possibilities from which we must prioritise according to the time available. Among the avenues which we might pursue are:

- Commodities: regional studies of soft wheat, sheep or beef, pigs and olive oil.
- Agri-environment measures: can we add a territorial dimension to existing evaluations?
- The territorial impacts of modulation, as agreed in the MTR.
- Who will receive direct payments in the accession countries?

We must emphasise that given the limits of time and financial resources we will have to be selective: this list of possible avenues for further research will not all be possible.

2 Short Presentation of Methods and Typologies

While this project primarily examines the territorial impact of he CAP and RDP for consistency with higher-level EU policy objectives, many of the findings are also relevant to a more narrow assessment of the CAP and RDP against its own goals and objectives.

2.1 Territorial Impact Assessment (TIA) method

Farmers operate within a wide range of economic, social and environmental contexts across Europe, and in addition the CAP is but one of many external factors that are influencing farm-level, agricultural and rural development. It was thus essential that the TIA method adopted

by Project 2.1.3 was capable of both accommodating the wide range of contexts and able to separate out, from all of the other factors, those changes which can be attributed to the CAP and rural development policy alone. Against this background, and, given the time span available for the project, a two-stage method was proposed.

In the first stage (year 1 of the project), a number of key hypotheses were developed regarding the territorial impact of the CAP and RDP. These were presented in Project 2.1.3's FIR and subsequently revised and categorised as either high or low priority bearing in mind the aims of the ESPON programme, the aims of this particular project, time and data constraints (see Project 2.1.3's SIR).

A key issue arising from the development of hypotheses was the importance of differentiating between different types of policy instruments that comprise the CAP and RDP:

a) because they have played a distinct role within the CAP reform process and
b) because they may have given rise to territorially distinct effects.

In particular, the decision was made to analyse separately the following:

Pillar 1:
- Market Price support
- Direct Income payments

Pillar 2:
- LFA scheme
- Agri-environmental schemes
- Rural development measures

Based on these hypotheses, statistical analysis has been carried out to assess the extent to which changes in the CAP are associated with observable changes in the economic, social and environmental conditions in areas at the NUTS 3 level or equivalent. This has been complemented by a review of the findings from previous studies considering the spatial effects of the CAP and RDP. The findings are reported in Chapter 3. Clearly, the type of analysis that has been possible has been conditioned by the amount of data available and the time available to prepare this report. In addition, the territorial impacts of the Mid Term Review proposals have been estimated at NUTS 3 level based on output from the CAPRI model. These are reported in Chapter 4.

Building on this, the second stage (year 2 of the project) will both:

- extend the statistical analysis of Project 2.1.3's NUTS 3 database, and
- use case-study methods to explore in more depth the causal relationships between CAP and rural development policy and certain apparent outcomes of policy, focusing, in particular, on how these are differentiated across space.

2.2 Choice of typologies

Four territorial typologies have been used by the project team:

- a rural area typology
- a less-favoured areas typology, i.e. LFAs vs. non-LFAs
- a territorial typology based on predominant farm type in the region
- a territorial typology based on average size of holdings in a region

These typologies are discussed in Chapter 1, and will be critical in assessing the impact of different policy strands on different regions in Stage 2 of the project. In particular, they provide an analytical tool for the EU-wide analysis, and a base for the conception and selection of the case studies. In this work it will be central to address the increased flows between regions, relate to the concepts of peripherality and polycentricity, and structure insights gained on territorial impacts for different types of regions.

2.3 Data sources and coverage

Much of the first year of Project 2.1.3 has been spent on the development of a dataset at NUTS 3 level on a consistent basis for not only the EU-15 but also for most of the ten accession countries, Norway and Switzerland. Data has been collected from 1990 onwards.

The availability of detailed territorial data on agriculture across Europe is surprisingly poor, given the extent of agricultural data collection and the bureaucratic burden on farmers. Very little data relating to agriculture are available at NUTS 3 level from Eurostat, DG Regio or DG Agriculture, and where they do exist up to 91% of data are missing. We were told by DG Agriculture that they have no information on CAP expenditure below national level other than Farm Accountancy data, which shows support received rather than expenditure.

As a result, the process of compiling the dataset has taken considerable time and much effort. Importantly, it required drawing on national and OECD sources and the use of apportionment methods (described in section 1.4.5 and an appendix to Chapter 3 of Part 2). Nevertheless, this has been successfully completed,and it has significantly improved the basis for analysing the territorial impacts of the CAP and RDP than available from EU datasets. Moreover, it provides a strong basis for analysing the Territorial impact of the CAP and RDP at a more localised level in year 2 of the project.

The ESPON database of core indicators has proved useful for Project 2.1.3. However, a few indicators were not forthcoming: sites designated under community/national environmental legislation; LEADER LAG areas; Structural Fund designations; and an indicator of local accessibility, requested from TPG 1.2.1.

The indicators which we have contributed to the ESPON database are as follows:

- Agricultural output per hectare.
- Agricultural output per AWU.
- Percentage value added by agriculture, forestry and fishing.
- Value of fertiliser input per hectare of arable land.
- Age of farm holders

2.4 List of Figures, Maps and Tables in the Interim Report

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2.5 Application of the Common Platform, Responses to SIR, and networking.

So as to ensure consistency and coherence across the whole ESPON programme, a set of common elements have been developed by the ESPON Co-ordination Unit and adopted by all TPGs. These elements comprise the "Common Platform" for the programme. They include:

- the development of an ESPON database of core indicators,
- agreed typologies of regions,
- a collection of ESPON maps,
- operational definitions and measurements of policy goals and concepts,
- general agreement as to methods of assessment and evaluation of results, and finally
- conclusions for policy.

The Crete Guidance Paper, received in June 2003, provided an overview of each element.

Project Team 2.1.3 has contributed fully to the development and implementation of the common platform, providing five core variables for the ESPON database, and commenting, as requested, on proposed guidelines for other elements in the platform. More importantly, it has adopted the common platform approach in preparing this report. It has also taken full account of the CU response to our SIR, and integrated these into this report.

Since the submission of the Second Interim report (SIR), the project team has met on two occasions, firstly during the Crete ESPON Seminar in May, and latterly at a full project team meeting in Dortmund, Germany, June 29- July 2. In addition, the project co-ordinators were represented at the ESPON Project Leaders' meeting, Brussels 16-17 June 2003. The team has also benefited from contact with Project 1.1.2 on rural urban relations (with whom we share a team member), and from discussions with other project leaders at the Brussels meeting.

ESPON
EUROPEAN SPATIAL PLANNING OBSERVATION NETWORK

ESPON Project 2.1.3

Part 2

The Territorial Impact of CAP and Rural Development Policy

Third Interim Report
August 2003

Trans National Project Team:
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DISCLAIMER

The content of this report does not necessarily reflect the opinion of the ESPON Monitoring Committee

Chapter 1

Introduction

1.1 Background and aims of the project

The Second Report on Economic and Social Cohesion (January 2001) called for cohesion policy to promote a more balanced and more sustainable development of the European territory, in line with the European Spatial Development Perspective (ESDP). As part of this, it identified the need for further work on the territorial impacts of sectoral and structural policies, of which one of the most important (in budgetary, economic, environmental, social, political and cultural terms) is agricultural and rural development policy. ESPON Project 2.1.3 sets out to help fulfil this research requirement, through an analysis of the territorial impacts of the Common Agricultural Policy (CAP) and rural development policy.

The project commenced in August 2002 with the overall aim of deepening the understanding of territorial impacts of the EU's Common Agricultural Policy and Rural Development Policy (CAP/RDP) through the provision of a standardised database and an analysis of territorial trends covering the EU-15 and neighbouring and accession states. Within this overall aim, the following specific objectives were set:

a) To develop a method for the analysis of the territorial impact of the CAP and Rural Development Policy.
b) To establish a set of indicators, typologies and concepts along with a database and the map-making facilities necessary to implement the territorial impact assessment (TIA) method.
c) To provide a structured presentation of the CAP identifying the relevant parameters for an assessment of its potentially differential impact across the EU.
d) To apply the TIA method to show the impact of the CAP on spatial development across the EU and accession countries at the NUTS III or equivalent scale.
e) To investigate the interplay between the CAP and national agriculture/land use-related policies and best examples of implementation.
f) To recommend further policy developments for the CAP in support of territorial cohesion and a polycentric and better balanced EU territory.

This is the Third Interim Report (TIR) for the project. Building on two previous Interim reports submitted by the project team in October 2002 and March 2003, it presents the progress and findings in the first year of the project to August 2003.

1.2 Application of the Common Platform

So as to ensure consistency and coherence across the whole ESPON programme, a set of common elements have been developed by the ESPON Co-ordination Unit and adopted by all TPGs. These elements comprise the 'Common Platform' for the programme. They include:

- the development of an ESPON database of core indicators,
- agreed typologies of regions,
- a collection of ESPON maps,
- operational definitions and measurements of policy goals and concepts,
- general agreement as to methods of assessment and evaluation of results, and finally
- conclusions for policy.

The Crete Guidance Paper, received in June 2003, provided an overview of each element.

Project Team 2.1.3 has contributed fully to the development and implementation of the common platform, providing five core variables for the ESPON database, and commenting, as requested, on proposed guidelines for other elements in the platform. More importantly, it has adopted the common platform approach in preparing this report.

1.3 Project meetings and networking with other projects

Since the submission of the Second Interim report (SIR), the project team has met on two occasions, firstly during the Crete ESPON Seminar in May, and latterly at a full project team meeting in Dortmund, Germany, June 29- July 2. In addition, the project co-ordinators were represented at the ESPON Project Leaders' meeting, Brussels 16-17 June 2003. The team has also benefited from contact with Project 1.1.2 on rural urban relations (with whom we share a team member).

1.4 Description of Methods

1.4.1 Objectives against which CAP and RDP are assessed

As described above, the central aim of Project 2.1.3 is to assess whether the CAP and RDP contribute to the goals and concepts of European spatial development policies. Thus the key questions for the project are whether the CAP and RDP support the goals of:

- social and economic cohesion
- environmental sustainability
- more polycentric development in Europe

Each question can be considered at three levels – macro (EU-level), meso (national-regional level) and micro (local) level. However, the CAP and RDP can also be assessed relative to their own policy objectives which include adequate farm income levels, agricultural productivity improvements, de-intensification, possibly higher or adequate diversity (e.g. mixed farming).

While this project primarily examines the territorial impact of the CAP and RDP for consistency with higher-level EU policy objectives, many of the findings are also relevant to a more narrow assessment of the CAP and RDP against its own goals and objectives.

1.4.2 Territorial Impact Assessment (TIA) method

The backdrop to the project is the wide range of economic, social and environmental contexts within which farmers operate across Europe, including the ten candidate countries in Central Europe. In particular, there is considerable heterogeneity in the dependence on agriculture as a source of employment, the productivity of the sector, natural production differences, pattern of agricultural structures and the application of CAP in different areas. In addition, in every area, the CAP is but one of many external factors that are influencing farm-level, agricultural and rural development. It was thus essential that the TIA method adopted by Project 2.1.3 was capable of both accommodating the wide range of contexts and able to separate out, from all of the other factors, those changes which can be attributed to the CAP and rural development policy alone. Against this background, and, given the time span available for the project, a two-stage method was proposed.

In the first stage (year 1 of the project), a number of key hypotheses were developed regarding the territorial impact of the CAP and RDP. These were presented in Project 2.1.3's FIR and subsequently revised and categorised as either high or low priority bearing in mind the aims of the ESPON programme, the aims of this particular project, time and data constraints (see Project 2.1.3's SIR).

A key issue arising from the development of hypotheses was the importance of differentiating between different types of policy instruments that comprise the CAP and RDP:
a) because they have played a distinct role within the CAP reform process and
b) because they may have given rise to territorially distinct effects.

In particular, the decision was made to analyse separately the following:

Pillar 1:
- Market Price support
- Direct Income payments

Pillar 2:
- LFA scheme
- Agri-environmental schemes
- Rural development measures

Based on these hypotheses, statistical analysis has been carried out to assess the extent to which changes in the CAP are associated with observable changes in the economic, social and environmental conditions in areas at the NUTS 3 level or equivalent. This has been complemented by a review of the findings from previous studies considering the spatial effects of the CAP and RDP. The findings are reported in Chapter 3. Clearly, the type of analysis that has been possible has been conditioned by the amount of data available and the time available to prepare this report. In addition, the territorial impacts of the Mid Term Review proposals have been estimated at NUTS 3 level based on output from the CAPRI model. These are reported in Chapter 5.

Building on this, the second stage (year 2 of the project) will both:

- extend the statistical analysis of Project 2.1.3's NUTS 3 database, and
- use case-study methods to explore in more depth the causal relationships between CAP and rural development policy and certain apparent outcomes of policy, focusing, in particular, on how these are differentiated across space.

The methods that will be adopted in Stage 2 of the project are detailed more fully in Chapter 9.

1.4.3 Choice of typologies
Four territorial typologies have been used by the project team:

- a rural area typology
- a less-favoured areas typology, i.e. LFAs vs. non-LFAs
- a territorial typology based on predominant farm type in the region
- a territorial typology based on average size of holdings in a region

A Rural Area Typology
The well-established OECD rural typology was used in the analysis. This scheme distinguishes two hierarchical levels of geographic detail. At the local community level, it uses the basic administrative or statistical unit, in most cases the community, as the lowest geographical areas to be classified as "rural" or "urban". The communities were split by the simple criterion of population density (threshold of 150 inhabitants per km^2) into *rural and urban communities.*

At the second stage, as regions usually comprise rural as well as urban communities, the degree of rurality was ascribed by the share of people living in rural communities, thus distinguishing the following ***three types of regions***:

- predominantly rural areas (more than 50% of the population live in rural "communities"),
- significantly rural areas (the share of the population in rural communities is 15-50%); and
- predominantly urbanised areas (less than 15% of the population is in rural communities).

This distinction between the hierarchical levels of territorial detail is central to the conceptual approach of the territorial typology. Only through the different levels can the complexity of rural problems in various national and regional contexts be seized. The framework is conceived also to allow for analysis of interrelationships between regions but to enable differentiation between rural and urban communities within a region at a lower geographic level.

The OECD approach therefore links to the typology method developed by TPG 1.1.2 "Urban-Rural Relations in Europe".[1] A map of the OECD's rural area typology was included in Project 2.1.3's SIR.

Less Favoured Area Typology

The first initiative to introduce an explicitly spatial / territorial dimension into the CAP was the LFA directive in 1975. It was therefore felt appropriate that Project 2.1.3 utilise a typology of regions based on LFA status.

Regulation EEC No. 2328/91 provides for payment of Compensatory Allowances in designated less favoured areas characterised by one or more of the following attributes:

- permanent handicaps (altitude, poor soils, climate, steep slopes),
- undergoing depopulation or having very low densities of settlement, and
- experiencing poor drainage, having inadequate infrastructures, or needing support for rural tourism, crafts and other supplementary activities.

Through the use of the LFA typology, Project 2.1.3 can establish whether the impacts of CAP have been different between LFA and non-LFA areas. The method used to calculate the percentage of each NUTS 3 area classified as an LFA is described in Appendix 1.1.

Farm Type and Farm Size Typologies

The project has also made use of the Community Typology of Agricultural Holdings, deriving from Commission Decisions 78/463/EEC and 85/377/EEC. There are three basic elements in the Community typology: (i) the standard gross margin (SGM), (ii) the type of farming nomenclature, and (iii) the economic size classification of farms. These farm type and size typologies are important, as the very nature of agricultural land use is in many cases very different from settlement structure types. The inclusion of agricultural indicators, through farm type and size, increases our potential to address regional impacts of CAP. This focus will also reflect previous work on classifying regional effects of agricultural production and policy.

The typologies will be critical in assessing the impact of different policy strands on different regions in Stage 2 of the project. In particular, they provide an analytical tool for the EU-wide analysis, and a base for the conception and selection of the case studies. In this work it will be central to address the increased flows between regions, relate to the concepts of peripherality

[1] TPG 1.1.2 have developed a settlement typology that takes account of population densities and presence/ absence of large centres of population. The two alternative typologies were compared and, for our purposes, the OECD typology appeared the more appropriate system due to the greater differentiation between rural areas types.

and polycentricity, and structure insights gained on territorial impacts for different types of regions.

1.4.4 Data sources and coverage

Much of the first year of Project 2.1.3 has been spent on the development of a dataset at NUTS 3 level on a consistent basis for not only the EU-15 but also for most of the ten accession countries, Norway and Switzerland. Data has been collected from 1990 onwards.

The availability of detailed territorial data on agriculture across Europe is surprisingly poor, given the extent of agricultural data collection and the bureaucratic burden on farmers. Very little data relating to agriculture are available at NUTS 3 level from Eurostat, DG Regio or DG Agriculture, and where they do exist up to 91% of data are missing. We were told by DG Agriculture that they have no information on CAP expenditure below national level other than Farm Accountancy data, which shows support received rather than expenditure.

As a result, the process of compiling the dataset has taken considerable time and much effort. Importantly, it required drawing on national and OECD sources and the use of apportionment methods (described in section 1.4.5 below).

Data has been acquired from the following sources:

(a) Eurostat (New Chronos) REGIO
(b) DG Agriculture - FADN
(c) Eurostat (New Chronos) Eurofarm
(d) DG Agriculture – CAP/RDR Expenditures
(e) Corine Land Use Data
(f) National Statistical Offices

Many of the data sources used by the project have incompatible geographies. For instance, both the FADN and the Eurofarm use hybrids of NUTS 1/2/3. In the case of the Eurofarm database these are known as "Districts". It took considerable time ensuring that data was allocated in an appropriate way to constituent NUTS 3 regions before it could be used for both mapping and statistical analysis.

The ESPON database of ore indicators has proved useful for Project 2.1.3. However, a number of important indicators have not been forthcoming. In particular, an inventory of sites designated under community/national environmental legislation was requested (DAEUINPT/DAEUINPTV2) so as to derive a simple indicator of environmental quality for each NUTS 3 region but this has not been forthcoming. Similarly, a dataset showing LEADER LAG areas (LDEC1MV1) or Structural Fund designations (SFEC3MV1/ SFEC1MV2-5) would have been useful to assess the territorial impact of the CAP within areas designated for various Structural Fund and rural development programmes. Finally, our ability to assess the CAP and RDP impacts at local level has been limited due to no indicator of local accessibility (such as might be derived from commuting patterns).

Thus there is scope for further analysis of the territorial impact of the CAP and RDP as the ESPON core dataset develops.

1.4.5 Methods of apportionment

As noted above, very little of the raw data in the REGIO database is available at NUTS 3 level. Indeed, the only indicator from this dataset widely available at NUTS 3 level relating to agriculture is employment in agriculture, forestry and fishing (derived from the Regional Accounts). Similarly the FADN dataset only provides data at NUTS 2 or NUTS 1 level, and sometimes in non-standard areas. Finally data on CAP and RDP expenditure is not available at NUTS 3 level.

Data from EUROFARM dataset, containing results from the EU surveys of the structure of agricultural holdings provides a far richer source of indicators on the agricultural sector at NUTS 3 level. However, the EUROFARM dataset relates only to Member States, not CEEC or EFTA countries and, even in relation to the EU-15, is incomplete. Therefore, a method was developed to apportion indicators required for analysis either from the REGIO, FADN or CAP/RDP databases from NUTS 1 or NUTS 2 to NUTS 3 level.

The method chosen for apportionment of higher-level data on farm numbers, crop areas, livestock numbers, subsidy receipts, etc. to NUTS 3 level was based on the following core set of agricultural land-use variables available at NUTS 3 level either from EUROFARM or national sources:

1. Arable Area (ha)
2. Permanent Crop Areas (ha)
3. Utilised Agricultural Area (ha)
4. No. of Dairy Cows
5. Total Number of Beef Animals (or Total Cattle less no. of Dairy Cows)
6. Total no. of Sheep and Goats
7. No. of Agricultural Holdings/Farms
8. No. of Agricultural Work Units (or Agricultural Employment)

The actual variable used to allocate an indicator from NUTS 2 to NUTS 3 depended on the indicator to be apportioned. For example, in the case of disaggregating the total level of feed used for grazing livestock, the sum of variables 5 and 6 is used, on the assumption that the relative proportions of total grazing livestock is consistent with the relative proportion of feed used in each component NUTS 3 region. Similarly, in allocating total cereal compensation payments from NUTS 2 to NUTS 3 level, variable 1, the arable area of each NUTS 3 region, is being used as the apportionment variable. As indicated by these examples, the method relies on the assumption that the actions of farmers (in relation to feed per livestock unit in the first case, and enrolment on the arable payments scheme in the second) does not vary significantly within each NUTS 2 region (or varies to the same extent within each NUTS 3 region). The method for apportioning FADN data, OECD market price support data, rural development fund and LFA expenditure data are detailed in appendices to Chapter 3.

The collection of apportionment data from national sources has proved a lengthy process. However, it has significantly improved the basis for analysing the territorial impacts of the CAP and RDP than available from EU datasets. Moreover, it provides a strong basis for analysing the Territorial impact of the CAP and RDP at a more localised level in year 2 of the project.

1.5 Structure of the report

The structure of this report follows closely the Appendum to Project 2.1.3's contract. In particular, Chapter 2 presents an advanced territorial analysis of agricultural sector in the EU and detailed description of the CAP. It also provides a SWOT of both the agricultural and rural development policy in Europe and a SWOT of territories, leading to the identification of problem regions. The chapter concludes by considering the relationship between the CAP, RDP, polycentricity and changing urban-rural relations.

Having set the context for the analysis, Chapter 3 presents the findings from the application of the first stage of the TIA method. In particular, the chapter considers the extent to which statistical analyses and the findings of previous studies support a number of hypotheses on the territorial impact of the CAP and RDP. Chapter 4 summarises the key findings, considering the relationship between the CAP and RD policies and the strategic EU objectives of social and economic cohesion, environmental sustainability and polycentricity.

While the discussion in Chapters 3 and 4 is based on an analysis of the CAP as it has operated to date, Chapter 5 turns to the possible territorial impacts associated with proposed reforms to the CAP and RDP. In particular, having outlined the nature of proposed reforms, the chapter uses maps and preliminary statistical analysis to assess the spatial pattern of reform impacts, paying particular attention to the impact on accession countries. Chapter 6 turns to the broader issue of how the CAP interacts with other territorially relevant policies, in particular, structural, social, environmental and transport policy.

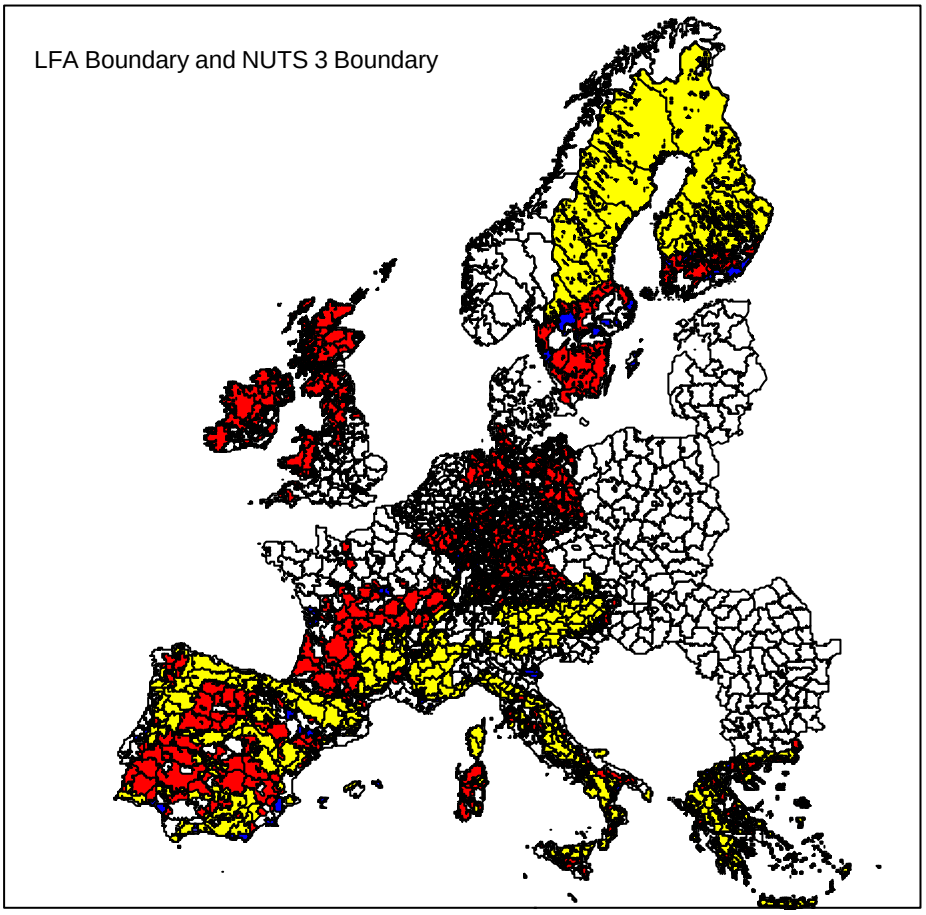
Based on earlier findings, Chapter 7 provides some initial policy recommendations on improving agricultural and rural development policy in support of territorial cohesion and the ESPD while Chapter 8 provides first propositions on the institutional aspects of spatial co-ordination and integration of EU policies. The final chapter, Chapter 9, outlines the next stages of the project.

Appendix 1.1

LFA Boundary and Percent of Area within LFA at NUTS 3

Figure 1 shows the LFA boundary superimposed on the NUTS 3 boundaries within "Espon space". The different colours signify LFA designated under different articles within the regulation. Yellow is Article 3.3, (mountain/hill areas), red is Article 3.4, (areas in danger of depopulation), and blue is Article 35 (specific handicaps). The original file also contained polygons for non-LFA areas, "lakes" (non-LFA areas surrounded by LFA), and non-EU areas. All these have been excluded from the analysis below (for convenience non-LFA area is simply defined as total area-LFA).

Figure 1: The LFA Boundary and NUTS 3 Boundaries

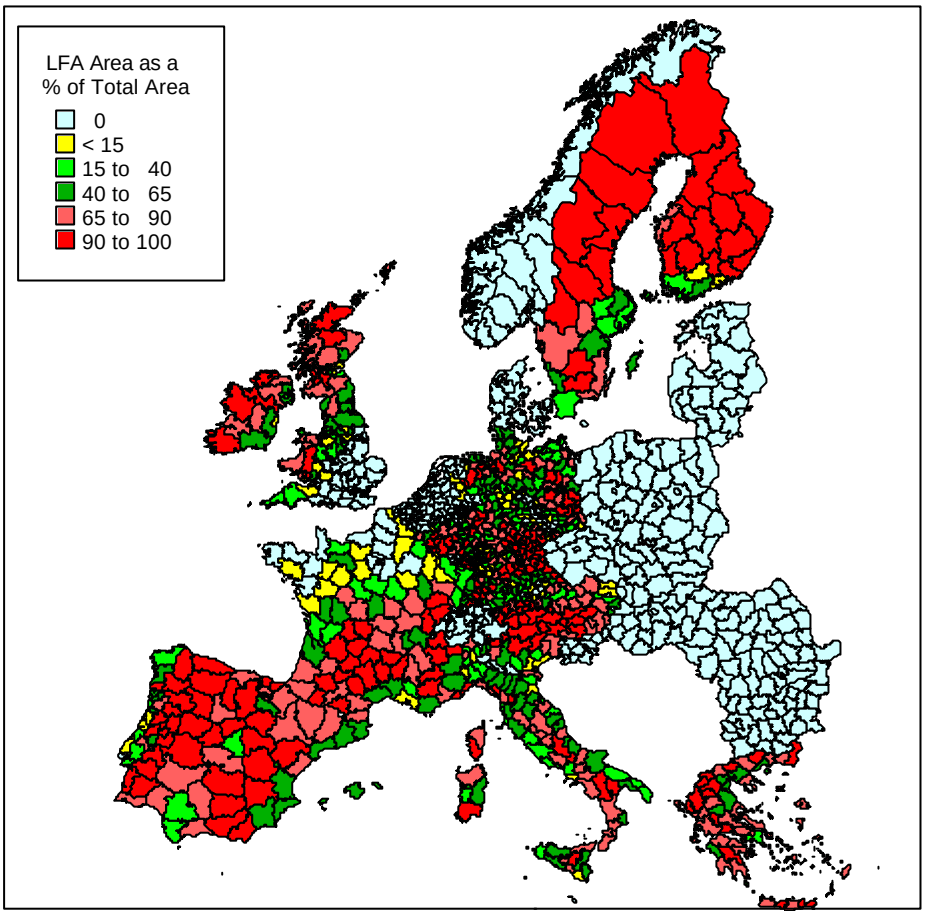


Although it is not evident in the map above, there is a degree of inaccuracy in the digitising, so that some LFA is in the sea, and some is across borders in CEEC or EFTA countries. When calculating the area of LFA for each NUTS 3 region I have simply ignored this discrepancy, which amounts to about 1% of the total LFA area.

The original file received from Dortmund contains a large number of "polygons" for each type of LFA. Associated with the boundaries is a file containing (among other things) the area in square metres for each polygon. The first step was to aggregate the polygons for each type, summing the area at the same time. The aggregate boundary for each of the three types of LFA was then split using the NUTS 3 boundaries as a "cookie cutter". This gives us up to three polygons for each NUTS 3 region, one for each type of LFA. The area data for each LFA type was also split into the NUTS 3 regions.

The area data was transferred to an Excel file (LFA Area by NUTS 3 Region.xls), a "total LFA" area for each region calculated, and then expressed as a percentage of the total land area derived from the REGIO Database. The results are shown in Figure 2 below.

Figure 2: LFA Area as a Percentage of Total Area by NUTS 3 Region



Chapter 2

Advanced analysis of the effects of the CAP and rural development policy

This chapter begins by describing, from a territorial point of view, the agricultural sector and rural areas of the EU-27 in terms of core indicators (Section 2.1). It then proceeds in Section 2.2 to a description and analysis of the EU's Common Agricultural Policy (CAP) and Rural Development Policy (RDP), first in general and then in relation to its territorial components and enlargement aspects in particular. These two sections form the basis of extended SWOT analysis of these Policies in relation to territorial cohesion in Section 2.3 and of territories in Section 2.4, leading to identification of problem regions. Finally, in Section 2.5, relationships between the CAP/RDP, polycentricity and new urban-rural relations are considered.

2.1 Territorial presentation of the agricultural and rural sector in the EU-27

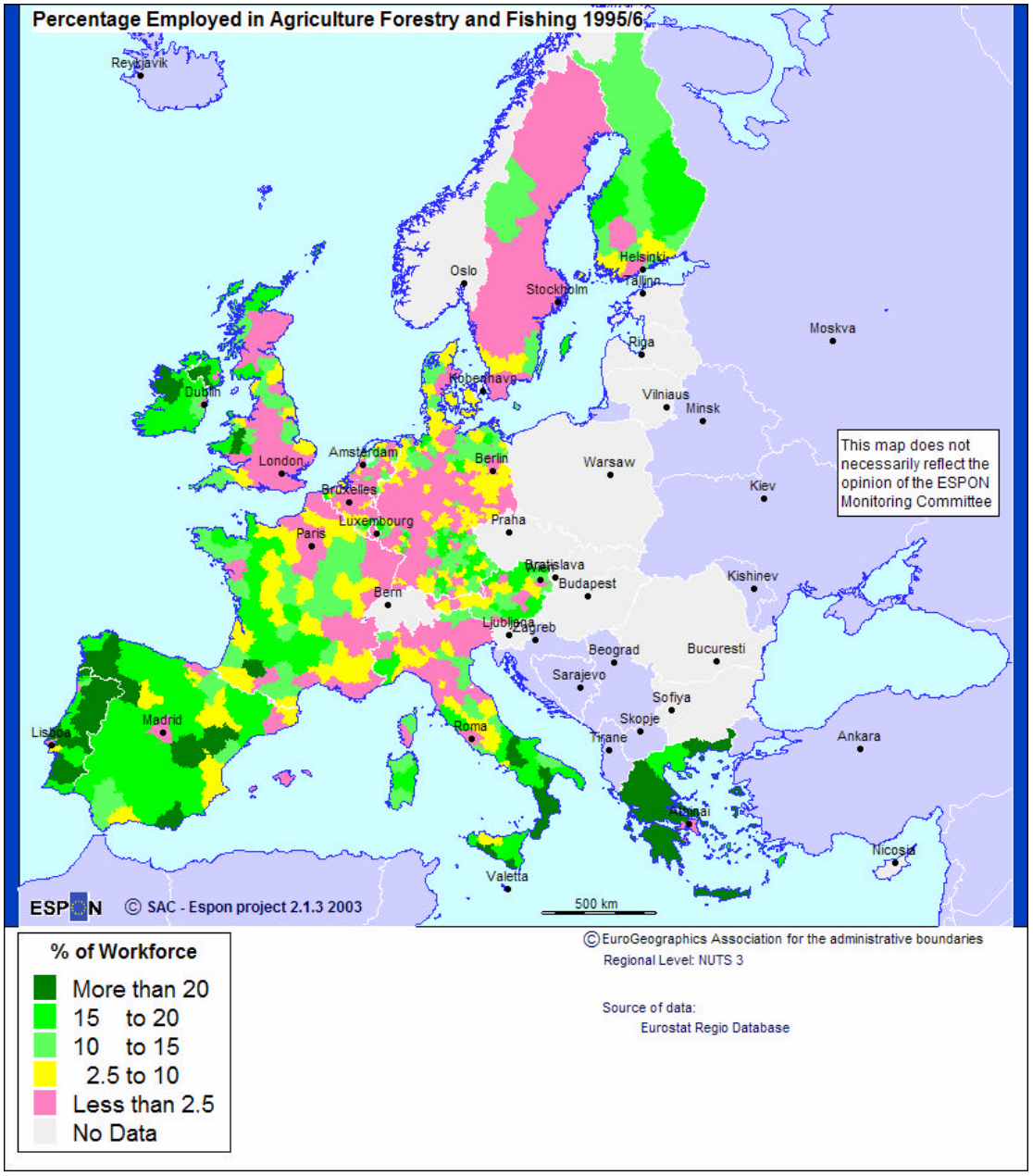
2.1.1 Agriculture in the EU-15

The agricultural and rural sectors of the EU-15 have been extensively studied and reported, and no overall and in-depth description seems necessary here. Instead, attention is drawn to the following maps of the EU-15 (and in some cases other countries in the EU-27). Where possible, these have been recalculated from those presented but barely discussed as Figures 7.1 to 7.10 in the Annex to the Second Interim Report of Project 2.1.3, using apportionment techniques described in the SIR, Section 6.4.

Percentage Employed in Agriculture, Forestry and Fishing (AFF)

Map 2.1 overleaf uses DG Regio data directly available at NUTS 3 level, though including employment in the forestry and fishing sectors, and possibly some associated with hunting and similar activities. The measure indicates the socio-economic dependence of the areas on the main land-based production sectors, and, given the preponderance of agriculture, the probable sensitivity to changes in the CAP.

Map 2.1: Percentage Employed in Agriculture, Forestry and Fishing (AFF)

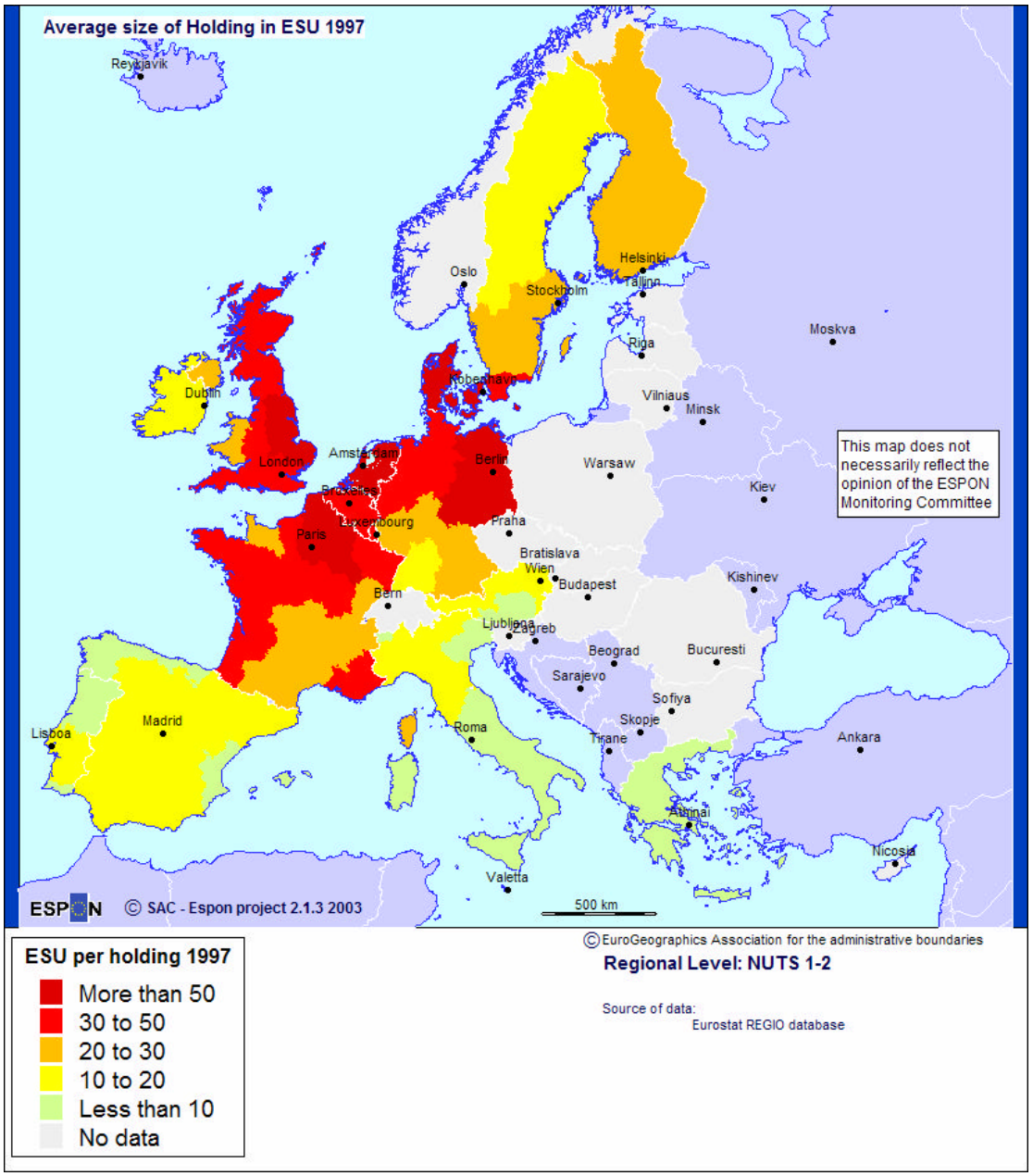


The countries with regions with high (over 20%) AFF shares of employment are most of Greece and Portugal, parts of Ireland, Spain and southern Italy. In all these cases, however, the AFF shares are relatively low (compared to the EU-15 average) in the NUTS 3 regions of the capital cities such as Athens, Dublin and Lisbon. Similar, if less noticeable, effects are observable for France (Paris), Madrid, Rome (and the cities of northern Italy), Athens, Berlin and Vienna. Other, much larger, areas of low AFF employment shares are in central England and central Scotland, much of central Germany, Austria and Sweden. It is noticeable that particularly mountainous regions, such as the Alps, the Pyrenees, the Massif Central, the Apennines and the Scottish Highlands, are generally characterised by low rather than high agricultural employment shares; this may be because of the relative importance of tourism and/or public-sector employment in these areas.

Average size (ESU) of holding

Up to a certain level, larger farm businesses, measured in terms of business size (European Size Units, ESUs), are generally believed to be more efficient and hence income-generating. However, small farm holdings may remain viable if occupiers have other sources of income. The largest average farm business sizes (over 30 ESU per holding in 1997; 8 ESUs is generally reckoned to be the minimum for a full-time unit) are found in most of the United Kingdom, the northern halves of Germany and France (and around Marseilles), the Low Countries and Denmark, with the smallest enterprises characterising most of Greece, southern (and far north-east) Italy, northern Portugal and some coastal areas of Spain. Again, mountainous areas do not stand out in particular.

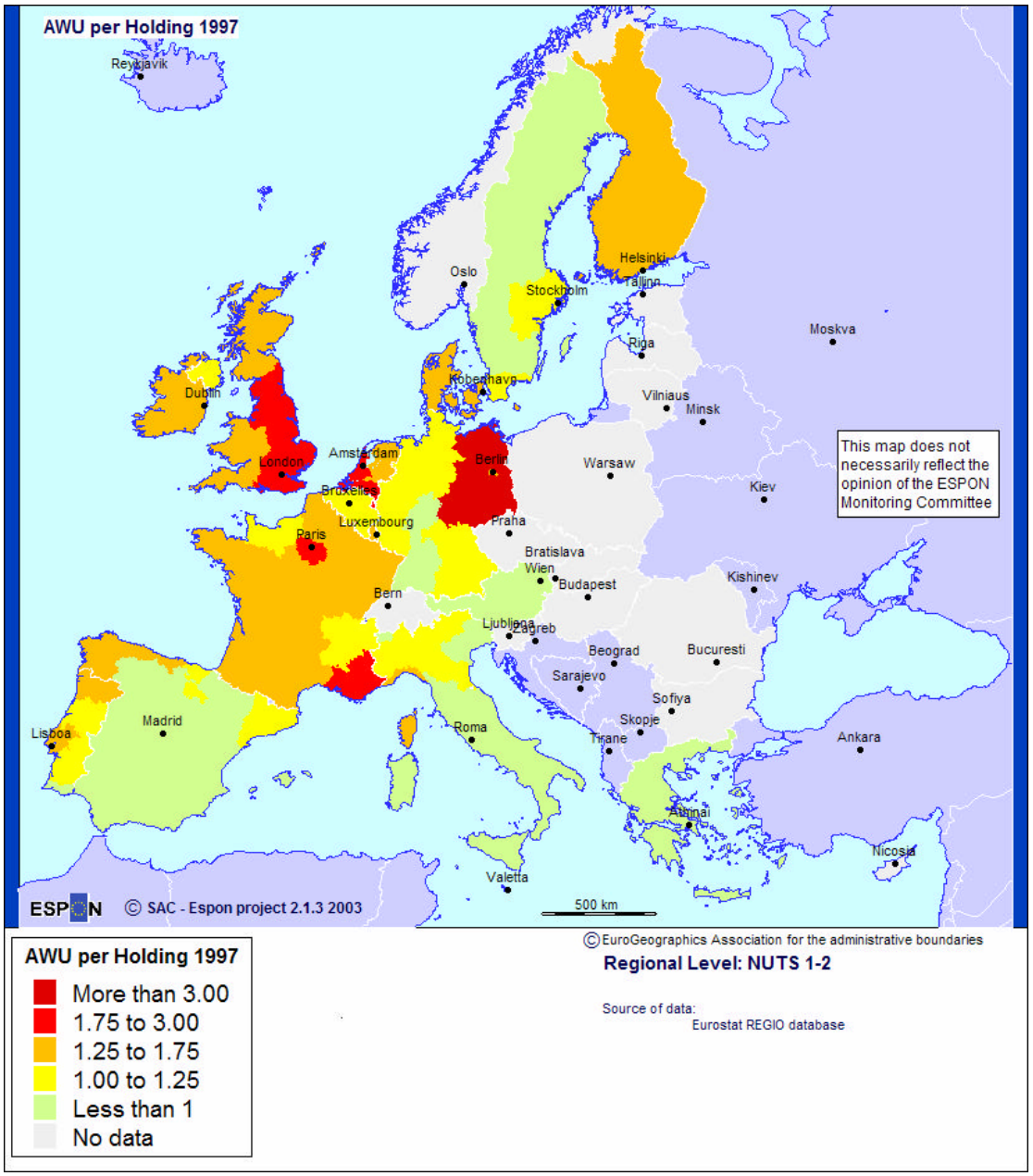
Map 2.2: Average size (ESU) of holding



Agricultural Work Units (AWU) per holding

This indicator of labour intensity not only reflects the structure of agriculture across the EU-15 but also suggests the possible impact of labour-linked policy measures such as a AWU-linked limit on direct CAP payment receipts per holding. The map below largely reflects the differences in farm structure across the EU-15, in particular high labour intensities in East Germany, the Low Countries and most of England, and also around Paris and Marseilles. Relatively large farm businesses and/or large horticultural enterprises may explain this pattern. Low levels of AWU per holding characterise Spain, Italy, Greece, Austria and most of Sweden, probably due to part-time farms. Otherwise, 'global' remoteness (Ireland, Scotland, Finland, Portugal, Denmark) appears to be associated with relatively higher labour intensities than in more central regions.

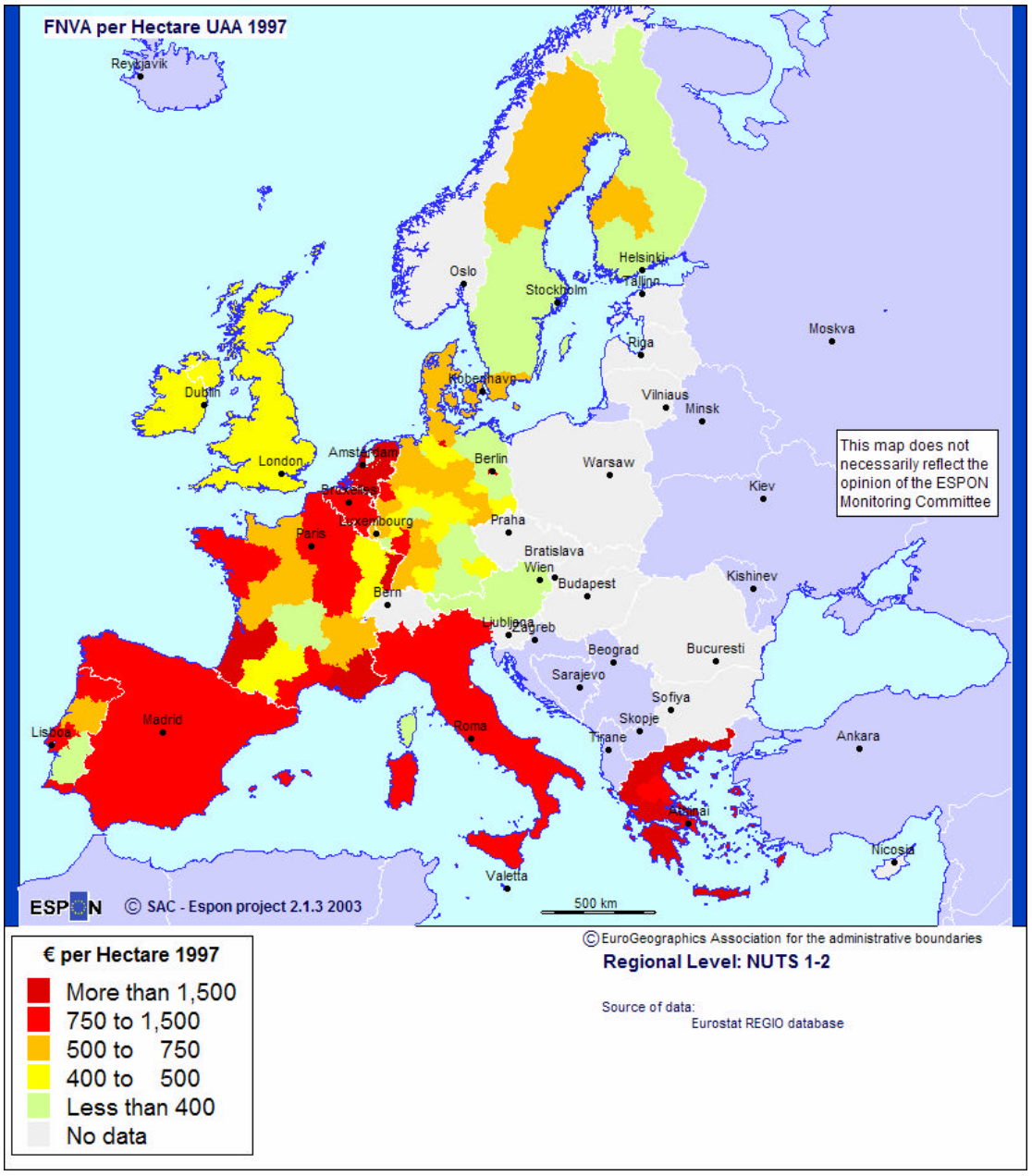
Map 2.3: Agricultural Work Units (AWU) per holding



Agricultural Land Use Intensity (FNVA per ha)

Farm Net Value Added per hectare is an indicator of economic prosperity, given market price support and input tax concessions whose value is included in the measure. However, it is obviously affected by the natural fertility and climate of the land in each region. High values are noticeable in the Low Countries and parts of northern, western and southern France, Spain, Italy and Greece. These probably indicate high-value farm enterprises such as horticulture and viniculture, particularly when related to small areas of utilised agricultural land. Austria, parts of Eastern Germany, and much of Finland and Sweden show low values of this indicator.

Map 2.4: Agricultural Land Use Intensity (FNVA per ha)

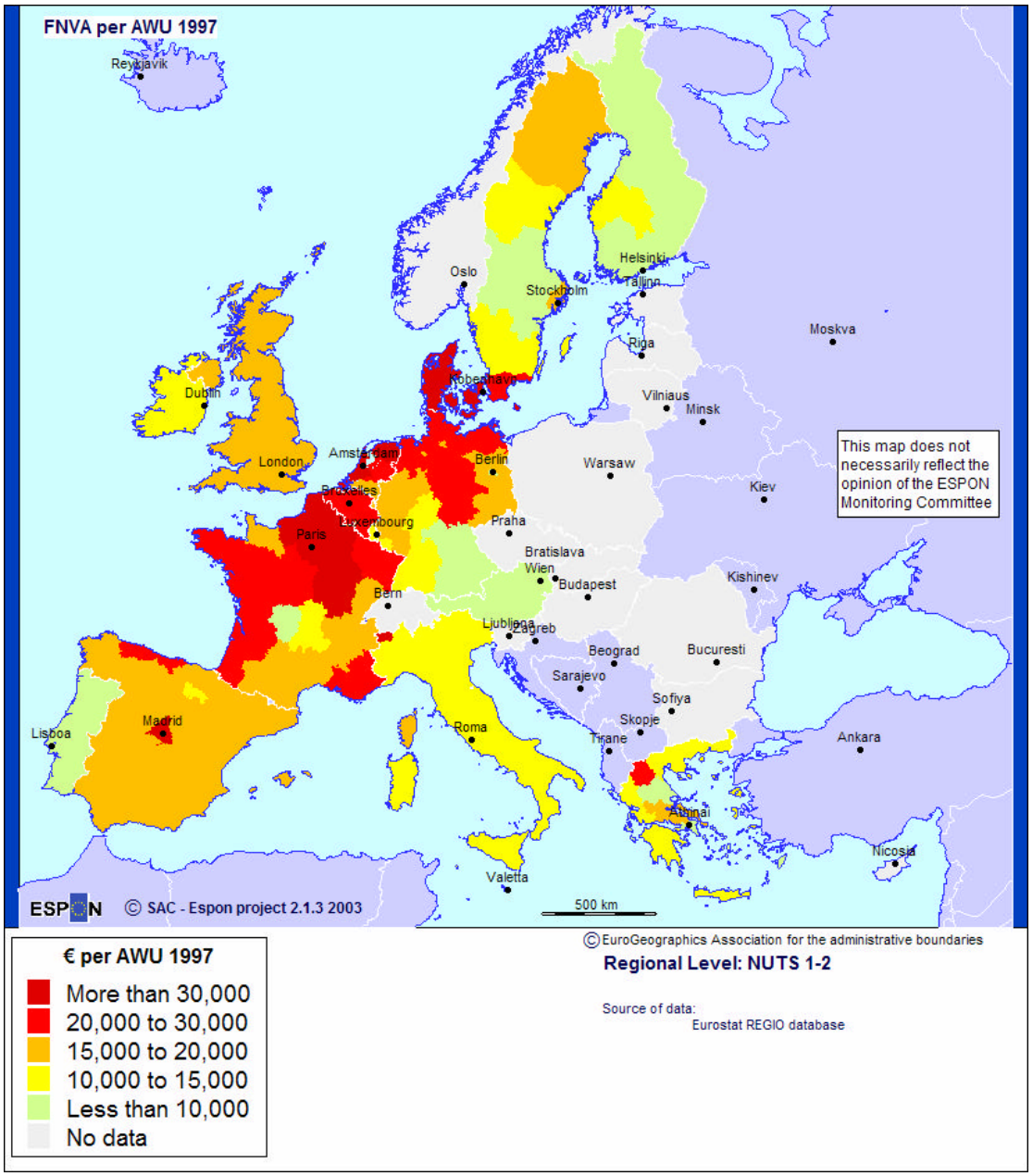


Agricultural Labour Use Intensity (FNVA/AWU)

This alternative measure of prosperity shows a somewhat similar overall pattern, but the southern parts of the EU – i.e., Spain, southern France, Italy and Greece – no longer show high values, while Denmark and most of northern Germany are similar to the rest of north-

west continental Europe. Particularly low values (under €10000 per AWU) appear for all of Portugal, and (for different reasons, presumably, e.g. part-time farming), parts of Finland, Sweden, southwest Germany and Austria.

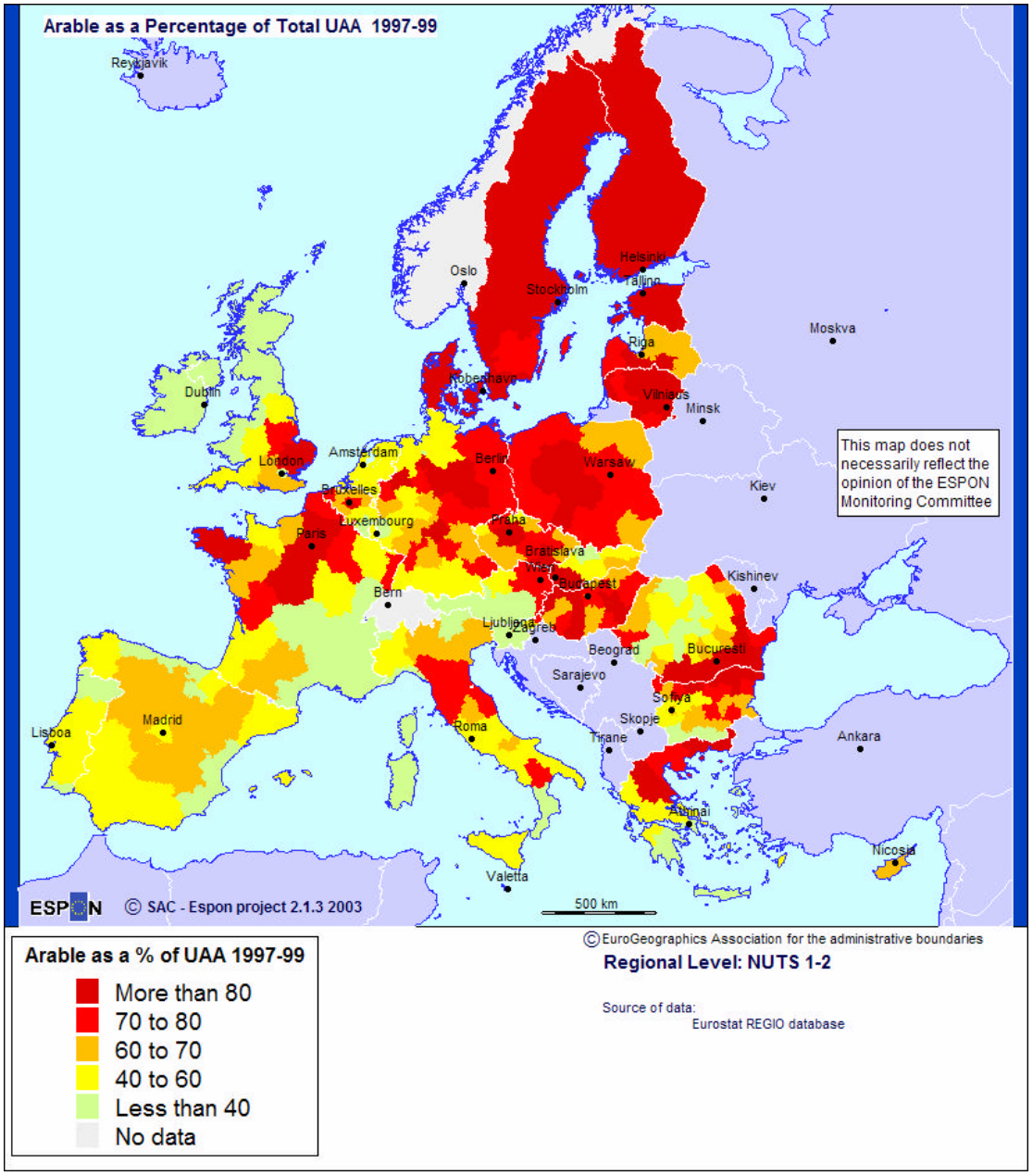
Map 2.5: Agricultural Labour Use Intensity (FNVA/AWU)



Percentage of Arable Land in Total UAA

This is an indicator of cropping intensity (and possibly some possible environmental problems due to fertiliser run-off and pesticide use), and is available for nearly all the European countries under study. The pattern generally reflects the recognised arable regions of the EU-25, except for Sweden and Finland, where (probably) severe winters lead to a system of livestock feeding based on arable land rather than grassland, and Brittany, where again housed livestock is a predominant feature.

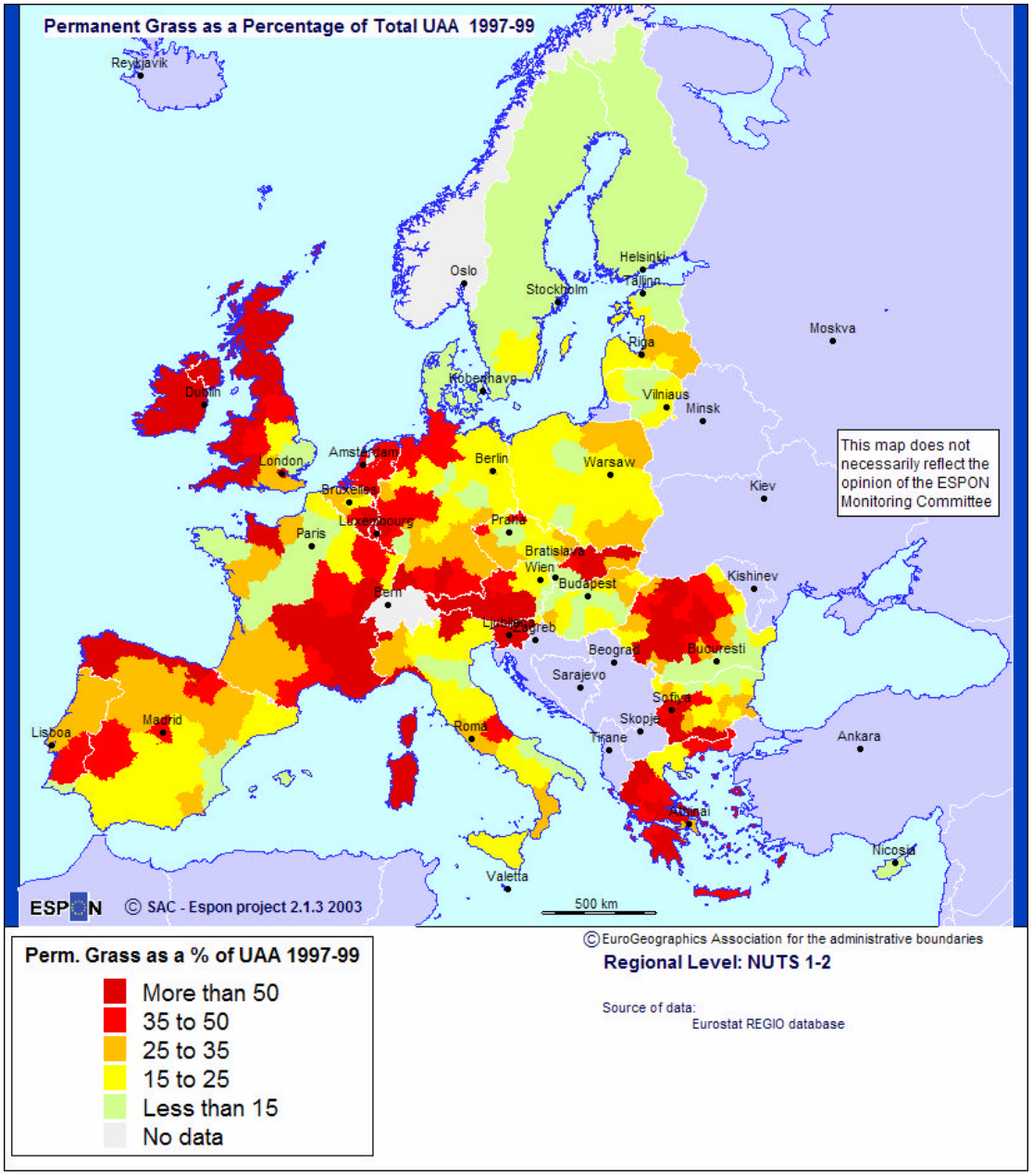
Map 2.6: Percentage of Arable Land in Total UAA



Percentage of Permanent Grass in Total UAA

In some ways, this measure is complementary to the previous one, with high values in Ireland, the west and north of Great Britain, the Low Countries, southern France, Austria, and parts of Italy, Romania and Greece. The economic, social and environmental implications will largely depend on livestock stocking rates.

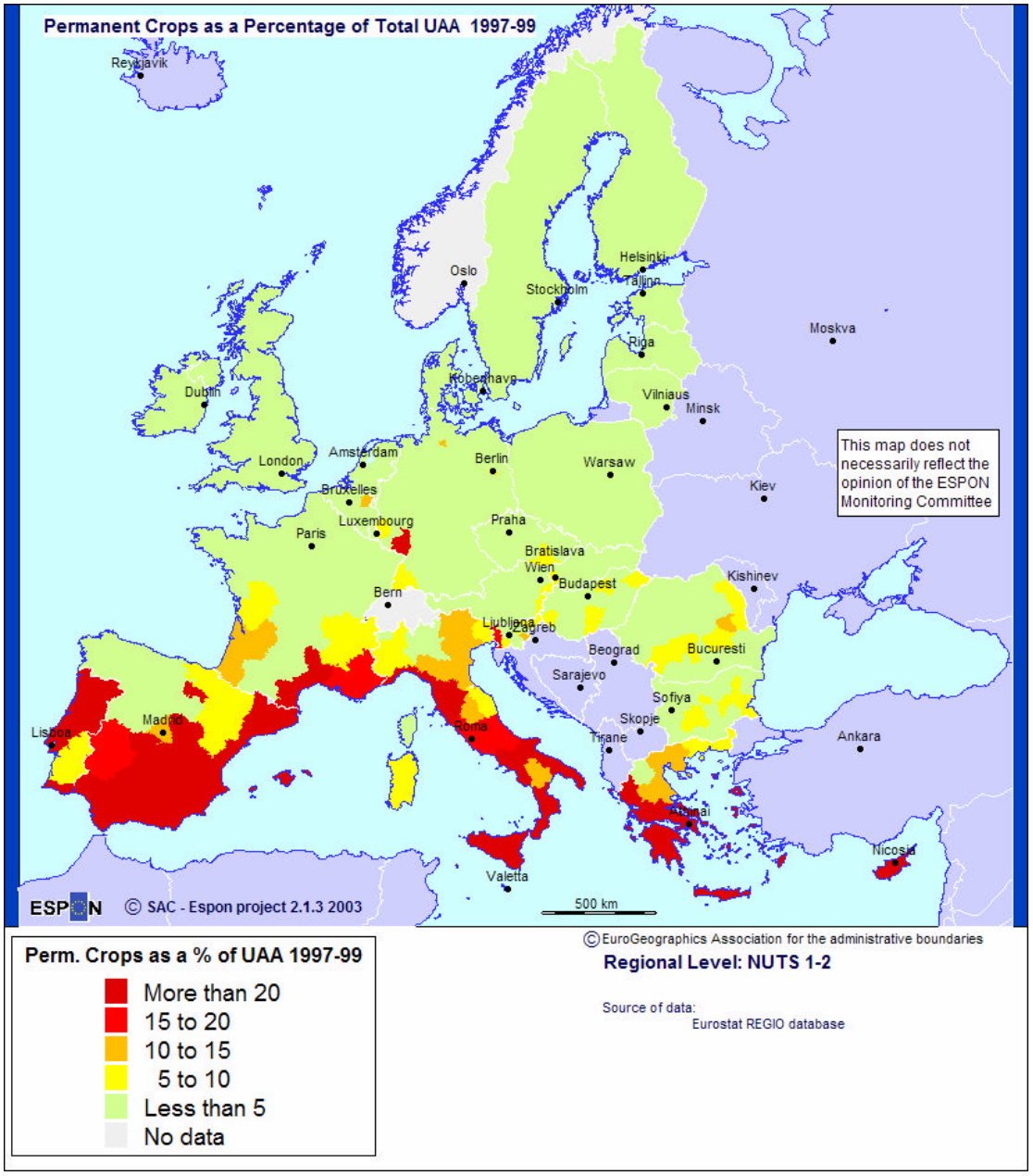
Map 2.7: Percentage of Permanent Grass in Total UAA



Percentage of Permanent Crops in Total UAA

This variable, which suggests high-value crops, often with considerable associated capital investment and seasonal labour demands, as in vineyards and olive plantations, is concentrated along the Mediterranean shores of the EU-15, and in northern Portugal, though extending well into central Spain and Greece.

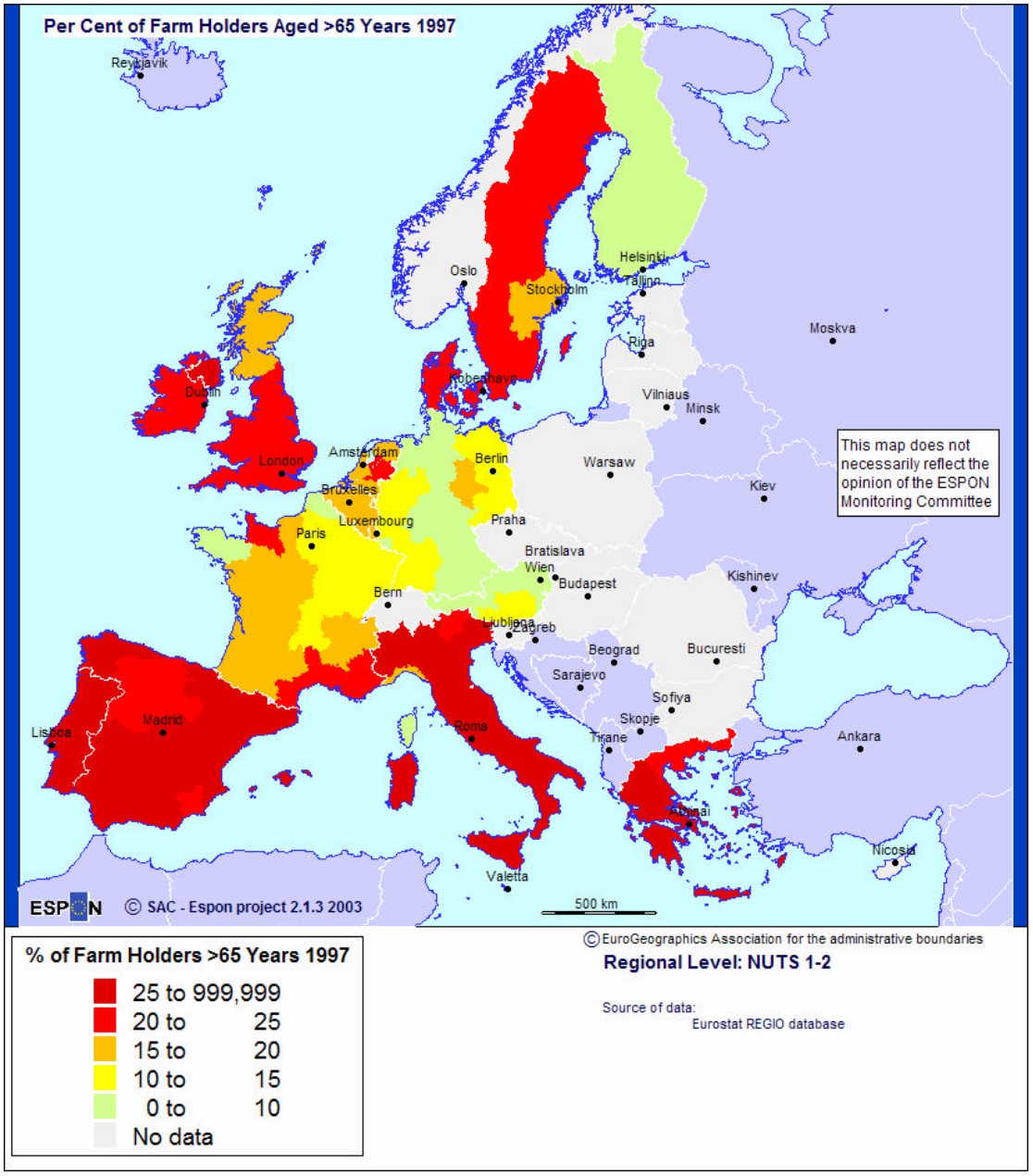
Map 2.8: Percentage of Permanent Crops in Total UAA



Percentage of Farmers over 65 years

Although a high percentage of older farmers can persist if they are assisted from time to time by younger workers (e.g. at harvest time) or are replaced on death or incapacity by other relatively elderly farmers, this variable may be a (negative) indicator of social sustainability in rural areas. However, it is unlikely that such farmers pursue intensive or modernised farming. The map shows high percentages in Portugal, Spain, Italy, Greece, Sweden, Denmark and Ireland. Relatively low levels are noticeable in Finland, central Germany, and northern Austria.

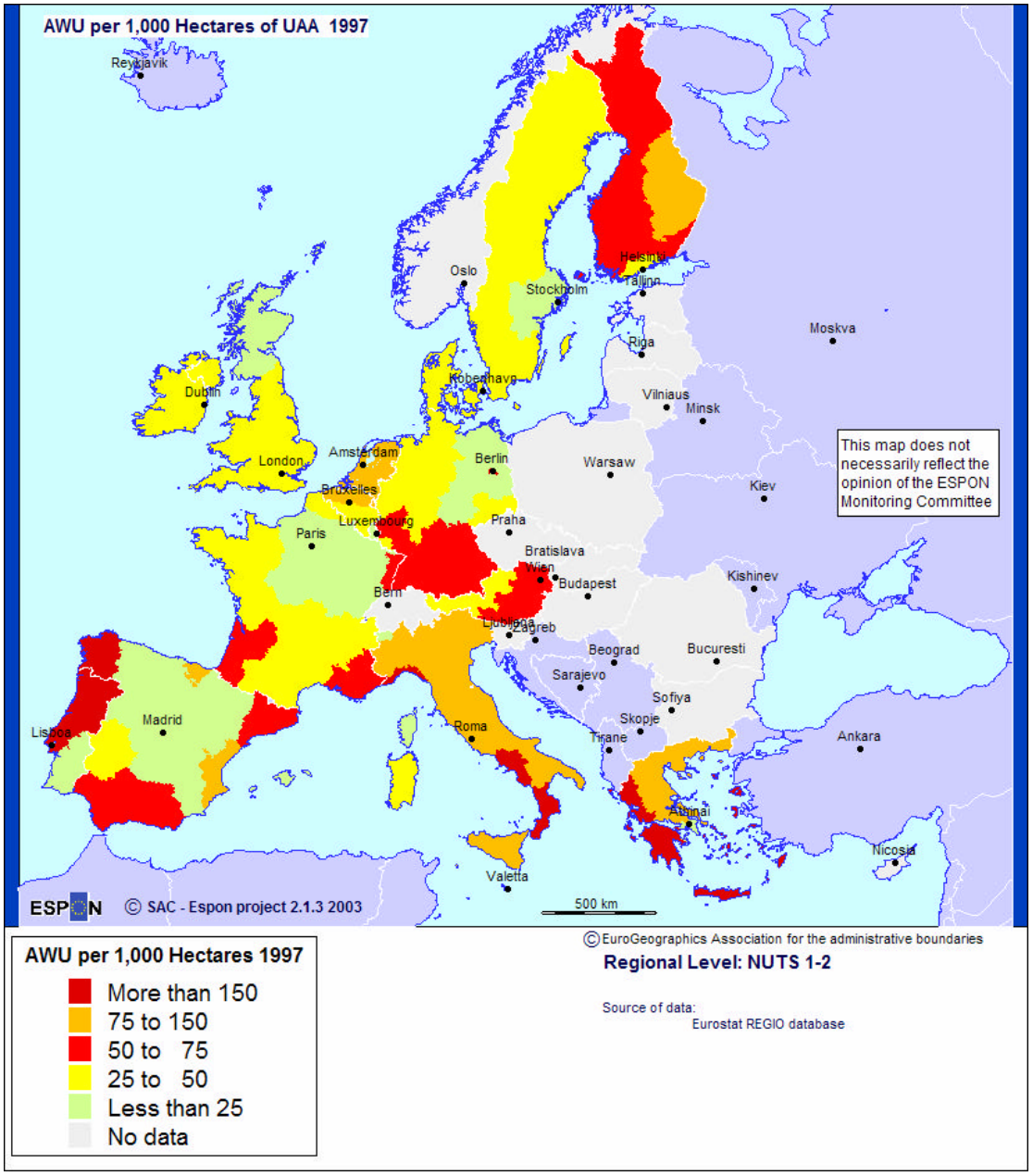
Map 2.9: Percentage of Farmers over 65 years



AWU per ha UAA

The simple labour-land ratio (measured using reported labour and registered area of agricultural land), is highest (over 150 AWUs per 1000 ha of AUU) in southern Germany, eastern Austria, south-western Italy and Greece, northern Portugal, southern and north-western Spain, and in much of Finland, and lowest (under 25 AWU per 1000 ha UAA) in most of Spain, the Paris basin, Scotland, east Germany, the Stockholm region and Corsica. Clearly, very different influences are at work here, requiring additional analysis to understand this indicator.

Map 2.10: AWU per ha UAA



2.1.2 Characteristics of Rural Areas in the CEECs

As for the regions of the EU-15, the development of the rural population and economy of a specific region in the new Member States is strongly linked with overall employment opportunities in these regions. Quite diverse situations and trends between regions occur in the accession countries, and there is rising concern about an increase in regional differential between agglomeration and marginal areas which is even more expressed than in the EU-15. With regard to cohesion objectives, this poses considerable challenges for application of EU policies.

The spatial distribution of the population is different in the accession countries, with a generally much more concentrated settlement structure than in EU-15 Member States. Roughly 62% of the population in the Accession Countries (ACs) lives in border regions, compared with only around 15% within the EU-15. Cross-border collaboration among the AC

is, therefore, one of the great challenges to European spatial development policy (EC 1999*a*: 47).

Most of the CEECs are relatively rural, with a relatively large part of the population living in rural communities with a small number of inhabitants, dispersed settlement patterns and a low population density. These rural areas are generally[2] characterised by an ageing population, relatively high dependence on agriculture, and poor technical and social infrastructure such as limited transport and communications networks, lack of schools, and limited access to health and other services. In some ACs, infrastructural problems have been aggravated by the disappearance of state and collective farms, which also provided social and other services to the local community (EC 1998*a*: 25).

There is an urgent threat of depopulation of remote rural and particularly mountainous areas in the CEECs, where unemployment and poverty have accelerated rural decline in many areas. This is closely linked with the need to develop the rural areas in the east, and likewise to determine the future of the semi-subsistence farm holdings which up to now have provided a refuge for a huge amount of labour. The appearance of semi-subsistence farming has greatly affected the balance of in- and out-migration of peripheral areas, so that, up to now, no significant depopulation trend has occurred in many areas. However, massive decline in rural incomes is a threat to future development, and particularly weakens the prospects for providing jobs for young people (especially those with advanced skills). Ageing of the rural population therefore becomes a severe problem (FAO 1999, CEI 2001: 32, IDARA 2002: 26). Another aspect is the decreasing fertility rate in the CEECs. In the long run, there will be a lack of persons of employment age.

Rural employment

The absorption of surplus labour from the farm sector in rural economies will pose a major challenge for most CEECs (EC 1998*a*: 48). The share of agriculture in total employment is still generally four times higher than in the EU, but national situations and dynamics are very different (the Czech Republic, Slovakia, Slovenia and Estonia have a relative low share of agricultural employment). Reduction of this share has generally slowed down and sometimes even reversed (Romania, Bulgaria). In the latter cases, this goes hand in hand with the growing semi-subsistence sector (Pouliquen 2001: 38).

In small towns and rural areas, unemployment levels are generally about double the average (former employees of macro-agricultural holdings and para-agricultural activities), while low qualification levels and the high cost of urban accommodation hinder migration towards large towns where (new) job creation tends to concentrate (Pouliquen 2001: 38).

This has been strengthened by the dismantling of the former collective farm system. Their important social function is emphasised, among others, in national case studies by the OECD. In almost all transition countries the share of population living in rural areas is higher than the proportion relying on incomes from agricultural production. This might be an indication of the weak structure of non-agricultural employment opportunities available in rural areas. However, it also reveals the extent of rural unemployment and may reflect the ageing of the rural population and the large numbers of people depending to a large extent on social security payments. Under the restructuring process, state and collective farms were, in most cases, legally released from most of the social functions they fulfilled under the previous system. Since in the majority of countries, previously dominated by collective farming, local

[2] In some countries, these characteristics may be offset by other features, e.g. large gypsy subpopulations with high fertility rates and shorter life spans. In some rural regions, there is an age structure similar to that in non-rural areas, and in some sub-regions the birth rate is even higher in rural areas (including the incidence of gypsy populations, e.g. in Hungary).

authorities are not able to take over those functions, the rural population in these countries has limited access to the social security system as well as to educational and health care services (OECD 1997: 128-129).

In several CEECs, there was even an opposite net migration flow towards the countryside as general economic conditions worsened in the first phase of the transition, and agriculture, land use and rural areas in general played the role of buffer spheres allowing people to live on plots of land in villages and supplement (weakly developed) other income sources, like retirement pensions. The underemployment and hidden unemployment related to subsistence farming poses large future challenges for a balanced development of the rural economies (EC 1998*a*: 9).

A key issue, therefore, will be the need of rural development, and the creation of employment possibilities, for the workforce of the agriculture sector. To reach just half the productivity of the EU-15 would already involve, with constant production amounts, the cessation of 4 million agricultural jobs in the 10 CEECs, the majority in Poland and Romania. A less dramatic situation is found in Hungary and the Czech Republic.

Whereas this scenario is reflected in the documents of the European Commission, Pouliquen (2001) calls into question the ability of traditional rural development to absorb the massive agricultural "over-employment" in certain large CEECs with high levels of agricultural over-employment such as Poland, Romania, Bulgaria, Lithuania and Latvia, through diversification or new services. The existing infrastructure of small and medium-sized towns generally makes them more effective locations for such development than small villages in rural areas (Pouliquen 2001: 84). Many analyses recall the need for appropriate programmes of general and vocational training, associated with economic development instruments, social security and housing policies (Pouliquen 2001: 84).

Rural infrastructure

The development of rural infrastructure is a core precondition for socio-economic successful development in rural areas. The poor infrastructure situation in many parts of CEECs, and its associated implications for economic development, have been key concerns for regional development in the countries. *"Development and improvement of rural infrastructure"* is therefore also a category of measures for the SAPARD-programmes (EC 2002: 29), but targeted particularly by ISPA programmes and general territorial strategies, such as the measures included in the TEN concept.

Only a few examples need illustrate the situation: in Poland, insufficient technical infrastructure in rural areas constitutes one of the main barriers to development. For example, at the end of 1998, only 50% of rural households had a telephone, and only 5.8% of rural households were connected to sewage systems. In addition, only a third of rural households used official dumping sites (EC 2002: 29). In Romania, the rural population frequently has no access to piped water, and, in addition to access problems, the wells do not provide water of adequate quality (EC 2002: 29).

Case studies of the IDARA network show that underdeveloped sewage systems, lack of canalisation, scarcity of purification capacity and wastewater collection is a widespread and common problem pattern (IDARA 2002).

A key element is transport because it builds the context for the provision of further infrastructure. After 1989, there was a shift from an eastward to a westward orientation, a shift from rail to road, and a shift from public to private transport. Expansion and improvement of infrastructure constitute the greatest challenge for all accession countries. A major obstacle is the significant lack of financial resources (EC 1999*a*: 48).

With increasing development, trade and integration with Western Europe, the increase in traffic will continue. This may imply damaging effects and the threat of fragmentation of eco-regions and biodiversity would increase.

The development of rural infrastructure is a key factor for the individual farm-households and the agricultural sector, but particularly relevant for the performance of the whole rural society and economy. It is an essential pre-condition to create close ties between different branches and sectors.

Land use patterns

Land use developed differently over the regions of the CEECs. The policy of land collectivisation was not implemented in all areas (e.g. in Poland and Yugoslavia, and in parts of other countries), and traditional rural lifestyles and landscapes persisted, particularly in marginal areas such as the Carpathians. Economically, they were not seen to be worth a high level of investment, and this preserved marginal areas from the agricultural intensification (CEI 2001: 8). The development of land-use patterns during the socialist era and afterwards can therefore be esteemed by no means to be universal.

The transition to a market economy now underway, and future accession to the EU, mean profound changes for rural landscapes. Traditional forms of forestry and agriculture are being replaced by more intensive methods in some areas (CEI 2001: 8), and in the future this polarisation of land use will be strengthened.

Land use depends on the kind of property status and the transformation approach: in general, land seized by the state during the Communist era is being returned to private hands. This might result in a highly fragmented land ownership structure and encourages short-term forms of exploitation, such as excessive logging, heavy grazing at high altitudes and cropping on unstable slopes (CEI 2001: 8). However, the assessment of the European Commission expects no significant shift of dominant land use patterns. This means also a preservation of the high percentage of agriculture as the dominant form of land use (over 55 % of total land area in CEECs), which constitutes an important factor in managing land, water and air resources (including bio-diversity) and in shaping the countryside (EC 1998: 9).

In most CEECs, total arable land has remained relatively stable or has declined slightly during transition. Over the period 1989-97 there has been a certain shift toward cereals, which increased its area and now accounts for nearly 60% of CEEC arable area (compared to a share of 50% in the EU). The area planted with wheat has generally tended to increase, although barley in Poland and the Czech Republic, rye in Poland, and maize in Hungary and Romania remain important. Other arable crops, in particular potatoes and sugar-beet, have dropped in area.

Potato feeding has declined with livestock numbers, while sugar consumption has declined in most CEECs. However, potato area remains significant and exceeds the EU area. Poland on its own has a potato area close to that of the EU-15. Oilseeds are relatively important in Hungary and Bulgaria and have more or less maintained their share in CEEC land use. In the Baltic countries cereals are relatively less important; a large part of arable land is used to grow fodder crops. This general description underlines the relevance for analysis of the spatial features of agricultural production in the accession countries, although no further major shifts in arable land use patterns were expected in coming years by EU Commission (EC 1998: 39-40).

Land abandonment

In the transition period since 1989, more and more utilised agricultural area has been farmed less intensively or has even been abandoned. Reductions in agricultural subsidies, increasing

economic costs, and transfer to a market economy have caused the abandonment of less productive and barely accessible grasslands or the large-scale afforestation of these areas (CEI 2001: 19).

Reduction in livestock numbers has also added to the abandonment of large areas of pastures and meadows, as well as extensification of land use and reductions in the input of agrochemicals. This happens mostly on marginal land, but also on some of good quality.

The major forms and causes of land abandonment have been:

- cessation of grasslands due to low (or even negative) profitability;
- cessation of management of land converted to arable land after privatisation but subsequently proved unsuitable for crop production;
- insufficient grazing livestock numbers in pastoral areas to maintain grasslands;
- cessation of management of grassland and arable land purchased after privatisation for speculative reasons;
- abandonment of farmland due to financial and legal uncertainty over ownership or lack of capital for investment.

In the Baltic countries, land that has been used in agriculture is often abandoned and perennial vegetation is taking over. Less favourable and remote areas are the first to be abandoned (CEESA 2001: 24, case study Estonia). Land abandonment is threatening many important habitats, for example bird areas; the most widespread problem is the growth of shrubby vegetation on flower-rich grassland and subsequent forest development (Baldock and Tar 2002: 5-6).

Development in land use after EU accession is hard to predict because it depends in general on the output/input price ratios of agriculture. Given a very low or negative agricultural profitability (as is the case now), the current trends are unlikely to reversed. Therefore, areas of highly intensive farming and increased production will further contrast with areas with declining output or abandonment in less competitive regions.

Environmental issues

The impact of different land use management methods may be seen best through the environmental effects. The application of high-technology agriculture raises the need to cope with the high amount of negative externalities linked to these techniques. As environmental concerns are generally still of low political priority in CEECs, there is little legislation incorporating specific environmental policy measures. This corresponds with a low level of ecological consciousness among local communities. Where agriculture does have a harmful impact on the environment, the damage usually takes the form of widespread water and soil pollution, soil erosion, and degradation of landscapes (such as in regions where large-scale farming dominates). In areas with a high concentration of intensive animal production, these types of problems are particularly relevant. However, in recent years economic considerations have forced farmers to cut back their livestock herds as well as to reduce their use of fertilisers and chemicals. On average, they use far less inorganic fertilisers and pesticides than farmers in many OECD countries. However, the privatisation process that is under way and the resulting redistribution of land will bring about changes in the size, technique and efficiency of farms and thus will increase the threat on environmental performance (OECD 1997: 22).

A similar ambivalent assessment was taken by the European Commission in 1999. Most ACs have managed to preserve extensive cultural landscapes and ecological systems undamaged, to an extent that is hardly found in many Member States. Problems include air contamination

from household emissions and road traffic (a high percentage of outdated vehicles), and water contamination from the intensive cultivation of land and from industrial waste water (EC 1999*a*: 48).

Soil degradation related to agriculture is among the most serious environmental problems mentioned in the CEECs. In most cases it is to a large extent caused by changes in land use during the last 50 years. Use of mineral fertilisers allowed the farmers to shift production towards more specialised production. Particularly on rather arid areas, this creates losses in the organic matter of the soil due to increased cultivation of annual crops. In Bulgaria there are especially problems caused by irrigation and combination with crops (CEESA 2001: 35).

According to experts and farmers in the region, the soil fertility recovery will be a long process: for this purpose changes are needed in the technologies, including application of a larger quantity of organic material (manure, green fertilising, harvest waste, etc.) and also an increase in use of phosphates (CEESA 2001: 22, case study Bulgaria). Surface water and ground water pollution from farming, both due to improper management practices, is taking place. Leaching of nutrients from soils to waters is a wide-spread problem (CEESA 2001: 23, case study Croatia). Devices for manure and solid animal waste storage are rather few (Poland), with animal waste being stored directly on the ground, which could lead to difficulties in the implementation of the Nitrate Directive. It seems therefore that a particular concern will be more effective protection of water resources (CEESA News 2/2002).

On one hand, intensive agriculture leads to losses in biological diversity, on the other hand, we can also observe regions with more positive situations: an important portion of the remaining high value farming systems is situated in the CEECs, but the stagnation of the sector and land abandonment poses one of the greatest threats to these areas (CEI 2001: 30). Land abandonment resulted in a rapid degradation of wildlife and landscape, since only the regular mowing of meadows may stop growing up the high-grown and bulky plants; it is expected that this trend might be reversed after accession (Ratinger/Krumalova 2002). However, we can also observe the opposite effect: The economic decline of agriculture due to extensification of production might ease pressure on wildlife.

Sector and agricultural structures development

Semi-subsistence farming

Semi-subsistence farming continues to play a very important social and political role as a social safety net in rural areas. Semi-subsistence farming has reduced the social costs of overall transition, has slowed the sharp rise in unemployment and the rural exodus, and has provided the poor, under-employed and peripheral parts of the population with cheaper food alternatives to the increasingly processed and standardised products of the major towns (Pouliquen 2001: 83). Semi-subsistence farming thus provides social service functions and supports persons in a situation of hidden unemployment. Its effectiveness is, however, threatened by the increasing exclusion from the market because of falling farm incomes. Therefore, a social safety net for semi-subsistence farming should be on the political agenda.

In the countries and regions most affected by relative rural poverty, targeted government aid could therefore be most needed. Indeed, such aid programmes might probably be less expensive than the unemployment payments and other associated social costs, growth of which would be the result of too rapid fall in semi-subsistence agriculture (Pouliquen 2001: 85). Unfortunately, there is little statistical data available for comparative measurement of semi-subsistence farming, primarily indirect indicators relevant to the issue in many regions.

The European Commission has held these arguments valid insofar as it created a special measure to make semi-subsistence farms viable. To help to turn them into commercially

viable units and to contribute additional income support while the farm is upgrading, a specific measure of maximum €1000 a year per semi-subsistence farm has been offered (EC 2002*d*: 3).

Agricultural structures

Despite efforts of restructuring the agriculture and food industries, the competitiveness of agriculture and the agro-food chain in the CEECs is much lower than in the EU-15 (EC 2002*a*: 3). The major trend of the reduction of the contribution of agriculture to GDP and its share in total employment has had until now only slight effects on competitiveness. Despite the overall economic recovery of the CEECs, agricultural production over the last ten years in general continued to shrink or stagnate.

The economic recovery has led to an increasing demand for processed products and net imports from the European Union. The balance in value of agri-food trade of the ACs is, as a whole, negative. Despite preferential tariffs and differences in quality regulations, exports to the Union often remained far from filling the moderate quotas of the European Agreements at reduced duty (Pouliquen 2001: 8-11).

In general, the farm structure in the candidate countries is unfavourable. The CEECs have to cope with inappropriate organisation structures and/or fragmentation of agricultural supply. Large number of small farms exist besides of durable semi-subsistence farming and an emerging commercial farming sector (dualism of structures) which has an important influence on the spatial trends of agricultural production.

Large company holdings have developed from the former state and collective farms. They carry out most of the "modern" part of agricultural production. They are commercial, concentrated and relatively capital-intensive production units, their labour productivity slowly increasing but on a level much lower than that of professional holdings in the European Union. Privatisation and abolition of subsidies that supported the state-owned agri-food chains has cut them off from their most profitable non-agricultural production activities. They struggle with high debts, have a lack of profitability and of land guarantees – and this restricts long-term bank loans for investment (Pouliquen 2001: 40-44).

The larger individual holdings constitute the prime core of intensive, professional farming, particularly in stock breeding. It is hopped that they are able to compete with its Community counterparts (Pouliquen 2001: 40-44). The dualism of structures strengthens the restructuring process, leading to the conclusion that not only farm structures but also up and downstream infrastructure, services, and off-farm employment opportunities will require development (EC 2002*a*: 3).

Structural problems of the commercial farm enterprises include:

- ***Very low or negative agricultural profitability***. The profitability of agricultural production in the CEECs in recent years has remained overall much lower than Community levels and has deteriorated to the point of general disinvestment in the sector. This constitutes the key limiting factor on agricultural production and obstacle to reducing its unit costs (Pouliquen 2001: 17). However, there are huge differences in the share of public support between the CEECs and the EU-15.
- ***Very low productivity of agricultural labour and land***. Despite structures a priori much more favourable with regard to total factors productivity, and therefore to competitiveness on factor and product markets, the production of the "modern" agricultural sector has tended to stagnate or to decline at a low level of productivity per hectare. This reflects the low input levels leading to lower livestock density and low yields of crops (Pouliquen 2001: 25).

- ***Deterioration in the output/input price ratios of agriculture***. This "scissors" effect is a major world trend, which also affects Community agriculture. In the majority of the CEECs, this effect was deferred between 1993 and 1997 under dual protection of still heavily depreciated currencies and of increasing custom tariffs. The subsequent erosion of this protection has therefore increased the effect. Under these conditions, the acceleration of productivity gains, and therefore of the restructuring of the sector, has become an important precondition for simply maintaining agricultural production in the CEECs (Pouliquen 2001: 21).
- ***Less binding quality, health and environmental regulations, farm animal welfare and transport rules.*** Low food safety and hygiene quality standards (below Community standards) will pose a severe problem in overcoming the low competitiveness level after accession and is an obstacle for "exports" to the Community. In the short term only, it is favourable for the poor, peripheral population, particularly in rural areas and small towns.
- ***Lack of financing***. Weak integration into capital markets maintains the capitalisation of agricultural labour at low levels. The absence or inadequacy of land guarantees strengthens this burden. Furthermore, the macroeconomic capacity for supporting the agricultural sector at the taxpayer's and/or consumer's expense is much lower (Pouliquen 2001: 33).

Land Markets

Purchase, lease or rental of farm properties is strongly linked with shifts on the agricultural structures and land use. The spatial impact of changing rental patterns cannot be overestimated for the future development of agricultural production. To date, farmland prices are much lower in the CEECs than in the EU, both in nominal and relative terms, and show no significant trend towards convergence.

As the CEEC markets in land ownership are not very active, this situation is going to remain unchanged in the near future: transactions only cover shares of stock generally much lower than current rates in the EU. This difference indirectly reflects and confirms the very low profitability of agricultural activity in the CEECs. The very low average level of farmland renting prices leads to an active rental market and, after the initial restitution and distribution of collectivised lands, it has become the major way of restructuring holdings (Pouliquen 2001: 66).

2.2 The Common Agricultural Policy (CAP) and Rural Development Policy (RDP)

2.2.1 Policy Scope

For this project, the scope of the CAP/RDP is taken to be the interventions in farming and farming-related activities (e.g., farm forestry and tourism, and food regulation). These interventions, undertaken by the Commission's DG Agri, for the purposes of pursuing Community objectives as set out in the various EU Treaties, can be categorised into three types:

a) expenditures from the European Agricultural Guidance and Guarantee Fund EAGGF
b) market price support via non-expenditure methods such as tariffs and import quotas, and
c) relevant EU Regulations and Directives.

This definition of policy scope excludes a number of Commission activities: see below. However, the descriptions which follow this section, and the analyses to be undertaken within this Project, will, where necessary, refer to these non-agricultural/ rural policies (see, e.g. Chapter 6), and to national and regional policies outside the framework of EU Directives, e.g. fiscal and land-tenure legislation.

The following relationships between included CAP/RDP areas and excluded policy areas are worth mention:

- Other structural fund policies: Regional and Social Funds are now partly "integrated" with EAGGF funding in Objective area "Programmes" etc.

- LEADER: farming and farmers were involved to a greater or lesser extent in the previous LEADER and LEADER II Community Instruments (CIs) of the previous two budget periods (1987-93 and 1994-99); the current (2000-06) LEADER+ scheme is funded entirely (except for national contributions) from within the EAGGF.

- EU environmental policy: environmental conservation and promotion (and sustainable development) are now over-arching EU policy objectives, and, in principle, all CAP initiatives must now carry environmental statements, and are subject to environmental criteria in their evaluation. In addition to the environmental effects of core CAP measures, e.g. intensification and farm/region specialisation, agri-environmental CAP instruments, introduced as "accompanying" measures in the MacSharry reforms and expanded subsequently, have explicit environmental effects as their objective. However, with more "cross-compliance" (so far limited in uptake by Member States), this distinction between the two may erode in the future, and analysis will have to take account of the different objectives and levels involved.

- EU competition policy: the Single Market is enforced with a set of regulations to control state (national and regional) aids; some such aids (which are inherently territorial) have persisted for special reasons. In the food chain, including farmer marketing agencies (e.g. the UK milk boards), the regulation of mergers and monopolies can fall under EU as well as national auspices.

- Food policy: there is increasing EU interest and active policy involvement in this area, largely through the Consumer Affairs DG. Regulations extend from farm (e.g. livestock welfare) through distribution and processing (livestock transport, slaughterhouse hygiene) to food retailing (e.g. traceability, labelling), including (e.g.) the regulation of organic food supply.

- National legislation: each Member State has its own set of laws regarding, for example, farm business taxation, land tenure/transfers and territorial planning regulations.

2.2.2 Policy Objectives

The Starting Point
The original objectives of the CAP were laid down in Article 39 of the 1957 Treaty of Rome and in the conclusions of the 1958 Stresa conference. The Article 39 objectives were (and are, since the Treaty remains in force, though subject to re-interpretation: see below):

- increasing agricultural productivity
- ensuring a fair standard of living for farmers
- stabilising markets
- guaranteeing food security
- ensuring reasonable prices for consumers.

The Final Resolution at Stresa maintained that agriculture should be regarded as an integral part of the economy and as an essential factor in social life (Fennell 1978, p.20).

These objectives were not considered immediately and directly from a territorial viewpoint, although obviously the original CAP was designed to support the rural population of the Community of Six relative to the urban population, which at that time was enjoying unprecedented economic growth and prosperity. However, the underlying philosophy of the Common Market as a whole was to exploit comparative economic advantages, which include spatial differences in farming productivity in terms of soil quality, climate, distance from markets, etc. These factors clearly varied greatly from location to location within the original six Member States, and do so even more greatly within the EU of 15 or 25. With changes over time in the comparative advantages of various rural areas arising from new technologies and changing consumer incomes and preferences, adjustments would be expected in the CAP (and later the RDP) to achieve especially the second of the above Treaty objectives, in particular since the others were successfully achieved by the 1980s.

In pursuing these Treaty of Rome objectives, three "principles" were commonly cited, and are still referred to, though sometimes in different terms:

- common pricing (or market unity)
- Community preference
- common funding (or financial solidarity).

Common pricing means the abolition of all artificial margins and price differentials between the different member states acting as a free trade area, so that price competition can operate without hindrance (except for transport, quality and other differentials) across borders within a common or single market. When prices are supported by appropriate policy instruments (see below), this brings in the question of the level of this support, and, in the presence of different national currencies, the appropriate exchange rate which should be used. These spatial factors emerged as major difficulties in the development of the CAP in its first three decades, and necessitated the creation of complex agri-monetary measures and "green" exchange rates as national currencies fluctuated against each other. However, with the achievement in 1992 of the Single Market, and the creation of the Euro as a single currency for twelve Member States in January 2002, these problems have largely subsided.

Community preference reflects the establishment of the European Community as a single customs union, with a common external tariff applied to all third-country imports as an instrument of market protection. Nevertheless, trade preferences have been awarded to an increasing number of non-EU countries, some on historical grounds (e.g. New Zealand supplies of dairy and sheepmeat products, and sugar from ex-colonies), some as part of pre-accession arrangements (Central Europe), and some for reasons of economic assistance and development (e.g. the Maghreb and the ACP-EC agreements). Given free trade within the Community, any such imports at one port or another are then, in principle, free to move elsewhere within its borders. Lowering the rate of Community preference, as happened under the Uruguay Round Agreement on Agriculture, and again under the Agenda 2000 CAP reforms (see below), and further under the most recent WTO and Commission proposals (ditto), naturally diminishes the significance of this principle for the commodities affected. However, current rates of protection are still high in some cases.

Common funding of the CAP involves both expenditures via the European Agricultural Fund, and income (from import and other agricultural levies etc., as well as the more general VAT- and GNP-based tax revenue) to the EU's budget as "own resources". In principle, member states have no entitlement to receive approximately the same amount in CAP/RDP expenditure from the EU as they contribute in terms of own resources (the concept of *juste retour*), and the necessary calculations are complicated by the location of these financial flows, e.g. at major ports such as Rotterdam, appropriate allocation of budget revenues, and other factors. However, given the major political significance of national and EU budgets,

some influence is to be expected. A notable example of this is the "Fontainebleau" arrangement for a UK budget rebate linked to that country's net receipts of CAP funds.

None of these principles carry obvious territorial characteristics, and indeed they each imply an increased degree of common rather than differentiated treatment across the entire EU area, e.g. in terms of free flows of goods.

Subsequent Objectives and Principles

As problems in operating the original CAP emerged – primarily surpluses of certain farm products, and escalating expenditures – additions and modifications were made to the above objectives and principles, via new CAP measures or via formal Treaty commitments. Amongst these modifications, some of the more important are discussed below, along with their territorial character.

With the entry to the European Community of the United Kingdom along with Ireland and Denmark in 1973, a substantial area of "difficult" farmland, often with pre-existing policy measures in place, became subject to the CAP. Thus, in 1975, Directive 268 authorised the definition of certain agricultural regions as "mountainous" or "less favoured" areas (LFAs), and entitled to special direct payments to ensure "the continuation of farming". This marked the important departure - especially in the context of the present study - from the common policy treatment of farming in different parts of the Community. More details are given in Section 2.4 below.

The principle of producer co-responsibility is that farmers should bear some of the burden imposed by financing costly forms of support. Co-responsibility levies on marketings have long applied in the sugar regime, and for some years were operated in the dairy and cereal regimes. In these measures, territorialism plays little part. Nowadays, it is more common to apply cross-compliance requirements, i.e. to be eligible for payments, farmers must observe a range of management obligations, usually of an environmental nature. These can be (and are, via the principle of subsidiarity and the national and regional preparation of arrangements for Commission approval) more territorially differentiated.

The 1987 Single European Act mandated the consideration of environmental protection in all EU policies (Article 130R), including the CAP/RDP. In practice, this led to the creation off a number of agri-environmental CAP measures (see below), and to a stronger (but still weak) element of environmental conditions (cross-compliance) in some other measures, e.g. stocking limits. These considerations led naturally to the specification of some new territorial aspects to the relevant XAP measures, but mostly using the LFA boundaries.

In Agenda 2000, the European Model of Agriculture was endorsed for the CAP, with objectives including:

- more market orientation and greater competitiveness
- food safety and quality
- stabilised agricultural incomes
- integration of environmental concerns into agricultural policy
- developing the vitality of rural areas, and
- simplification of administration
- strengthened decentralisation.

In its 2002 Mid-Term Review of the CAP following the Agenda 2000 reforms (COM 2002, 394), and re-stated in the Explanatory Memorandum to its Long-Term Policy Perspective (COM 2003, 23), the Commission argued that the objectives for EU agriculture should be:

- enhanced competitiveness
- more market orientation
- more sustainability
- a better balance of support, and
- strengthened rural development

to be achieved through the following key elements

- a single farm payment independent from production,
- payments being linked to environmental, food safety, animal welfare, health and occupational safety standards,
- more money for rural development policy
- new measures promoting food quality, animal welfare and environmental standards,
- reduction in direct payments for bigger farmers, and
- further revisions to CAP market policy

The current (June 2003) set of CAP reforms are discussed and analysed for their territorial aspects in Chapter 5.

2.2.3 Policy Measures and Expenditures

Agenda 2000 defined two "Pillars" of the CAP. Pillar 1 comprises:

- commodity market support regimes with intervention buying or private storage aids
- "lightweight" regimes wit emergency buying and producer group support
- direct payments, often with quotas and/or reference yields and area ceilings to limit expenditure
- supply management tools such as quotas on milk supplies, maximum stocking densities and compulsory arable set-aside
- other elements such as environmental or animal welfare requirements, 'outgoer' (e.g. dairy) schemes and grubbing-up aid.

Pillar 2 covers structural and rural development measures such as:

- aids for farming in Less Favoured Areas and now in areas with environmental restrictions
- agri-environment schemes
- support for farm forestry
- aid for farm investment, modernisation, and diversification
- aids for marketing and processing
- early retirement aids, and aids for young farmers
- vocational training,
- aids for improved water management, land reparcelling and land improvement(Article 33 of Regulation 1257/1999)
- support for developing farm-related tourism and craft activities (Article 33)
- other farm-related rural development provisions (Article 33)

The 'common rules' Regulation 1259/1999 on obliges Member States to meet 'environmental protection requirements' in relation to common market organisations (Article 3), and authorises 'modulation' to switch funding from Pillar 1 to certain elements of Pillar 2 (Article 4). However, modulation has been implemented only by France – which later suspended the process – and by the United Kingdom.

EAGGF Guarantee Expenditures

Table 2.1 shows expenditures from the Guarantee Section of the EAGGF by Member State for 2001, classified by commodity and other sector. The main item, accounting for over 40 per cent of the total of 42 billion Euro, relates to "arable crops", i.e. cereals, oilseeds and protein crops (peas and beans), is mainly direct area-based payments (including those on set-aside), with a small amount of market support expenditure on export refunds and storage. The next highest item relates to bovine meats, i.e. beef and veal (mainly direct payments), and smaller commodity-related expenditures to olive oil (mainly direct payments), milk products (market support), fruit and vegetables (market support), sugar (market support), sheep and goat meat (mainly direct payments), wine (market support) and tobacco (mainly direct payments). EAGGF Guarantee expenditure on rural development measures (previously accompanying measures) account for about 10% of the total.

Table 2.1 CAP expenditures by Member State, 2001 (million Euro)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	Total*
Arable Crops	166	666	3739	483	1934	5181	120	1919	11	251	379	242	353	420	1603	17466
Sugar	281	86	237	8	62	357	4	143		50	28	21	10	23	187	1497
Olive Oil				587	1030	5		848				54				2524
Dried Fodder etc.		10	23	5	186	83		48		14		1			4	375
Textile Plants	9		2	543	212	42				4	1	3			9	826
Fruit and Vegetables	37	1	17	235	522	294	2	348		40	2	42		2	17	1558
Wine Products			41	16	470	222		378			14	54			1	1197
Tobacco	3		34	376	115	77		339			1	19			9	973
Other Crop Products	3	32	18	24	52	26		118		10		5	2	2	4	297
Titre 1 (Crop Products)	*499*	*794*	*4111*	*2276*	*4584*	*6287*	*126*	*4144*	*11*	*368*	*425*	*441*	*365*	*448*	*1824*	*26713*
Milk and Milk Products	181	128	186	-3	29	500	144	92		479	-27	-3	46	28	127	1907
Bovine Meat	169	83	744	61	734	1468	827	296	8	86	172	126	62	101	1116	6054
Sheep and Goat Meat	1	1	34	201	390	144	90	143		12	4	48	1	3	374	1447
Pig Meat, Eggs, Poultry Meat	5	26	5	1	11	52	1	8		19	4	3		1	2	137
Other Animal Products																
Fish					6	3	1					1			1	13
Titre 2 (Livestock Products)	*356*	*238*	*969*	*261*	*1171*	*2167*	*1063*	*539*	*8*	*597*	*153*	*175*	*109*	*134*	*1619*	*9559*
Non-Annex 1 Products	40	33	65	3	23	53	51	19		79	19	2	6	9	36	436
Food Programmes	8	2	17	15	63	65	2	49		2	1	28	7	9	12	282
Ultra-Periphery Programmes				24	90	39		1				30				184
Vet. & Phytosan. Measures	4	3	22	4	18	27	15	24		51	2	8	1	1	383	566
Fraud Control & Prevention			10	3	11	-1	-1			1	2	-1			10	32
Reductions in Advances	-2		-27	-45	-311	-40		-143		1						-570
Promotion and Information	1		5		4	5	1	1		4	1				3	49
Other Measures	1	8				39	17	57					1	29	318	470
Titre 3 (Other)	*51*	*46*	*91*	*4*	*-103*	*184*	*84*	*7*	*1*	*136*	*24*	*69*	*15*	*48*	*753*	*1448*
Rural Development	*32*	*35*	*708*	*75*	*540*	*609*	*327*	*660*	*10*	*55*	*453*	*197*	*327*	*151*	*184*	*4363*
Total FEOGA Guarantee*	*938*	*1114*	*5880*	*2616*	*6194*	*9248*	*1599*	*5349*	*30*	*1155*	*1055*	*882*	*816*	*780*	*4381*	*42083*

Source:31st Financial Report on the EAAGF Guarantee Section, 2001 Financial Year, Annexe 8, COM(2002)

** Individual values may not add exactly to Totals, due to rounding and/or small amounts unallocated to countries.

In Chapter 3 and subsequent chapters, analysis of these figures proceeds by apportioning these EU and national commodity totals to NUTS 3 level on the basis of crop areas and livestock numbers. This involves a degree of estimation and assumption (necessary, in any case, for market support expenditure which is not territorial in nature). The method for apportioning expenditure to NUTS 3 level was described in the SIR, Section 6.4.

For non-commodity expenditures, it is necessary to allocate national totals on a different basis, e.g., following OECD procedures for PSE measures, by the level of total agricultural output (see SIR, Section 6.5). For rural development expenditure, it was hoped to follow a more specific procedure, with more detailed data for different RDP measures, and alongside Guidance and national public expenditures.

CAP/RDP Structural Fund Expenditures

The Structural Funds of the EU comprise the Regional Fund, the Social Fund and the Guidance Section of the Agriculture Fund, together with the Cohesion Fund.

In the two previous programming periods, 1988-1993 and 1994-1999, these funds were allocated in rural areas according to a number of Objectives, viz. 1, 5a and 5b, and 6. Objective 5a concerned the improvement of agricultural structures, via horizontal measures applicable throughout the EU, and hence was non-territorial in nature. However, LFA expenditures were treated as horizontal, and were in fact the major EAGGF Guidance Section commitments.

Objective 1 regions were defined as those lagging behind in development according to Regulation 2052/88, and with GDP per head less than 75% of the Community average. They included the whole of Ireland, Greece and Portugal, and much of the more remote and rural parts of the rest of the Community.

Objective 5b concerned the development of rural areas in difficulty but not falling within the scope of Objective 1. These areas were considerably expanded (approximately doubled in area and population, overall, taking into account the accession of three new Member States in 1995) between the 1989-1993 and 1994-1999 periods.

Objective 6 was added for Sweden and Finland on the accession of these countries in 1995, and concerns Nordic areas characterised by extremely low population densities (no more than 8 persons per square kilometre).

Some of the Structural Fund expenditure under the other Objectives (2, 3 and 4) had indirect effects on rural areas. Approximately 15 billion Ecu were allocated to rural development over the 1988-1993 period.

In Objective 1 areas, rural development measures were financed, within an integrated (i.e. territorial) approach, from the EAGGF Guidance Section, with the exception of the Less Favoured Area scheme for which the EAGGF Guarantee Section was used.

Community Instruments (CIs) are operated directly by the Commission through local or regional bodies, and are targeted at areas and issues of special concern. The main CI in rural areas is LEADER, which emphasises a bottom-up, innovative and transferable approach to rural development. During the 1994-1999 period, Leader II programmes at national or regional level were implemented in Objective 1 and 5b areas.

Actual payments for the previous programming period, 1994-1999 are not yet available. Table 2.2 shows commitment appropriations for the four CIs for the programming period

2000-2006, by Member State. It can be seen that the main rural CI, LEADER, accounts for about 20% of total CI appropriations. An additional but unknown share of INTERREG funding to cross-border, transnational and interregional cooperation purposes will also be applied in rural areas.

Under the Rural Development Regulation, Article 33 measures relate "to farming activities and their conversion and to rural activities, which do not fall within the scope of any other (RDR) measure". Table 2.3 shows the allocations by Member State for all 4 CIs for the period 2000-2006, and for the 3 LEADER "Actions" at EU level.

Table 2.2 Indicative allocation of commitment appropriations among the Member States, 2000-2006 (in million euro – 1999 prices)

	LEADER	***INTERREG***	***EQUAL***	***URBAN***	***TOTAL***
B	15	104	70	20	**209**
DK	16	31	28	5	**80**
DE	247	737	484	140	**1608**
GR	172	568	98	24	**862**
E	467	900	485	106	**1958**
F	252	397	301	96	**1046**
IRL	45	84	32	5	**166**
I	267	426	371	108	**1172**
L	2	7	4	0	**13**
NL	78	349	196	28	**651**
A	71	183	96	8	**358**
P	152	394	107	18	**671**
FIN	52	129	68	5	**254**
S	38	154	81	5	**278**
UK	106	362	376	117	**961**
Networks	*40*	*50*	*50*	*15*	***155***
EUR-15	***2020***	***4875***	***2847***	***700***	***10442***

Source: European Commission Press Notice, Brussels, 13 October 1999, no. IP/99/744

The Community Initiatives in 2000-06: indicative allocation of funds among the Member States

LEADER+ 2000-2006

	EAGGF Guidance	Other	Total	%
Action 1	*1826*	*2552*	4378	86.75
Action 2	*211*	*294*	505	10.00
Action 3	*29*	*40*	69	1.36
Technical Assistance	*40*	*56*	95	1.89
Total	2105	*2941*	5047	100.00

Action 2: Support for cooperation between rural territories

Action 3: Networking

Project 2.1.3 Classification of CAP/RDP Measures
For the purposes of this project, CAP/RDP measures have been grouped into the following six categories, on the basis that each has potentially different territorial impacts:

- market regulation
- direct income payments
- LFA payments
- agri-environmental measures
- rural development measures
- other

The first of these comprises the 'traditional' CAP instruments of market support for most (but not all) farm commodities via import taxes, export subsidies and intervention purchasing, together with secondary measures such as marketing quotas.

The second category includes CAP payments made directly (or nearly so, e.g. to co-operatives, etc.) to farmers linked to production, e.g. area and headage payments. Various constraints, such as set-aside for commercial arable farmers, and stocking densities for grazing livestock payments, are attached to these payments. Under Agenda 2000, these payments may be 'modulated', i.e. reduced for individual farmers in order to finance Pillar 2 activities, but this has not yet been widely undertaken.

The remaining categories of CAP/RDP measure are defined on the basis of their emphasis on the environment and/or economic development. Originally (at the time of the 1992 CAP reforms), 'accompanying measures' comprised three sets of measures (agri-environmental schemes, early retirement, and afforestation). LFAs were included as accompanying measures within Agenda 2000, but remain as a dual-purpose instrument, addressing both environmental and socio-economic goals. The four measures account for about 50% of the funding of Rural Development Programmes in all EU countries. However, the situation in the member countries differs substantially; the Netherlands have the lowest share (13%) and Ireland more than 90%.

Agri-environmental measures comprise payments made to farmers under Regulation 1257/1999; these are part-financed (in differing proportions from region to region) by the EU, the rest being made up of national-government funds. Other rural development measures comprise the fourth category above, and consist mainly of grants and loans (again, co-financed) to processing and marketing investments, training and diversification schemes, and the broader "Article 33" measures. These also are only part financed by the EU and require national-government funds.

In current Commission parlance, the term "rural development" is used very widely, to include both agri-environmental and "true" development in rural areas, whether on-farm or off-farm (e.g. diversification). In the recent Mid-Term Review proposals, it has been used to encompass even food quality and animal welfare, which are likely to become of increasing importance. In the context of this study, however, "rural development" measures cover payments for processing and marketing; training and diversification; farm development; Article 33; and LEADER). The final "other" category covers all other aspects of the CAP and RDP not accounted for elsewhere, e.g. input subsidies and (special) taxes.

The Financing of the CAP/RDP
The CAP/RDP (as defined in Section 2.2.1 above) is financed by the European Agricultural Guidance and Guarantee Fund (EAGGF, or FEOGA) which accounts for about 50% of the total EU budget. That budget is financed mainly through national GDP-linked contributions

from Member States, with the addition of sugar import levies and of customs duties, some of which are imposed on food imports. Following the 1984 Fontainebleau agreement, the UK's contribution was reduced by means of a rebate, and further relatively minor adjustments of a similar nature have been agreed.

The two Sections of the EAGGF – Guarantee, originally for market support, and Guidance, for structural or rural development aid – are each subject to separate financial guidelines, or upper limits, determined for the EU-15 at the Berlin Summit for the period 2000-2006.

Table 2.3 Agricultural Expenditure agreed at Berlin European Council, March 1999 (billion Euro, at 1999 prices)

	2000	2001	2002	2003	2004	2005	2006	**Total**
Markets	36.62	38.48	39.75	39.43	38.41	37.57	37.29	267.37
Rural Devt.	4.30	4.32	4.33	4.34	4.35	4.36	4.37	30.37
Total	40.92	42.80	43.90	43.77	42.76	41.93	41.66	297.74

Note: Veterinary and plant health measures are included in "Markets", and accompanying measures in "Rural Devt." The latter figures exclude measures financed by the EAGGF Guidance section outside Objective 1 programmes.

The Commission breaks down EAGGF expenditure into the following main categories:

a) intervention expenditure (€30.5 billion), mainly direct aid (€25.6 billion) which includes area payments, set-aside payments, area or production aid for olive oil, flax, rice, tobacco etc., and headage payments for cattle, sheep and goats, but also storage (€0.95 billion), withdrawals (€0.5 billion), and "other measures" such as some sugar intervention, special aids, financial adjustments, etc. (€3.5 billion).

b) (export) refunds (€5.6 billion)

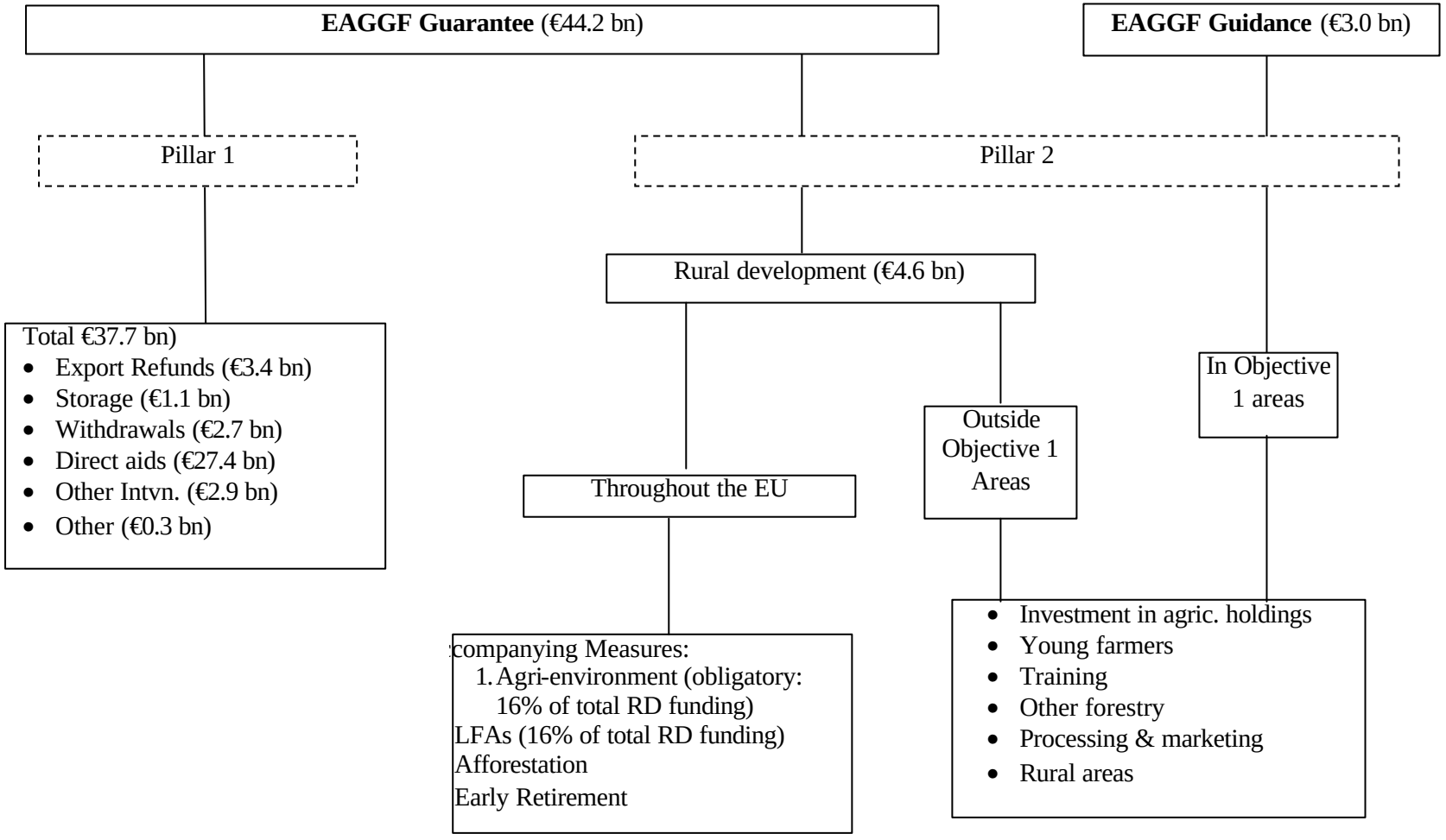
c) rural development payments (€4.2 billion from the Guarantee Section, and a further Euro 2.5 billion from the Guidance Section, including Leader), i.e. Reg. 1257/99 measures, which distinguish between Objective 1 measures and those applied elsewhere

There are also expenditures on veterinary and plant health measures, information measures, fisheries etc. (each relatively minor), and also some small "negative" expenditure items, such as gains made on selling public stocks.

Because of the general nature of EU financing, national (or regional) "agricultural budget" balances of CAP/RDP funding flows, as well as more sophisticated measures such as OECD-type Producer Support Estimates (PSEs), are not directly obtainable from official figures. However, estimates are available from various non-official sources.

Figure 2.11 shows how funds flow from the two Sections of the EAGGF to the various measures of the CAP/RDP. It is to be noted that Pillar 2 is currently funded by both the Guarantee and Guidance Sections (which have very different budgetary and administrative arrangements, e.g. co-financing). Also, the large component of expenditure devoted to direct aids is being increasing decoupled from specific commodities and their output levels, and are attracting increasing agri-environmental conditions.

Figure 2.11: EAGGF Budget Flows via Pillars 1 and 2, 2000-2006



2.2.4 Territorial Components of CAP/RDP Measures

Any CAP measure may have differential effects over the Community space, depending on the presence and nature of agricultural activity. However, this section examines the territorial character of the instruments themselves, i.e. where and how they apply differentially across the extent of the EU. By definition, market support in the Single European Market, without intra-EU border controls and measures such as the previous agri-monetary or "green" exchange rates, are largely non-territorial, except insofar as some of these instruments, which operate at EU borders and at intervention purchasing points, may relatively favour EU producers near these locations due to transport costs.

As indicated above, several CAP/RDP measures have strong territorial characteristics, in being applicable, at different rates, or at all, in various parts of the Community. In some cases (e.g. sugar quotas), the spatial element is restricted to Member State level, with complete freedom of action within national borders; in others, such as Less Favoured Areas (LFAs) or Objective 1 areas, there are more detailed geographical specifications.

National and regional ("ring-fenced") quotas for milk and sugar have obvious territorial characteristics, being based on historical levels of production in the various areas defined in the regulations. In some countries, the growth of a relatively free market in such quotas will have minimised the territorial "quota effect" when compared to the spatial pattern which would have emerged without quotas (but with price support); in others, the lack of such a market will have enhanced it by "freezing" production patterns down to farm level. Similar effects can be expected with eligibility "quotas" for farm grazing livestock numbers, and with some "maximum guarantee quantities" (tobacco, etc.).

The current arable regime includes regionally specified "reference" crop yields as the basis for rates of direct payments, and hence has a territorial character, though one that offsets regional agronomic differences that would otherwise have meant a "biased" application of the direct payment system. The impact of this feature will depend on the "coarseness" of the regions defined by Member States when this regime was introduced, and possibly the interpretation for the purposes of policy implementation of "good farming practice" criteria.

Less Favoured Areas

The first initiative to introduce an explicitly spatial / territorial dimension into the CAP was the Council Directive 75/268/EEC on Less Favoured Areas, which was introduced in 1975. As a complement to the range of sectoral support measures already in place, the LFAs Directive provides a framework for payment of annual compensatory allowances to farmers in less favoured areas. Specifically, Directive 75/268 states that:

> "…the steady decline in agricultural incomes in these areas as compared to other regions of the Community, and the particularly poor working conditions prevalent in such areas are causing large-scale depopulation of farming and rural areas, which will eventually lead to the abandonment of land that was previously maintained…. The permanent natural handicaps existing in such areas, which are due chiefly to the poor quality of the soil, the degree of slope of the land and the short growing season and which can be overcome only by operations the cost of which would be exorbitant, lead to high production costs and prevent farming from achieving a level of income similar to that enjoyed by farms of comparable type in other regions… It may be essential, if the objectives assigned to farming in the less favoured areas are to be attained, that farmers permanently engaged in agriculture in such areas be paid annual compensatory allowances".

Regulation EEC No. 2328/91 provides for payment of Compensatory Allowances in designated less favoured areas characterised by one or more of the following attributes:

(1) permanent handicaps (altitude, poor soils, climate, steep slopes),
(2) undergoing depopulation or having very low densities of settlement, and
(3) experiencing poor drainage, having inadequate infrastructures, or needing support for rural tourism, crafts and other supplementary activities.

As most of the payments under this Regulation are calculated on the basis of livestock numbers they are usually referred to as 'headage payments', though of course they are not the only category of 'headage payments'.

The objectives of the LFA Compensatory Allowances, as specified in Regulation 2328/91 are "to maintain a viable agricultural community and thus help develop the social fabric of rural areas by ensuring a fair standard of living for farmers and by off-setting the effects of natural handicaps in mountain and less-favoured areas". Following the reform of the Structural Funds in 1988 the LFA scheme was incorporated as part of a horizontal EU Objective 5a measure under the Structural Funds. In 1999 the total expenditure on Objective 5a throughout the EU was €1310.9 million, which was 23.5% of the total EAGGF Guidance Section expenditure. For the period 2000-2006 there is provision to allocate EUR924 million (= 3.8% of total EAGGF Guarantee to rural development policy) to LFAs and areas with environmental restrictions in Objective 1 regions. The corresponding allocation to non-Objective 1 regions is €4631.9 million, equivalent to 18.9% of the total EAGGF Guarantee to rural development policy.

LFA classification affects direct payments and rural development measures. Similarly, the boundaries defined for the old Objective 1 and 5b areas, and new Objective 1 areas have territorial implications for the effects of EU Rural Development Policy, including the LEADER schemes.

2.2.5 Enlargement Aspects of the CAP/RDP

It is expected that the terms of accession of ten new Member States (eight Central and Eastern European Countries, CEECs, plus Malta and Cyprus) will be agreed in time for accession in May 2004, with Bulgaria and Romania possibly acceding in 2007. In the meantime, most accession states have been preparing their agricultural sectors and policies for EU entry and CAP adoption, e.g. by instituting CAP-like support systems, and seeking liberalised trade with the EU-15. The territorial aspects of agricultural and rural development policies in the accession states are therefore complex, with significant differences between conditions in the early 1990s shortly after the start of transition in the CEECs to those expected in (say) the mid-2000s.

In preparation for EU entry, CEEC applicants have set up regional authorities for the development of rural development programmes, and these are being used to implement the current pre-accession SAPARD funding. These regions are natural groupings for the purposes of spatial impact analysis, although they may well suffer some of the same drawbacks (e.g. based on urban centres, with a variety of agro-ecological conditions in the hinterlands) as EU regions. A similar differentiation of regional types as suggested above might allow more in-depth analysis on diverging territorial impacts within CEECs. This applies in particular to the situation of rural types, LFA situation and high nature value farming areas in these countries.

Current and future investment in rural infrastructure such as transport and water facilities part-funded by the ISPA pre-accession scheme may well have additional spatial implications for agricultural and rural areas in the CEECs. It is to be expected that improved communications, and improved reliability of water supplies, will soon affect the food chain as it develops nationally and internationally.

Pre-accession aid for agriculture and rural development - the SAPARD programme

Preparation for membership of the EU requires many changes to industrial and public infrastructure, administrative institutions and procedures, as well as training and capacity building programmes. To support these often costly measures the EU has established PHARE, which has become a familiar source of funding. Two further funds (SAPARD and ISPA) were agreed at the European Council meeting in Berlin as part of the Agenda 2000 proposals.

In addition, a Special Preparatory Programme (SPP) in the framework of PHARE has been established (in the years 1998 and 1999), which among other things financed capacity building, training and technical assistance for the preparation of a national Rural Development Plan in each applicant country. This plan served as basis for measures under the SAPARD programme.

Both new programmes, the Instrument for Structural Policies for Pre-Accession (ISPA) and the Special Action for Pre-Accession measures for Agriculture and Rural Development (SAPARD) are of great concern for the territorial development policies of the applicant countries. ISPA is clearly modelled on the Cohesion Fund and has its main priority a reduction of the gap in economic development of these countries. With an annual budget of 1,040 million € for 2000-2006 (see Table 2.4), ISPA will fund up to 85% of the cost of infrastructure projects in the area of the environment (with its focus on investments to bring legislation on drinking-water supply, treatment of waste water, solid-waste management and air pollution up to EU standards) and transport infrastructure, which is essential if the expanded Single Market is to function smoothly. The SAPARD programme disposes of smaller financial means (€520 million per year), and acts through horizontal measures towards the adaptation of agricultural structures and policy as well as support for rural development. As in the rural development programmes of the EU-15, regional priorities and region-specific application were aimed at.

SAPARD and SPP are the most important funds for agriculture and rural development. The required national co-financing (25%) for both funds is likely to take up a large part of the current budgetary resources for these measures in most applicant countries (annual SAPARD budget for all the CEECs covers about 14% of national agricultural budgets; Dwyer *et al.* 2002, p.100). Thus, it was thought that decisions on the structure of programmes under these funds would significantly influence the future direction of rural policies in CEEC.

Table 2.4 Allocations for SAPARD and ISPA programmes (indicative annual allocations, 2000-2006)

	SAPARD		ISPA		
CEECs	Amount in million Euro	Share (%)	Amount in mio. Euro (min.).	Amount in mio. Euro (max.)	Average share (%)
Bulgaria	52.124	10,02	83.2	124.8	10,00
Czech Republic	22.063	4,24	57.2	83.2	6,75
Estonia	12.137	2,33	20.8	36.4	2,75
Hungary	38.054	7,32	72.8	104.0	8,50
Lithuania	29.829	5,74	41.6	62.4	5,00
Latvia	21.848	4,20	36.4	57.2	4,50
Poland	168.683	32,44	312.0	384.8	33,50
Romania	150.636	28,97	208.0	270.4	23,00
Slovenia	6.337	1,22	10.4	20.8	1,00
Slovakia	18.289	3,52	36.4	57.2	4,50
Total	520.000	100,00	878.8	1201.2	100,00

Source : AgraFood East Europe no. 216, Sept. 2000, EC 2000, p.9

SAPARD provides applicant countries with the possibility of funding projects in the areas presented in Table 2.5. Out of the wide range of measures, four have been selected as priorities by all applicant countries: investments in agricultural holdings, processing and marketing, agricultural diversification and technical assistance. Two measures are taken up by 6-7 countries: rural infrastructure, and environmental protection and maintenance of the countryside (i.e., pilot agri-environment schemes). This last measure indicates the relevance of the SAPARD programme but also its position as complementary funding to that for national actions.

Of the available measures, taking all 10 countries together, investment in processing and marketing is the most popular, with 26% of the total public aid, followed by investment in agricultural holdings and investment in the rural infrastructure, each at just over 20%. Next comes the group of measures of diversification, with around 11%. Of the 9 other measures in the programme, none averages more than 4% of the total public aid. Although the balance differs from programme to programme, in virtually all of the candidate countries the share of public aid accounted for by the three most used measures is over 60% of the total (Wilkinson and Korakas 2001).

Other measures, such as support for producer groups, water resources management or forest measures, have only been taken up by some countries with a specific interest therein. Direct payments similar to the LFA scheme are (together with horizontal agri-environmental measures) not element of the SAPARD programme. Although a number of pilot actions address the need for more integration of local populations into the planning and operation agricultural and rural development schemes and for models designed for the specificity of problems of peripheral areas, experiences are rather scattered and not led by a strategic approach. In recognising the difficulties of the first experiences with the involvement of local bodies, the financial agreements for 2002 aimed to strengthen the bottom-up approach (CEC 2002).

Table 2.5 SAPARD support measures

Measures	**Priority in SAPARD programmes**
Investments in agricultural holdings	XXX (all countries)
Improving the processing and marketing of agricultural and fishery products	XXX (all countries)
Improving the structures for quality, veterinary and plant-health controls, for the quality of foodstuffs and for consumer protection	X
Agricultural production methods designed to protect the environment and maintain the countryside	XX (6-7 countries)
Development and diversification of economic activities, providing for multiple activities and alternative income	XXX (all countries)
Setting up farm relief and farm management services	
Setting up producer groups	X
Renovation and development of villages and the protection and conservation of the rural heritage	X
Land improvement and reparcelling	X
Establishment and updating of land registers	
Improvement of vocational training	X
Development and improvement of rural infrastructure	XX (6-7 countries)
Agricultural water resources management	
Forestry, including afforestation of agricultural areas, investments in forest holdings owned by private forest owners and processing and marketing of forestry products	X
Technical assistance for the measures covered by this Regulation, including studies to assist with the preparation and monitoring of the programme, information and publicity campaigns	XXX (all countries)

Source: European Commission 2000, Cunder 2001.

Given the early implementation state of the SAPARD programmes in general, it is not yet possible to achieve a detailed evaluation of socio-economic and environmental impacts (see Dwyer *et al.* 2002). The EU programmes for support for pre-accession aid focus on facilitating adaptation of national legislation as well as administrative structures and procedures to the European Community *acquis.* This orientation is led by the conviction that the Single Market and the support system of CAP cannot function without harmonised standards and procedures. However, such a rigid approach leaves little room for national priorities or local bottom-up initiatives. Therefore there is strong criticism relating to the focus of capacity building whose actual emphasis seems misplaced since many candidate countries have a background of strong central state structures but weak local and non-state structures.

However, when assessing the implementation of the SAPARD programmes, one has to take into account the more recent decisions brought about by the agreement at the Copenhagen Summit, where it was agreed that ten new member countries can join the EU on 1 May 2004. The agreement has a particular relevance with respect to shortening the programme period of SAPARD, and laying down provisions for programmes of rural development measures to be established as soon as the countries are EU members, including more favourable conditions than those applied to the present EU member states.

2.3 Extended SWOT Analysis of Policy

In this section, the SWOT (strengths, weaknesses, opportunities, threats) technique is applied to the CAP/RDP as a policy (not to a company or to the agricultural sector), and strengths and weaknesses must therefore be assessed against policy aims. However, there is some divergence between the aims of the CAP and those of the ESDP. For this exercise we take ESDP aims as the benchmark. Policy aims of the ESDP relevant for the CAP/RDP include the central aim "of achieving a balanced and sustainable development, in particular by strengthening economic and social cohesion" (ESDP 1999, p.17) This general aim is reflected in three aims of spatial development, all of which are relevant to the CAP and RDP: economic and social cohesion; prudent management and development of Europe's natural and cultural heritage; and a more balanced competitiveness of the European territory (ESDP 1999).

In relation to these aims, the following strengths, weaknesses, opportunities and threats can be identified for the CAP/RDP, the latter two in relation to the ESDP:

1. **Strengths** of the CAP and RDP

- Increased agricultural output and productivity
- Encouraged farm and regional specialisation (and hence efficiency/competitiveness)
- Stabilised markets and reduced risks to farmers and consumers
- Multifunctionality (the European model of agriculture) if the CAP and RDP are specified accordingly
- Maintained farming in Less Favoured Areas.

2. **Weaknesses** of the CAP and RDP

- Market imbalances, i.e. structural commodity surpluses, resulting from the principal commodity regimes
- Associated budgetary pressures creating burdens on taxpayers, consumers and third countries

- Export subsidies undercutting and destabilising domestic production in developing countries
- Failure to support farm incomes (aim of ensuring a fair standard of living for farmers)
- Concentrated support on larger farms and encourages farm amalgamation
- Discouragement for mixed farming
- Encouragement of intensification and associated damage to environment and landscape, although this might well have happened as a result of technological change even in the absence of the CAP
- Perceived negative consequences for human health and animal welfare
- Bureaucratic and administrative burdens
- General lack of territorial character and focus.

3. **Opportunities** for the CAP/RDP in relation to the aims of the ESDP.

- The proposed shift from sectoral to territorial policies (i.e., from Pillar 1 to some of Pillar 2 of the CAP) holds out the hope of eventually pursuing a more balanced and sustainable territorial development. An example of this is the way in which modulation of direct subsidies was briefly applied in France during 2002 to top-slice the subsidies payable to the largest, most prosperous farmers in the Paris Basin. This was done in order to fund land management contracts with smaller, less prosperous farmers elsewhere in France for the benefit of the environment and rural development (Lowe *et al.* 2002). Such a 'territorial' approach offers potential for more balanced, more cohesive, more integrated and multi-sectoral development. However, this will also require a refocusing of the Pillar 2 measures towards more genuine rural development measures available to the broader populace and not only to farmers.
- Further promotion of opportunities for farm households to earn off-farm incomes (pluriactivity) is likely to be a more effective and sustainable way of increasing the incomes of lower income farm households than continuing high levels of market price support or direct payments. This will require intervention on both the demand and supply sides of rural labour markets, as well as attention to the 'softer' aspects of rural economic development (e.g. social capital, governance, entrepreneurship).
- Modification of the details of implementation of the CAP could support economic and social cohesion by targeting support more effectively on lower-income farm households. Merging of Irish datasets on farm businesses and household incomes allowed Frawley *et al.* to identify some detailed changes to the commodity regimes and systems of direct payments which would achieve this readily.
- Prudent management of Europe's natural and cultural heritage requires agriculture to play an important role, both in maintaining valued landscapes and habitats through a mixture of agri-environmental schemes and cross-compliance regulations, as already recognised in Agenda 2000 and the MTR proposals, and through maintaining regional and local farming cultures in ways which have thus far received little attention.

4. **Threats** for the CAP/RDP in relation to the aims of the ESDP.

- One scenario for change is a radical liberalisation of agricultural policy, encompassing the elimination of price support, quotas and other supply measures, and the decoupling and phasing out of direct payments except where justified to underpin public goods such as the environment. This is expected to lead to further territorial specialisation, with some favoured agricultural regions characterised by intensive, commercial agribusiness, and others becoming leisure areas, environmental areas, and rural residential areas around towns. This may support competitiveness but run counter to the ESDP aims of balanced

territorial development and economic and social cohesion, perhaps also involving loss of natural heritage in the intensively farmed areas, and will require careful scrutiny.

- Similarly, a scenario for policy change based on pluriactivity – perhaps redirecting direct payments towards certain types of family farms, and emphasising rural development actions – itself runs the risk of unbalanced territorial development unless policies are successfully deployed to address variations in the labour market opportunities between rural areas. The logic of capitalist accumulation and the colonisation of rural space by mobile capital are still likely to produce uneven development, even if, under this scenario, this is not so much driven by differences in agricultural competitiveness.
- A number of challenges at the pan-European level also arise from EU enlargement which will greatly increase the numbers of farmers in the EU, leading to new surpluses and budgetary crises unless the CAP is reformed quickly. There are also strong pressures from European trading partners through the WTO negotiations. This need for policy reform is the perspective of the Mid-Term Review (MTR) of the CAP. One danger is that such reforms preserve inequalities between the EU-15 and the CEECs. Another is that the new member states may oppose reform.
- One possible outcome which is sometimes discussed is a partial renationalisation of the CAP. The territorial consequences of this would depend on the forms of such renationalisation and the approaches then pursued by each member state.

2.4 SWOT analysis of territories

In contrast to SWOT analysis applied to a policy (see Section 2.3), the ESPON project itself focuses on the strengths and weaknesses of territories as affected by the CAP/RDP. This task is oriented at a spatial perspective and assumes the availability of indicators and measurement of territorial performance for all spatial units under consideration. The difficulty of the exercise is exacerbated by the fact that such an analysis has to keep in mind the different levels of spatial organisation, and reflect the inter-relation between territories at similar and different levels.

Following the project's objectives, the aim of the analysis of territorial development is linked to its relation to agricultural sector development (which is intrinsically influenced and shaped by CAP and its specific application) and the core aspects of rural development. However, we have to acknowledge the multi-sector relevance for all regional development analysis. We can therefore distinguish between an analysis more closely related to the sector performance, and a space-based perspective using a holistic approach. We would thus arrive at either:

- problem regions, characterised primarily by their weak agricultural productivity, and structural problems leading to comparably low performance of the sector; or at
- a problem review reflecting the multi-dimensional aspects of rural "problems", and a definition of the position of different types of rural areas within spatial development of the EU territory (including changes to be expected by integration of accession countries).

The analysis of strengths, weaknesses, opportunities and threats of different territories is therefore highly dependent on the level of geographical unit we choose and the different aspects of socio-economic development which are included. A thorough SWOT study would have to start from region-specific concepts and strategies, and assess these against economic, social, cultural and environmental performances. Given the influence of individual features of every study region, this would have to be done on a case-by-case basis. The following analysis therefore investigates if specific types of problem regions can be identified at the European level, and whether a framework for the future analysis of spatial impacts can be provided.

The selection of categories for which the situation is discussed in the following table is based on the predominant interest of this project on spatial differences, i.e. spatial impacts of the sectoral policy. Bearing in mind the regional situation of agriculture across Europe, it is therefore useful to focus on classifications which differentiate between agricultural structures and performance. This can be done based on indicators such as farm production conditions, types of farming, and farm intensity measurement. In addition to these classifications, the specific location of the regions (in Member States or in Accession Countries), and other territorial characteristics closely related with the sector's recent historical experience, regional development issues, socio-economic aspects, and the institutional framework, are of decisive influence for assessment in terms of the SWOT analysis. Issues that constitute a strength for a EU-15 Member State territory might be analysed as a future opportunity in many accession countries where development has still to take place (e.g. tourism). Moreover, the general nature of the statements given in a SWOT table might provoke very different assessments when seen from national viewpoints, as these might have significant influences which outweigh the broad categories presented here. In this regard, the different definitions across Europe for the types of territory analysed have to be taken into account (e.g. for mountain areas, LFAs, and the shape and scope of Objective 2 areas).

The arguments summarised in Table 2.6 have been derived from discussion in the TPG and from other sources where a recent judgement on SWOT aspects was available for the specific types of regions relevant to our exercise. For instance, assessment made in the EU mountain study commissioned by the European Commission, DG Regio (Nordregio 2003) or the various programmes and evaluations of Structural Funds programmes, especially Rural Development Programmes, were a useful source. The particular focus of the International Year of Mountains 2002 has also given rise to intensive debate on the strengths and weaknesses of mountain areas which have been discussed for instance at the European Commission's conference in Brussels (17-18 October 2002) with regard to the challenges for Community policies and mountain areas. Similarly, other territorial dimensions for EU policies have been addressed in recent years, including in particular Structural Funds area development, the role of INTERREG programmes and LEADER actions for border and local development, and the specific problems of coastal regions and islands.

Table 2.6 SWOT Analysis of Territorial Types by Objective, Dynamic/Lagging and LFA Region Types

Territory Type	*Strengths*	*Weaknesses*	*Opportunities*	*Threats*
Structural Funds areas				
Objective 1 areas	• cultural and natural amenities • high tourism attractiveness • production of some agricultural products limited to southern European countries (e.g. olives, some fruits, tobacco)	• weak economic performance • peripheral situations • gap in knowledge base • institutional representation • typical agric. products (horticulture) less supported than crop and livestock production – minor importance of most supported commodities of CAP	• improving accessibility • reduced regional disparities • enhancement of endogenous resources • specific Mediterranean products (quality products in AC) • potential for diversification and rural development activities • new social demands	• convergence at national level vs. persistence of regional disparities • intensification processes and further specialisation • marginalisation and land abandonment • environmental consequences and landscape changes • standardisation of rural life
Objective 2 areas	• strengthening of local industries and services • development of regional strategies • beginning use of diversification potential	• diversity of national/ regional situations and approaches • delimitation at low spatial level (sometimes excludes comparable problem areas) • no clear policy orientation, in particular with little focus on rural needs	• improved linkage between territories • more emphasis on endogenous potential • integrated regional approaches	• less clearly expressed problem profile • no priority for EU support, lack of national attention and/or funds • agriculture (not regional) development perspective • diverse production situations also within member states
Other areas, including Community Initiatives (e.g. LEADER, INTERREG; also URBAN)	• high degree of innovation in pilot programmes (CIs, local action etc.) • due to low public support, strategy development primary • valorisation of local	• very scattered experience • diverse concepts on appropriate territorial level • coordination and cooperation to be developed	• application of experiences from pilot action to different types of regions • new concepts on spatial inter-linkages • integration of agriculture • “rural” not conceived as	• regional competition, lack of inter-regional cooperation • insufficient reflection of institutional stakeholders

	resources (CIs) • flexibility and dynamism • participation given a central role, mixed partnerships (CI) • new social demands well expressed		opposed to "urban" • rising national (and regional) understanding for shifting away from "problem" perspective	
Dynamic / lagging regions				
Dynamic regions	• mix of endogenous and exogenous factors • use of information technology and knowledge base • proximity to centres • strategic use of incentive policies • strong identity of region	• agglomeration problems • intensity of use and environmental problems	• natural amenities • partnership of local stakeholders • extending participation to new social groups	• controversial interests and tensions neglected • danger of "success": Missing new innovations (institutional sclerosis)
Lagging regions	• low production costs • role of place-based economy and policies is evident for problem solving • unspoiled rural amenities • good environmental condition	• low productivity • dependence on a single economic sector • weak economic performance • commuting dependence • raw products (few processing and marketing) • low share of services • weak regional identity	• process of identity building and regional strategies formulation • use of untapped resources • new cooperation and linkages of agric. sector, and rural development • level of education • natural endowments	• incapability to adapt to structural changes • lack of institutional development and social capital difficult to overcome • mono-structured approaches
Less-favoured area (LFA) types				
Mountain areas	• low level spatial differences • tourism (EU-15) • forest use, energy provision (including water) • good environmental	• land of poor productivity and poor potential • depopulation and ageing • decline of regional economy • small scale agriculture	• tourism (AC), and eco-tourism • high degree of biodiversity • increased use of (rural) amenities	• lack of educated labour • peripheral situations • over-exploitation and conflict on local land use • marginalisation and

	conditions • historical culture and landscape heritage	• service provision • accessibility	• quality food products • cooperation • ICT	abandonment
Other LFAs	• agriculture a substantial role in regional economy • less competition on land use (intermediate regions) • centres in accessible distance	• land of poor productivity and poor potential • depopulation • small scale agriculture • partially, overgrazing • weak regional centres and low level of services provision	• high nature value farming systems • diversification and pluriactivity • strengthen multifunctional role • cooperation with local economy	• lack of perspectives, professional strategies • high income disparities • marginalisation • no clear territorial definition
Non - LFAs	• high agricultural production potential • market integration • prosperous regional economy	• rising demand for agricultural land • loss of biodiversity and landscape features	• product specialisation • processing and marketing, extension of value chain • high degree of economic and social integration	• environmental degradation, further loss of biodiversity • decrease of soil fertility • divergent trends for farming management with areas (farm groups) of intensification and stagnation/ or extensification • contesting land uses • new consumer demands against highly intensive agriculture systems

Some of these aspects have been already discussed in the Second Cohesion Report and are reflected in the priorities for the economic and social cohesion. In addition, the different typologies of rural areas, the situation of ecological areas in contrast to more intensively used areas, the relevance of border areas, and areas with specific conditions, such as islands, mountains and peripheral areas, are addressed there as supplementary dimension. Although the Report confirmed the view that some convergence of EU regions has taken place, the need for on-going support for regions with the most lagging economies was underpinned by the still existing economic gaps. Moreover, while cohesion between countries at the national level has advanced substantially, there is concern about weak development at the regional level and the considerable divergence between regional development. Issues outlined in the Second Cohesion Report were therefore:

- Economic activities in the EU are highly concentrated, leaving peripheral areas with low performance, but also negative consequences for central regions by increasing traffic and environmental problems.
- Growth centres for polycentric development have to cope with high internal social and economic disparities.
- Different situations obtain in different rural regions. In addition to the different degrees of rurality across Europe, there appear very different socio-economic developments although in general population and employment growth is higher in rural areas than in urban areas of the EU-15.
- Border regions comprise a quarter of the EU-15 population (which will increase after enlargement), and strategies to cope with the considerable economic differential at borders are central for future regional cooperation.
- Areas with specific features (islands and archipelagos, mountain regions and peripheral regions) are characterised by common physical and geo-morphological characteristics and similar economic disadvantages. However, with respect to integration into agricultural sector activities and rural development initiatives, they have to overcome specific problems to valorise their limited but specific potential.

2.5 The CAP/RDP, polycentricity and new urban-rural relations

Very little of the CAP/RDP is specified in a way related to settlement patterns. Thus it cannot be expected that the Policy will assist in polycentric development, except insofar as it provides support for economic activities much more geographically dispersed than those located mainly in the core area of the EU. Even so, the "northern bias" of the CAP means that it impacts more on several countries which overlap substantially with this core (western Germany, southern UK, northern France, Benelux), and less on others which do not (Greece, Spain and Portugal, southern Italy). Exceptions include Ireland and Denmark, which are major CAP beneficiaries, and Sweden and Finland which have substantial national supports as well as CAP measures.

It is possible that, to extent, by strengthening the economic position of agriculture, the CAP hinders economic development and adjustment in those locations where it impacts more intensively. This would be truer if environmental concerns lead to rigorous restrictions on non-agricultural development in rural areas and/or substantial payments to farmers for environmentally friendly land management, thus enabling them to survive, and to maintain highland prices. In poorer areas, it might be more likely that non-agricultural development would be more easily promoted via re-allocation of farming resources (houses, land, labour, etc.). However, the agri-environmental aspects of the CAP/RDP are still weak, and in their infancy. Thus it is unlikely that, by constraining economic development more in richer areas than in poorer ones, the CAP/RDP aids polycentric development.

In the ESDP, the relationship of CAP and Rural Development Policy to the spatial objectives of territorial cohesion is to be expressed through the increasing focus on polycentric development succeeding the former core-periphery perspective on spatial development. This new approach does not just affect the inter-relation and complementary division of functions between centres, but also its relation to the surrounding rural areas. Urban-rural relations can no longer be thought of as the exchange between static and opposite spatial units. They have to include aspects addressing the specific strengths in each territorial unit and apply a framework which uses complementary opportunities in a synergetic way. However, there is little experience with this new concept, and administrative and cultural contexts do not favour the approach. In particular, this means that cross-border co-operation and a re-examination of tasks at different levels have to be intensified. In this respect, the role of rural areas in a polycentricity model runs the danger of being neglected and seen as a residual category. A deliberate confirmation on the territorial functions of the CAP and rural development within such a spatial concept is therefore required, and should be integrated into the discussion of the impact of polycentricity, particularly strengthening the urban-rural interrelations in the overall concept.

Polycentricity

The notion of polycentricity can be traced back in the literature of the twentieth century on conceptualisation of urban spatial structure (see, e.g. Davoudi 2003). The critique of the growth centre model suggests that urban systems develop in two tiers rather than as one mono-hierarchical system. However, the rising popularity of this concept resulted in Europe in its application in the European Spatial Development Perspective (ESDP) which promotes polycentricity as one of the key components of the integrated spatial development strategy.

The polycentricity concept marks a paradigm shift in thinking about Europe's spatial and economic structure. It replaces the core-periphery model which prevailed before, and which focused on a dichotomy in which a prosperous, economically dynamic core zone contrasts with an under-developed, geographically remote periphery. At EU (and European) level, the core has been variously defined as the 'European Megalopolis', the 'Blue Banana', the 'Golden Triangle' and the 'Pentagon' (Davoudi 2003). The core-periphery pattern has been the key influential perspective in the European regional policy discourse for more than a decade, with considerable influence over mainstream policy targeting. For example, the Structural Fund Objective 1 and the Cohesion Fund as well as specific measures addressing peripheral disadvantage, such as the TENs initiative, various telematics schemes, and the Northern Periphery Programme (Article 10), have taken their prime objective from this territorial concept (Copus 2001). However, the ESDP suggests a shift towards promoting its replacement by a more balanced polycentric system which will "help to avoid further excessive economic and demographic concentration in the core area of the EU" (ESDP 1999, para 67). It also affirms that such a policy will more fully utilize the potential of all regions, and so enhance the overall competitiveness of the EU (and cohesion) within a global context. The ESDP vision is described as follows:

> "The creation of several dynamic zones of global economic integration, well distributed throughout the EU territory and comprising a network of internationally accessible metropolitan regions and their linked hinterland (towns, cities and rural areas of varying sizes), will play a key role in improving spatial balance in Europe" (ESDP 1999, para 20).

With respect to a comparative analysis against earlier concepts for spatial development, Schindegger and Tatzberger (2002) stressed the following main features of the concept:

- Polycentricity is a dynamic concept considering cities not only as supplying centres (Central Places concept / "Zentrale-Orte-Konzept" in German discussion) but rather as *driving forces for the regions*;

- Polycentricity is not only a model of well balanced settlement structure but of *functional networks*. Functional networks refer to networks of existing and developing institutions for example in the area of education, health, culture, leisure time and services which are able to coordinate and co-operate, and concentrate their efforts to produce synergetic effects. They thus achieve viable market structures and are able to maintain economic institutions and services which could not be achieved on their own.
- Polycentricity implies the activation of *endogenous regional potentials* rather than top-down measures of adjustment such as financial assistance and appropriate infrastructure. Such aid was often provided through re-direction of resources from the prosperous areas to the peripheral ones. In polycentric development, the emphasis is shifted towards encouraging regional specialisation that can help firms to compete in global markets (Davoudi 2003:19).
- The polycentricity model should be applied at *several levels or scales,* and implies a hierarchical interrelation of functional structures between the different levels.

Several definitions may be offered for the concept of polycentrism. The classic definition of morphological polycentricity is that a region consists of more than two cities that are historically and politically independent (no or weak hierarchy) and that are in proximity to each other and have a functional relation and complementary role to each other. However, there are other definitions especially when polycentricity is focused on functional economic or political networks (Antikainen *et al.* 2003). In the work of ESPON Project 1.1.1, it is emphasised that spatial proximity is not a condition of polycentricity. Therefore, beside the morphological aspect, there is also the relational aspect of polycentricity, based on networks of flows and co-operations between urban areas at different scales. Considering the opportunities of the countryside as an integral part of regional development, the structure of intra-regional flows and relations is of increasing relevance and hence may be related to proximity.

Within the working definition of Project 1.1.1, polycentricity results from institutional (political) processes, based on voluntary cooperation, and structural (economic, functional) processes, arising from "spontaneous" spatial development (Nordregio 2003, p.3).

Polycentric development should not remain restricted to Europe's larger metropolitan areas because this would not be "in line with the tradition of maintaining the urban and rural diversity of Europe" (ESDP, para 71). The guiding principle is the concept of urban hierarchies that cut across the whole of the EU territory. According to this, the polycentric development can be applied at different territorial scales:

- at the European scale: several metropolitan regions as global integration zones instead of only one prosperous, economically dynamic core zone;
- at the transnational/ national scale: enforcement of a polycentric system of metropolitan regions, city clusters and city networks as well as systems of cities including the *corresponding rural areas* and towns;
- and at the regional/local scale: enforcement of networking and co-operation between small and medium sized towns as *engines for economic development in rural regions*.

However, the concept of polycentricity has so far remained without a precise operational method. ESPON Project 1.1.1 therefore proposes to measure the existing polycentricity of the European urban system by identifying three dimensions of polycentricity: size, distribution in space (location) and spatial interactions (connectivity). The three indicators shall be used to construct a comprehensive indicator of polycentricity. The outline for the proposed method will be presented in the Third Interim Report of ESPON Project 1.1.1 (Nordregio 2003, p.7f.).

The regional/local scale seems to be the most appropriate one to address the issue of the rural areas within the concept of polycentricity. In this connection, the ESDP states that "the small and medium-sized towns and their inter-dependencies form important hubs and links, especially for rural regions. In "problem" rural regions, only these towns are capable of offering infrastructure and services for economic activities in the region and easing access to the bigger labour markets. Towns in the countryside therefore require particular attention in the preparation of integrated rural development strategies" (ESDP 1999, para 93). ESPON Project 1.1.1 underpins the central notion of application which also pays tribute to the wide internal diversity in the ESPON area and implies that there must be room left for decision-making attuned to the actual local situation (Nordregio 2003, p.9). In the case of many rural regions where small towns prevail, and have an important influence on regional performance, the role of this category of towns should also be taken into consideration, at least more than in the definitions/proposals on polycentricity presented until now. A specific EU research project is currently focusing on this very topic (Pettit 2001). This would supplement the approach taken in the analysis of Functional Urban Areas (FUAs) focusing on inter-municipal cooperation (Nordregio 2003, p.12). A wider place-based strategic remit requests the inclusion of the countryside in regional strategic concepts.

However, both the other (higher) levels are increasingly relevant for the development of rural areas. They are more and more affected by large-scale policies which provide important framework conditions for local and regional development prospects. Yet, both national and international, and global, implications can hardly be influenced by the set of instruments of rural development programmes or "rural-specific" targeting.

Rurality itself (though it is increasingly difficult to distinguish "urban" and "rural", Centre for Urban and Regional Studies 2003, pp.26ff.) is therefore perceived as a complementary category, always in connection with an agglomeration. All models relying on centrality perceptions start from the assumption that any kind of development has its source in the centres. The polycentric development suggests that the "critical mass" required can be achieved much more effectively in combinations and inter-related (smaller) centres if co-operative efforts are assumed, and tasks are shared and oriented on the specific strengths and development trajectories of the single centres. The relationship between cities (of every size) and the countryside, especially in sparsely populated rural areas, can provide chances for regions which would not be competitive remaining on their own in their development effort. Towns can offer a certain level of infrastructure and services in rural areas and attract the economic activities necessary for the preservation of the settlement structure and cultural landscape.

This perspective, that an improved understanding of the role of co-operation between towns and countryside is decisive for regional development success, is also expressed in ESDP policy options which were mentioned of particular relevance for the ESPON Project 1.1.2 (Centre for Urban and Regional Studies 2003, p.4). Strengthening the functional network of regions and integrating the countryside might contribute to the economic performance of rural regions which have turned in a number of cases into dynamic areas of growth. It is hence important to consider the development potential of rural areas as a relevant contribution and option for regional development strategies.

Considering the regional level of polycentricity leads also to the point in the ESDP where urban-rural relationships are described as a most useful concept for integrated development and policy making (see below).

Within the ESDP, the concept of polycentricity is used not to explain or analyse an existing or emerging phenomenon, but as a guiding principle for achieving two arguably conflicting goals. On the one hand, the idea is to make the EU economically more competitive in the world market; while on the other hand, it should be made a more socially and spatially

cohesive and equitable place. Whilst this seems to be an attractive and suitable answer to regional disparities in Europe, there are a number of open questions as Davoudi (2002, 2003) points out. Some of these questions are:

- "Is a balanced regional development achievable within the framework of current EU policies?
- If not, what [can] cities and regions do to remain or become competitive?
- Do polycentric urban regions provide a better chance for cities in peripheral regions to become economically more competitive? (Are polycentric urban regions a panacea for economic competitiveness?)
- If so, can policy intervention transform a number of neighbouring cities into a genuine polycentric urban region? (Can a polycentric urban region be planned for?)."

The last two issues seem to be of special interest in the present context. With regard to business competition and networking focusing on the economic competitiveness of firms, the ESDP argues that cities and regions can become equally successful if they develop associational structures in their social relationships. "In smaller towns in less densely settled and economically weaker regions, co-operation between urban centres to develop functional complementarity may be the only possibility for achieving viable markets and maintaining economic institutions and services" (ESDP 1999, para 74). It is also emphasized that the voluntary nature of the co-operation and equal rights between partners are basic principles within the relationships.

However, the building up of institutional networks is a difficult thing to do, and economically weak regions are often lagging behind precisely because of their lack of associational structures. Without long-term external assistance and investment in building up institutional capital and effective governance relations, there seem to be great difficulties in breaking up the vicious circle of lagging regions having less developed networks and co-operation mechanisms. This occurs particularly in regions with historically and politically separate cities with no single administrative authority responsible for the whole area and no place-based identity amongst the partners. Hence, *cross-boundary co-operations* are unlikely to emerge voluntarily and without considerable long-term external assistance (Davoudi 2003; Parr 2003: 15).

With regard to the hierarchial interrelation of functional structures, there are also certain risks, as the Hungarian case exemplifies. In Hungary, in 1971, a National Concept for Development of Settlement Network in Hungary introduced a deliberate hierarchy of regional structures in which local governments were reduced: a third of the settlements lost their independence and were merged to joint local governments of one or more settlements. In a later version of this concept, 62% of the 3000 villages of Hungary were categorised as 'settlements without a sphere of action'; and the inhabitants of such places (18% of the total population) were not only no longer eligible for public investments, but private investments also were not permitted, e.g. refusal by the local government of approving of plans for construction, even reconstruction. Schools were closed, railways cut, shops removed, and local kolkhozes merged with neighbours. These villages lost their economic potential, and a few were emptied, many losing their active population. (As to larger villages and small/middle towns, the concept did not promote polycentric development; but only provided preference to those towns/large villages where the political leadership was influential. There, settlements were artificially merged under the preferred settlement.)

After the failure of communism in 1989, there was a real recovery of these villages. Most of the villages regained their own self-government, schools were reopened, and public services (commuting facilities, telephone lines, water network, sewerage conduit and even gas pipes, etc.) have been extended even in rural areas. However, current developments, due to lack of

local government funds, are impelling to the previous drive. Government actions, e.g. obligatory increase of salaries of public employees (teachers, doctors, etc.) and adjustment to EU standards, might generate high costs, which cannot be met by many local governments. Thus the current shortage of local budget funds has the same effect had the National Concept in the 1970s and 1980s.

One can say that the National Concept is reinforcing the economic restructuring drive several decades ago, but the problem is that the Concept damaged many settlements without making progress in others. Now, when market forces have the same effect, those settlements, which have sufficient budgets to survive, but still can not make significant investments to absorb the population from declining villages.

Urban-rural relationships

Spatial and functional interdependencies between urban and rural areas are not a recent phenomenon although the complexity of their linkages and relationships has often been underestimated. Davoudi and Stead (2002) distinguish three phases in how interdependencies of urban and rural areas can be perceived. The traditional reciprocal exchanges between cities and villages are described in phases one and two. The first phase occurred when the societies of north-west Europe were predominantly rural, and cities' relationships with rural areas were characterized by the consumption of agricultural products by urban dwellers in exchange for the cities' industrial and commercial products. In the second phase, after the Industrial Revolution, the balance of urban-rural relationships began to shift towards an increasing dependency of rural areas on urban economies, in terms of employment and economic development, consumption and capital flows, and dependence on dominating lifestyles and cultural dominance.

Today, in the third phase, urban-rural linkages are moving beyond the largely deplored one-way exchanges. The physical and functional boundaries of urban and rural areas are becoming ever more blurred, while simultaneously the interdependencies are getting more complex and dynamic, containing structural relations between, and functional urban-rural (visible and invisible) flows of, people, capital, goods, information, technology and lifestyles. Waste and pollution also shape the fortunes of the cities as well as the countryside (Centre for Urban and Regional Studies 2002, 2003).

Whilst rural communities may be facing distinct challenges, as may other specific communities, it is now increasingly acknowledged that such challenges cannot be addressed in isolation from their wider context when it comes to policy formulation and programming.

The functional interrelationships of urban areas with their surrounding countryside and the need to move away from the compartmentalization of policies are particularly highlighted in the ESDP by reinforcing the notion that the linkages between urban and rural areas should be based on an integrated treatment of the city *and* countryside as functional and spatial entities with diverse relationships and interdependencies. In the ESDP, 'urban-rural partnerships' are offered as a "new" concept embedded in the concept of polycentricity.

In the Study Programme on European Spatial Planning (SPESP; BBR 2001), several types of urban-rural relationships were developed. One of the results of the SPESP was that urban-rural relationships refer to the functional linkages between urban and rural areas, while urban-rural partnerships could be seen as a second step and refer to initiatives to formulate, adapt and implement policy answering to the needs and requirements caused by various urban-rural relationships.

The following types of relationships were distinguished in the SPESP:

- home-work relationships;

- central place relationships;
- relationships between metropolitan and urban centres in rural and intermediate areas;
- relationships between rural and urban enterprises;
- rural areas as consumption areas for urban dweller;
- rural areas as open spaces for urban areas;
- rural areas as carriers of urban infrastructure (including waste treatment);
- rural areas as suppliers of natural resources for urban areas.

CAP and rural development in a polycentricity framework
Within the context of the above spatial development paradigm, the role of CAP and rural development is often neglected. When assessing the territorial impact of agricultural and rural development policy, it is however important to recall the relationship between CAP and RDP and its combined spatial effects, and to analyse the specific potential effects for these areas.

Does CAP and RDP lead to endogenous development in peripheral regions promoted in polycentric development? (how to measure?) The hypothesis would be that the achievement of a polycentric settlement structure will be greatly assisted if the socio-economic function of rural areas can be stabilized and secured over the long term (Bengs and Zonneveld 2002, p.287)

When assessing the territorial effect of CAP and RDP, we encounter rather contradictory results which we have to analyse against different spatial categories. The simple objective of regional application and orientation of a measure does not automatically mean that it leads to a convergence effect (or the opposite). Thus the markedly diverse application of CAP and RDP requires us to analyse regional effects in detail, and particularly to pay attention to the national level (where CAP application is decided, with significant input from regional levels in some Member States) in the implementation of Community policies. Moreover, effects tend to be different according to type of measure and the degree of its spatial impact.

- Pillar 1 measures: with no support and little incentive towards regional application, these centralised subsidies and top-down measures seem unlikely to enhance the development of self–containment and responsibility.

- Pillar 2 measures: The Agenda 2000 reform provided a new framework for rural development policy, the Rural Development Regulation (Reg. 1257/99), including principles of multifunctionality of agriculture; multisectoral and integrated approach to the rural economy; flexible aids for rural development, based on subsidiarity and promoting decentralisation; and the transparency in drawing up and managing processes. Thus, the preconditions for a more endogenous development seem to be strengthened through these principles. The Regulation offers some new scope for governments to tailor measures more effectively to meet the varied local needs of rural areas, at least from the conceptual level for programming.

In particular, the Article 33 measures in the RDR provide countries with instruments to increase the scope of action of farmers and people in rural areas. However, on average only about 10% of funds of the RDP are foreseen for these measures in the EU, In addition, most of these measures are only eligible for the farm sectors (Dax 2002). Budget constraints are also perceived for the overall structure of Second Pillar measures. In most countries, the stakeholders believe and first assessments reveal (Dwyer *et al.* 2003) that the budget is much too small to adequately deliver against programme objectives in the period 2000-2006 and that a substantial increase will be required for the next programme period, starting in 2007. This perspective was shared by the European Commission assessment in the Mid-Term Review (EC 2002). However, subsequent changes to the reform proposals resulted in very modest modulation effects from Pillar I to Pillar II, and the results will probably be less

relevant than would appear from the prominent place in the discourse of (past and) current CAP reform (Baldock 2003: 100).

Does CAP and RDP promote networking and co-operation within a certain territory to enhance competitiveness?

Encouragement of interaction and co-operation between neighbouring cities and towns and their surrounding rural areas is essential for developing polycentrism in a region. But "co-operation is a delicate flower" that is not easily introduced and that can only survive over the long run if the distribution of benefits bears some perceived and accepted relationship to the distribution of costs between partners, an outcome sometimes difficult to achieve (Parr 2003, p. 15). There are at least two factors which condition the extent of co-operation. One factor is that some kind of identification of the citizen, the householder, the worker, the manager or the firm with the region (territory) within the co-operation should take place, and furthermore that the structure of the local government which should foster co-operation.

As an integrated rural development strategy, LEADER may give an answer to this need for co-operation between rural areas, and between urban and rural areas. LEADER allows experiments with local (territory-based) small-scale actions (pilot projects) using the endogenous potential of the area. The bottom-up approach allows the local community and the local players to express their views and to help define the development course for their areas in line with their own views and plans. LEADER follows an integrated multi-sectoral approach allowing the linkage of several sectors of activity so that the rural innovations programme becomes more coherent and the need for co-operation between different actors is obvious (van Depoele 2003:49f). This positive assessment of the LEADER approach reveals the potential provided through this Community Initiative; in addition, a thorough analysis has to take account also of the limits of local actors' participation, the difficulties of co-operation at local and regional levels, the sectoral compartmentalisation of many regional contexts, and the still limited experience on exchanges. Nevertheless, the approach is significant for the momentum on innovative ideas in rural areas, and could serve as an impetus also to other activities.

Projects within LEADER may therefore support strategies using a polycentric development model enhancing awareness of regional potentials and forcing co-operation and networking between different actors of the agricultural sectors and beyond it. This implies tight co-operation with other (European or regional) programmes which can supplement the networking of actors and increase regional effects. From the territorial perspective of rural development, many Structural Funds programmes (INTERREG, some EQUAL; Objectives 1 and 2) and environmental programmes (LIFE, NATURA 2000; local Agenda 21, …) are quite relevant and provide examples of pilot action in rural areas.

One has to admit that only a few Rural Development Programmes (Reg. 1257/99) have taken up the offer to develop integrated programmes (or to partly integrate some of their measures). The weak application of this principle seems primarily due to the institutional framework of RDP within agricultural policy and the administrative structure which favours the continuation of existing (agricultural) measures within RDP (Mantino 2003).

The question arises as to why the *rural development* programmes were not *orientated towards regions in higher need of support*?

At the time it was devised, the RDR was widely hailed as the new 'Second Pillar' to the CAP, and its implicit orientation towards rural areas was thought of as including substantial regional impacts. However, there are striking national differences in the patterns of planned expenditure on the RDR (and SAPARD measures, too – which can be analysed as the similar programmes for the accession countries). These programme structures broadly reflect

historical allocations to similar measures in the past, which have not been fundamentally altered by the new programmes.

There are marked differences between applications by countries, from those for whom the new Programme is clearly seen as a tool to promote environmental land management, to those for whom it is essentially about modernisation of agriculture. It appears that the richer regions of the EU (primarily northern European countries) tend to prioritise agri-environmental measures and LFAs, whereas the poorer regions prioritise agricultural development. As the poorer countries do not dispose of the same amount of national (regional) budgets to provide co-financing as the richer ones, the outcome of spending patterns largely reflects the situation prior to 1999 and still favours economically leading countries (Dwyer *et al.* 2003).

Polycentric development promotes the enhancement of the *accessibility of urban and rural areas through better infrastructure* on the one hand, and the improved assignment of *functional tasks of urban-rural relationships* on the other. Is there any element in the CAP and RDP regulations which addresses this issue? What might be the probable outcomes of such promoted accessibility for rural areas?

As most measures of CAP and the RDP are conceived horizontally and encompass all the agricultural area of the countries, there is hardly any focus on geographical differentiation or assessment of the impacts of infrastructure development on the sector. Accessibility is to be split into different aspects and has to be analysed on the targets to be accessed. For large parts of the programmes, there is a particular lack in coherence between RDR funds and other EU policies and funds. The dominant picture is also that of relatively weak integration between measures, and between these regulations and other national and regional rural funding. The continuing preoccupation of many RDR programmes with agriculture and the very restricted discussion of rural area problems recall the need to widen the scope of measures and address these concerns in future programmes. An integration approach would inevitably require discussions in the process of plan development of how to assign the functional tasks of urban and rural areas, and how to deal with these tasks in the proposed programme measures. In such a strategic concept, it would be important to view the chances of rural areas in the framework of a re-designed spatial development policy. With about 40% of EU population living in rural regions, covering about 85% of the European Union's area, (EC1997, p.8) this additional perspective to the polycentricity concept is of quite considerable relevance for spatial and cohesion policy.

Chapter 3

Findings from the Territorial Impact Assessment of CAP and RDP

3.1 Introduction

This chapter reports the first results of the territorial impact assessment (TIA) of the CAP and RDP in the European Union. Analysis is based on an application of the TIA method described in Chapter 1. In particular, the results are based on a statistical analysis of indicators and data at NUTS 3 level over the period 1990 to 2000, augmented by findings from an EU-wide review of literature. The absence of a realistic counterfactual or "without CAP" scenario means that analysis is confined to considering how support is/has been distributed and implemented between areas of Europe and the way in which *changes* in the CAP have impacted on regional economies in different ways.

A key factor that needs to be borne in mind when considering the results is that the CAP is but one of many external factors influencing farm-level decisions and agricultural and rural development. At this stage of the project it is difficult to separate out, from all of the other factors, those changes which can be attributed solely to the existence of the CAP and RDP. The second year of the project will explore in more depth the causal relationships between the incidence of CAP and RDP and different impacts across European territory.

A set of hypotheses on the territorial impact of the CAP and RDP was presented in Project 2.1.3's Second Interim Report, grouped into categories based on our classification of CAP and RDP measures. Such a grouping was made on the grounds that each of type of support (market price support, direct income payments, agri-environmental payments etc.) has played a distinct role within the CAP reform process and may have given rise to territorially distinct effects. The structure of this chapter is based on this approach. In particular, while Section 3.2 considers the CAP and RDP in general, sections 3.3 and 3.4 focus on the territorial impact of Pillar 1 and Pillar 2 instruments, respectively. The final section of the chapter considers preliminary evidence in relation to the territorial impact of agricultural policy in the CEECs.

3.2 The CAP and RDP in general

3.2.1 The Distribution of CAP Support

An initial hypothesis developed by the project team was that **the incidence of the CAP is not consistent with the economic or social cohesion objectives of the EU**. To test this proposition, the level of Pillar 1 and Pillar 2 support received by farmers was regressed against GDP per inhabitant, unemployment rates and population change in each NUTS 3 region. In this and subsequent analyses, Pillar 1 support is defined as the sum of the value of market price support (MPS) and direct income payments received by farmers.

MPS data were derived from the apportionment of OECD E.U.-level data to NUTS 3 regions, while the value of direct payments was derived from the FADN database apportioned to NUTS 3 regions. The level of Pillar 2 support accruing to each NUTS 3 region was estimated in two ways:

- Firstly, by the sum of the value of environmental subsidies and LFA payments received by farmers again derived from the FADN database and apportioned down to NUTS 3 level;
- Secondly, through the apportionment of national Rural Development expenditure, taken from Dwyer *et al.* 2002).

Neither approach is entirely satisfactory – the first because it is based on sample data, the second because it is based on budget figures and it is not clear how well these reflect actual expenditures. However, using both measures in this and subsequent analyses provides a better basis for understanding of the territorial impact of Pillar 2 policies. The methodologies used for the apportionment of MPS, FADN and rural development data to NUTS 3 level are described in Appendices 3.1, 3.2 and 3.3 respectively.

To allow for differences in the scale of NUTS 3 regions, the level of support per agricultural work unit (AWU) and per hectare of utilisable agricultural area (UAA) were taken as the basic units of analysis. The year investigated was 1999, prior to the Agenda 2000 reforms but well into the period following the MacSharry reforms of the CAP.

Table 3.1 reports summary results in relation to indicators of economic cohesion (GPD per head and unemployment rates). Full regression results are available on request.

Table 3.1 The relationship between CAP support and economic cohesion indicators, 1999

	GDP per inhabitant	Unemployment rates
Pillar 1 per AWU	-	-**
Pillar 1 per ha	+**	-**
Pillar 2 per AWU (FADN)	+**	-**
Pillar 2 per ha (FADN)	+**	-**
Pillar 2 per AWU (RD)	-	-**
Pillar 2 per ha (RD)	-**	-**

Note: ** means significant at the 5% level

In all but two cases, the results were statistically significant. Although the magnitude of association between levels of support and GDP levels was small, the results indicate that in 1999 both total Pillar 1 and total Pillar 2, as estimated from the FADN database, were distributed in such a way that they tend to benefit richer regions and also regions with lower unemployment rates. They thus support the hypothesis that the incidence of CAP support is not consistent with the economic cohesion objectives of the EU. The findings support the Second Cohesion Report which asserts that the least prosperous regions which account for around 20% of the EU population get less than their share of CAP support (European Commission 2001). The only result which is consistent with the higher level EU objective of economic cohesion relates to Pillar 2 support as measured through the apportionment of national rural development expenditure, although even here the results are ambiguous with higher support accruing to regions with lower unemployment rates.

In the absence of a more appropriate way of measuring social cohesion, the relationship between the CAP and social cohesion objectives of the EU was investigated by regressing the level of Pillar 1 and Pillar 2 support against the population change in each NUTS 3 region from 1995 to 1999, where the latter was weighted by the level of population in each region to allow for scale effects. Again the results (summarised in Table 3.2) suggest a conflict between the strategic objective of improving social cohesion and the distribution of Pillar 1 support: at the EU-level, CAP pillar support in 1999 was higher in areas where population growth had been most rapid. The results in terms of Pillar 2 support are more ambiguous with only one estimate significant. However, even in this case, it appears the CAP is not contributing to cohesion with levels of support estimated from funds for RD measures positively associated with the rate of population growth a region has experienced up to that date.

Table 3.2 The relationship between CAP support and population change 1995-1999

	Population change 1995-1999
Pillar 1 per AWU	+**
Pillar 1 per hectare UAA	+**
Pillar 2 per AWU (FADN)	-
Pillar 2 per hectare UAA (FADN)	-
Pillar 2 per AWU (RD)	+**
Pillar 2 per hectare UAA (RD)	+

Note: ** means significant at the 5% level

While the contradiction between the outcomes from the CAP as a predominantly sectoral policy and the cohesion objectives of the EU may have been justified in the early decades of the CAP (on grounds of ensuring food security and economic efficiency), this is no longer the case. The agrarian concept of rurality that underpinned the CAP in the 1960s and 1970s is becoming less and less appropriate for the emerging context of a "post-industrial" European rurality (Sotte 2003) and the limitations of the traditional CAP are especially problematic in the context of EU enlargement (Buckwell *et al.* 1995).

There are many potential reasons underlying the observed distribution of support. Firstly, as detailed in Chapter 2, CAP objectives have been narrowly focussed on sectoral issues, such as improving farm productivity, ensuring certain characteristics of food markets and, more recently, environmental goals rather than higher level cohesion objectives. The policy instruments that comprise the CAP, particularly those falling into Pillar 1 support, simply reflect this narrow sectoral focus. The findings relating to the distribution of Pillar 2 support are more paradoxical.

Various reasons have been proposed to explain why Pillar 2 instruments favour the richer areas of the EU. These include:

- differing National priorities,
- the uneven allocation of RDR funds, and
- difficulties co-financing RDR expenditure in poorer countries (Dwyer *et al.* 2002)

AgraCEAS (forthcoming) also argue that the requirement of Member State co-financing of Pillar 2 measures has influenced uptake of the different measures. It follows that, even allowing for the different natural production conditions and the high variation in agricultural structures, the impact of Pillar 2 measures will be differentiated across EU space.

While the results above are based on an EU-wide analysis, a similar pattern holds in some member states. For example, INEA (2002) has mapped the regional distribution of product support in Italy and found a wide spatial variation, with the overall effect working clearly against cohesion objectives (p.238). Support per farm unit is highest in the Northern areas, notably the favoured area of the Po valley, and in some central regions, and is least in the poorer south.

The changing nature and demands placed on rural areas means that the relationship between CAP support and prosperity of regions is unlikely to stay constant. For example, Lafferty *et al.* (1999) showed that in the 1970's the southeast of Ireland was regarded as one of the more prosperous regions, in part due to its strong agricultural sector. At this stage it also received high levels of CAP support. By the 1990s, while still in receipt of above average CAP support, the region was no longer one of the most prosperous since its total economy has not adapted as well as other regions in Ireland.

Most country-level analyses, however, focus on the extent to which the distribution of CAP support accrues to the richest/poorest farmers rather than the richest/poorest regions. For instance, a study by BMLFUW showed that in Austria, overall agricultural support is not going primarily to farmers with low incomes, but rather to lowland farms with higher farm incomes (BMLFUW 2000*b*). Further country-level analyses of the consistency between the CAP and broader cohesion objectives would be valuable.

3.2.2 The influence of farm types

A second key hypothesis developed by the project team was that **the impact of the CAP on regions in Europe is mainly visible through the CAP's impact on farm types** where farm types are differentiated by both economic size and enterprise mix**.**

Considering first the relationship between farm size and CAP support, it is widely recognised that CAP Pillar 1 support accrues disproportionately to intensive large-scale farmers. This is because to date it has been coupled (either directly or indirectly) to the level of output produced by a farmer. Analysis of the data at NUTS 3 level confirms that distributional effect. In particular, Table 3.3 reports the findings from a crosstabulation of Pillar 1 support per ha UAA against the average farm size in each region measured in European Size Units (ESUs). Information of the latter was taken from the FADN database apportioned to NUTS 3.

Both CAP support and farms' size were banded into five categories on the basis of quintile values. Thus for example, the regions with support levels smaller than or equal to the first quintile formed the first group, group 2 those NUTS 3 with values above the first quintile and smaller than or equal to the second quintile, etc. The analysis focuses on 1999.

Table 3.3 Crosstabulation of per hectare Pillar 1 CAP support in relation to farm economic size, 1999 (showing row percentages)

	Farm size classification					
Level of Pillar 1 support	Group 1 (Smallest)	2	3	4	Group 5 (Largest)	**Total**
Group (lowest)	89	45	47	9	20	210
	42.4%	21.4%	22.4%	4.3%	9.5%	100.0%
2	26	32	56	23	73	210
	12.4%	15.2%	26.7%	11.0%	34.8%	100.0%
3	32	39	51	41	46	209
	15.3%	18.7%	24.4%	19.6%	22.0%	100.0%
4	43	68	26	49	24	210
	20.5%	32.4%	12.4%	23.3%	11.4%	100.0%
Group 5 (highest)	20	26	30	87	46	209
	9.6%	12.4%	14.4%	41.6%	22.0%	100.0%
Total	210	210	210	209	209	1048

Chi-square tests of joint association confirm an association between the distribution of Pillar 1 support measures among NUTS 3 regions and average farm size: regions with larger farms received higher levels of CAP support. In particular, Table 3.3 shows that in 1999, 42% of regions receiving the lowest level of support fell into the smallest farm size category while 64% of those regions receiving the highest level of support fell into the two largest average economic size categories.

The same crosstabulation analysis was repeated for Pillar 2 support. As shown in Table 3.4, the distribution of Pillar 2 support was found to be far less dependent on farm size. In this case, a very large proportion (77%) of those in the highest support group fell into the smallest two farm size categories.

Table 3.4 Crosstabulation of Pillar 2 CAP support measures in relation to farm economic size, 1999 (figures in italics show row percentages)

	Farm size classification					
Level of Pillar 2 support	Group 1 (Smallest)	2	3	4	Group 5 (Largest)	**Total**
Group (lowest)	44	8	35	81	44	212
	20.8%	3.8%	16.5%	38.2%	20.8%	100.0%
2	10	12	43	80	67	212
	4.7%	5.7%	20.3%	37.7%	31.6%	100.0%
3	35	25	69	34	49	212
	16.5%	11.8%	32.5%	16.0%	23.1%	100.0%
4	50	76	43	12	31	212
	23.6%	35.8%	20.3%	5.7%	14.6%	100.0%
Group 5 (highest)	73	91	22	5	22	213
	34.3%	42.7%	10.3%	2.3%	10.3%	100.0%
Total	212	212	212	212	213	1061

Note: Estimates of Pillar 2 support in this case were based on the apportioned funds for RD measures. The alternative, FADN based estimates of Pillar 2 support revealed a similar relationship.

Since large farms are mainly concentrated in continental Europe while small farms are more prominent in southern regions of the EU, the results reported in Table 3.3 suggest an uneven territorial distribution of Pillar 1 support across Europe. Even within countries, differences in the distribution of support can be easily detected. For example, in Germany there are large differences between different Laender regarding the average farm size. In 1997, farm size differs between averages of 24.7 ha in the so-called Alte Laender and 201.7 ha in the Neue Laender and between 17.9 ha in the Land "Baden-Wuerttemberg" (in the southwest) and 272.2 ha in "Mecklenburg Vorpommern" (in the northeast) (Statistisches Bundesamt 2003). The role of CAP in regions with larger farm sizes, such as "Mecklenburg Vorpommern", is much higher than in regions with smaller sizes of farms, such as "Baden-Wuerttemberg".

However, the situation is more complex because the level of support varies between commodities and, in general, does not differentiate between production conditions. Taking this into account, Table 3.5 reports the results from an analysis of the relative importance of different factors on the distribution of support across Europe. The key explanatory variables investigated were farm size, land cover (as a proxy for the productive capability of the land and farm type) and the peripherality of the region. The latter was based on the most recent index developed by IRPUD for the EU-15. The lower the index, the more peripheral the region.

Table 3.5 Agricultural factors influencing the level of CAP support (figures in brackets show absolute t values).

Dependent variable	Pillar 1 per AWU		Pillar 1 per ha UAA		Pillar 2 per AWU		Pillar 2 per ha UAA	
	Beta		Beta		Beta		Beta	
(Constant)		14.34		8.43		13.73		11.97
Economic size (ESUs)	0.235**	6.99	0.341**	9.94	-0.226**	-5.96	-0.240**	-6.46
% irrigated	-0.052	-1.74	0.090**	3.01	-0.167**	-5.00	-0.154**	-4.72
% rice	-0.013	-0.51	0.015	0.56	0.020	0.68	0.018	0.62
% vine	-0.192**	-7.09	-0.117**	-4.25	-0.104**	-3.40	-0.052	-1.75
% fruit	-0.158**	-5.58	-0.075**	-2.62	-0.051	-1.59	-0.014	-0.46
% olive	-0.131**	-4.25	0.072**	2.30	-0.087**	-2.51	0.052	1.52
% pasture	0.118**	3.95	0.133**	4.39	-0.017	-0.51	-0.085**	-2.56
% annual crops	-0.051	-1.75	0.069**	2.34	-0.062	-1.89	-0.025	-0.79
% complex cult.	-0.060**	-2.08	0.309**	10.61	-0.048	-1.48	0.050	1.58
% natural veg.	-0.159**	-5.68	0.053	1.87	-0.171**	-5.42	-0.121**	-3.90
Peripherality ind.	0.030	0.97	0.246**	7.78	-0.331**	-9.46	-0.337**	-9.81
GDP per capita	-0.236**	-7.94	-0.050	-1.66	-0.053	-1.58	0.062	1.89
Unemploy. rate	-0.062	-1.64	-0.346**	-9.08	-0.170**	-4.04	-0.250**	-6.05
n	921		919		930		931	
Adj. R squared	0.377		0.358		0.201		0.232	

Note: ** means significant at the 5% level

The results show that, controlling for other factors, average farm size is a significant factor in explaining the level of CAP support received by NUTS 3 regions. In the case of Pillar 1 support, regions with larger farms get higher levels of support. In contrast, higher levels of Pillar 2 support tends to go to regions with smaller average farm sizes.

Turning to the land cover variables, as anticipated, these are shown to play a more significant role in explaining the distribution of Pillar 1 support than they do for Pillar 2 support. For example, seven of the land cover types included in the analysis were significant factors in explaining Pillar 1 support per hectare UAA, as compared to only three land cover types which were significant at the 5% level in explaining Pillar 2 support per hectare UAA. In the case of Pillar 1 support per ha UAA with positive and significant coefficients for the percentage of land accounted for by irrigated land, annual crops, complex cultivation and pasture variables, negative coefficients estimated for the percentage of land covered by vine or fruit. This reflects the varying level of MPS given for different agricultural products.

A key finding for this study was that the location of a region (as measured by an EU-wide peripherality index) also played a significant role in explaining the level of CAP support received by a region in 1999. In the case of Pillar 1 support, decreasing peripherality (increasing accessibility) was positively associated with higher levels of support: after controlling for farm size and land cover, the more accessible regions in the EU received higher levels of Pillar 1 support. The opposite effects for Pillar 2 support were found: the least accessible regions received, on average, higher levels of support. From a spatial policy perspective, these findings confirm that although Pillar 1 measures are aspatial, they have very discernible spatial impacts.

The level of per capita GDP is shown to become an insignificant influence on the level of Pillar 2 support once other factors are accounted for. In other words, the relationship shown in Table 3.1 above is explained by the way in which a combination of farm-related variables vary across space. While it still appears significant in the case of Pillar 1 support, the nature of association has changed as a result of accommodating other factors in the analysis:

focusing on Pillar 1 support per ha UAA, once the influence of farm size and enterprise mix is allowed for, there is a small negative relationship between per capita GDP and support levels. However, the coefficient associated with unemployment rates continues to suggest that the distribution of support is not entirely consistent with higher level EU cohesion objectives.

The review of other country-level studies supports the hypothesis that the impact of the CAP is highly differentiated by farm type. For example, in Austria, average support levels are highest for farms specialising in field crops that are concentrated in the lowlands, particularly in northeast of Austria. These farms have support levels at least 50% higher than all other types of farming. There is a strong correlation between economic size of holding (expressed in ESUs) and farm income levels (BMLFUW 2000*b*). Similarly Lafferty *et al.* (1999) show that in Ireland, the greatest impacts of the CAP occur in the southeast and southwest where, on average, farms are largest and there is a higher level of specialisation on dairying and cereals.

As a result of the various reforms of the CAP, and, in particular, the growing importance of Pillar 2 type measures, the intra-sectoral distribution of support is changing. The Second Cohesion Report (European Commission 2001) notes that the shift from market price support to direct income payments following the MacSharry reforms did not radically alter the distribution of support between European regions. However, the report highlights that the introduction of direct income support has helped to weaken the relationship between the level of aid to regions and agricultural performance and this should, in turn, lead to a more equitable distribution of aid between regions.

3.2.3 Structural change

In relation to structural adjustment, the project team hypothesised that **the CAP has affected the scope of structural change in agriculture but this has been highly differentiated across space.** In particular, it was believed that structural adjustment is faster in areas of higher agricultural potential because of technical bias and the greater market orientation of agriculture in more favoured regions.

Analysis of NUTS 3 data between 1990 and 1998 did not find any significant relationship between the level of Pillar 1 and Pillar 2 support and the rate of structural change in the sector. It also failed to find a relationship between the rate of structural change and general economic growth in a region. Both results may be due to the limited time period over which data was available. The literature review provided a richer source of information on this issue, suggesting that certain policy instruments have specific impacts on the nature and rate of structural change in the sector. For example, the tradability of milk quotas has in some countries (including the UK and Ireland) encouraged further concentration in fewer and larger units in the core areas where the greatest sources of comparative advantage exist (Crowley and Walsh 2003). In other countries, for example Austria, milk quotas have been used as a policy mechanism to keep farming in mountain areas. Here, although there have been considerable regional shifts in milk production (towards the fringe of mountain areas where production conditions are more favourable and structures larger), agricultural policy remains an important influence on structural change in the sector.

Similarly, the farm investment scheme has been shown to have led to very different effects in different regions, partly because the way it has been implemented varies substantially between Member States, and partly due to the influence of a number of constraining factors on the scheme which have also varied between regions. These constraining factors include the operation of the land market and the level of interest rates. AgraCEAS (forthcoming) argue that in countries with small farms and a high proportion of permanent crops, the Farm Investment scheme has been used primarily to accelerate the pace of structural change through farm consolidation and economic intensification. In contrast, in Member States with a

high proportion of small and medium sized farms, relatively low agricultural productivity and a high proportion of grazing livestock, the scheme has been used to encourage adding value and addressing animal welfare issues. Finally, Member States with large farms and productive land have been less involved with the scheme.

The manner and rate at which structural change is occurring varies widely across Europe. In Spain for example, the decrease in the number and increase in size of farms has been more intense in the nineties than in precedent decades as a result of EU accession (Arnalte 2002), with farms adapting to the new scenario and increasing their competitiveness. Following the MacSharry Reforms, the trend to intensify towards further farm concentration has continued particularly in the more productive and competitive Spanish regions. In another study of Spanish agriculture, Mora and San Juan (2003) investigated the evolution of agricultural product specialisation at farm and county level, in this case from 1979 to 1997, and found that regions which were initially more specialised in export-oriented products have shown the largest increase in specialisation. Similarly in Austria, structural change has been most rapid in the more favoured regions (Dax 1995). This was partly supported through policy mechanisms aimed at maintaining existing structures in mountain areas and less-favoured areas. However, the key issue emerging from the literature review is that the CAP itself is not the sole driver of structural change. Various other factors play a role including technical change, combined with the physical and socio-economic context.

In Ireland, historical patterns of land ownership and the attachment of families to their farms may have slowed down the process of adjustment (Commins 1990). In particular, farms in the south and east where production conditions are most favourable have increased in size through purchase and/or through leasing of additional land. In the predominantly smaller farming regions average size has also increased, however in these areas it is often as a result of consolidation of land parcels held by different members of the same kinship network. The demise of some farms which facilitates an increase in the average size of remaining units cannot be ascribed solely to the CAP especially in the weaker farming areas. It is frequently associated with social traditions that resulted in a significant number of landowners remaining unmarried.

In the UK, while there has been a growth in large farms, there has also been an increase in the number of very small agricultural holdings (Scottish Affairs Committee, vol III 1996, Howe *et al.* 1996). This "duality" in the sector is predicted to increase.

"On the one hand there will be 'fully commercial' farm businesses characterised by modern-technology-based large-scale operations, able to survive by an exclusive focus on producing for agricultural markets and competitive at world market prices, and producing the bulk of the nations' agricultural output. Against this will grow an increasing sub-population of part-time farms in which agricultural production will be a serious, often crucial but not exclusive element of their economic operations and which are dependent on other income sources for their continued survival (whether accessory business operations or earnings from off-farm employment)."

Howe *et al.* 1996

The future influence of the CAP will depend in part on the extent to which regions are dominated by commercial farms, part time farms or a combination of both.

3.2.4 The CAP and spatial patterns of development

The project team hypothesised that **the relative impact of the CAP in remote rural areas (compared to what would most likely have happened otherwise) may have been more significant than in accessible rural areas due to the fact that the latter are influenced amongst other things, by contiguous urban developments (near to market centres).**

To provide some background data for this hypothesis, the distribution of CAP support between different types of regions in Europe was analysed where the regional typology was based on that used by the OECD. In Table 3.6 the share of support received is contrasted with the share of AWU and UAA in each region type.

Table 3.6 The incidence of CAP support by OECD region

	% of total				
OECD region type	AWU	UAA	Pillar 1	Pillar 2 (FADN)	Pillar 2 (RD)
Rural - leading	16	21	17	23	22
Rural - lagging	25	34	31	29	28
Intermediate - leading	13	13	14	14	15
Intermediate - lagging	23	19	18	19	21
Urban – leading	13	8	11	9	8
Urban – lagging	9	5	8	7	5
TOTAL	100	100	100	100	100

The results show that, as expected, predominantly rural regions receive the lion's share of total CAP support (predominantly rural regions receive 48% of total Pillar 1 support and either 50 or 51% of Pillar 2 support depending on whether it is estimated from FADN or from RDR fund data. Lagging rural regions receive a substantially higher share of total Pillar 1 support than their share of the agricultural work force would suggest, while both leading and lagging rural areas get a disproportionate level of Pillar 2 support, at least in relation to their share of the total AWUs.

Another linked hypothesis concerning the CAP and rural development that was investigated was that **changes in the levels of farm household pluriactivity are more strongly associated with variables reflecting the strength of the local economy than the level of CAP support.**

In an EU-wide study of farm household pluriactivity, Bryden *et al.* (1993) stress that it is the combination of internal and external factors that ultimately determines whether a farm household will be pluriactive. Internal factors include size of holding, farm type, land quality, the age and number of family members, the stage in the family life cycle, educational background and farm location in relation to markets. External factors include the availability of local non-agricultural work and the presence or otherwise of local and national policies influencing household behaviour (e.g., planning regulations, inheritance laws, taxation policies, etc.). Each combination results in a different set of opportunities and constraints and a different set of household values, attitudes and goals. Pluriactivity is consequently a highly complex, diverse process.

The relative importance of the spatial variables on farm pluriactivity are widely debated in the literature. In a study based in the Grampian region of Scotland, Edmond *et al.* (1993) found no evidence of a relationship between access to labour market opportunities and the presence of off-farm (as opposed to on-farm) activities at sub-regional scale. The authors thus argue that household preferences and responsibilities may be more important determinants of off-farm work than proximity to labour market opportunities or CAP considerations. This argument was supported by a study comparing the take-up of pluriactivity in different regions of Scotland (Edmond and Crabtree 1994). However, evidence from Ireland is supportive of the project team's hypothesis. The highest levels of pluriactivity are either in peri-urban areas or in high amenity areas where there are strong 'pull' factors encouraging members of farm households to obtain additional sources of income. In contrast, pluriactivity levels tend to be

low in rural areas that are not accessible to alternative sources of employment. In weaker rural areas this tends to lead to higher levels of out-migration (Cawley *et al.* 1995; McDonagh and Commins 1999).

The German experiences are similar, with higher levels of pluriactivity tending to occur in areas proximate to development centres. For example, in the region of Munich, farmers have a lot of alternatives to traditional agriculture. Farm niche markets include, for example, ecological farming, tourism on a farm, horseback-riding (*Reiterhoefe*), and a wide variety of job opportunities in other sectors. This is typical for well-developed regions with a small unemployment rate and a high purchasing power. In less favoured regions without alternatives, trends of pluriactivity can hardly be detected (Dortmund 2003).

Farm pluriactivity levels are particularly high in Austria. The highest levels are in areas of small-scale agricultural structures with long tradition of diversification activities and in mountain areas which also had a traditional combination of agricultural, forest, processing and community services activities. In recent decades the valuation of these areas as high amenity areas has helped to compensate for the loss of agricultural production through an increasing involvement in tourist activities and other local employment. Thus in this case, it is not the pull of contiguous urban centres that is encouraging pluriactivity as much as new leisure-based opportunities that are emerging in rural space.

More generally, the literature review indicated that rates and patterns of farm household pluriactivity vary widely both between and within member states and the CAP ranks fairly low as a factor driving change. Regression analysis backed this up with findings that the relationship between the level of CAP support received by a region and extent of part time farming was not statistically significant. Interestingly, the strength of the regional economy was found to be negatively related to rates of part time farming, in other words, part time farming was more prevalent in poorer regions of the EU than richer regions.

3.2.5 Externalities

Since the early 1980s it has been frequently alleged that the CAP has created or at least has contributed to various different negative effects for society. The project team hypothesised that **the unintended side-effects of the CAP have a strong territorial dimension**.

The two negative externalities that came through most clearly in the review of literature were:

- Ecological effects including a decrease of biodiversity and landscape quality; and
- Social effects in particular population change in certain farmed areas.

In relation to the first of these areas, many sources argue that, by encouraging intensification and specialisation, the CAP has threatened the habitats of flora and fauna. For example, in Germany, it is estimated that:

- 29 % of the fern plants and flowering plants (*Farn- und Bluetenpflanzen*)
- 36 % of the bird species (*Vogelarten*)
- 47 % of the aboriginal mammal species (*einheimischen Saeugetierarten*)
- 58 % of the amphibian species (*Lurcharten*)

have been lost as a result of the intensification of agricultural production methods (Loesch and Miemberg 1986, Voegel 1993). Similarly, in Ireland, the range of bird species has been reduced in areas of intensive farming. The most commonly cited example is the retreat of the corncrake following the switch from hay to silage as winter fodder for livestock.

The impacts on landscape quality that have been associated with intensification include:

- Removal of field boundaries (which also includes loss of habitats for flora and fauna);
- Destruction of archaeological monuments; and
- Detrimental impacts on the environment such as pollution of river water, eutrophication of lakes, and significant contributions to methane gas emissions (Stapleton *et al.* 2000).

A study on the financial costs of UK agriculture as a whole in 1996 found that the total cost of all environmental externalities (including those associated with human health) is equivalent to 13% of the total average gross income of the sector in the 1990s (Pretty *et al.* 2000). Like other studies, the author identified very different environmental costs associated with different types of farming. Given the distinct geographical pattern of farm types across Europe, this finding supports the hypothesis that negative environmental effects of agriculture are territorially specific. However, whether these can then be attributed to the CAP is unclear.

The literature search found far less evidence in terms of the social impact of the CAP. In relation to the level of population in rural areas, two opposing arguments were identified. The first argument is that CAP support payments have helped to stem the outflow of labour from agriculture and, in doing so, have reduced the pace of rural depopulation in some remoter regions of the EU. In other words, it is argued that some CAP support mechanisms have enabled more farms to survive than might have happened in the absence of the policy. This is especially the case in weaker rural areas where opportunities for alternative forms of development are more restricted. The second opposing argument is that by encouraging intensification, the CAP has accelerated the outflow of workers from the sector and has led to a negative social impact in some regions.

In relation to the first argument, detailed studies conducted in other areas do not support the argument that agricultural policy helps stem population outflows from remoter rural areas. For example, Goetz and Debertin (1996) found that in the US rural counties receiving larger farm program support payments as a share of total marketing receipts were more likely to have higher population losses after controlling for other economic variables affecting population migration from rural areas, such as demographic variables, earnings level and employment rates. An equivalent EU-wide study would be useful to assess whether the same holds true in the case of the CAP.

In relation to the second argument, population declines even in intensively farmed areas have, in many cases, been more counterbalanced by rural-inmigration. Even though it is possible to identify some structurally weaker rural areas (such as in the northwest and part of the west of Ireland) where a decline of the agricultural population has occurred without any compensating gains associated with the rest of the economy, it is difficult to attribute this solely to the CAP.

3.3 Pillar 1 measures

Single variable regression analysis was sued to contrast the spatial incidence of MPS and direct income payments. The results, which are summarised in Table 3.8, suggest that of the various elements that constitute Pillar 1 of the CAP, only market price support was distributed in a manner inconsistent with economic cohesion objectives. Crop-related direct income payments tended to be higher in areas with a low GDP per capita and with high unemployment rates. A similar pattern is evident in relation to direct income payments associated with livestock production (although this relationship is only statistically significant when considering support per UAA).

Table 3.8 The relationship between MPS, direct income payments and economic cohesion indicators, 1999

	GDP per inhabitant	Unemployment rates
MPS per AWU	+	-**
MPS per ha UAA	+**	-**
Direct payments to crops per AWU	-**	+**
Direct payments to crops per ha UAA	-**	+**
Direct payments to livestock per AWU	-	-
Direct payments to livestock per ha UAA	-**	-

Note: ** means significant at the 5% level

This analysis supports the argument that the introduction of direct payments has led to a more equitable distribution of support between regions of Europe (European Commission 2001). However, Buckwell (1996) argues that direct income payments remain problematic for two reasons. Firstly, the levels of payments have not been sufficiently linked to the income reductions associated with the lowering of commodity price supports. This has led in some circumstances to over compensation of some groups of farmers. Secondly, there has not been a clearly articulated rationale to support an indefinite continuation of such payments for a once-off policy change.

The remainder of this section considers additional hypotheses associated with the territorial impact of each of the Pillar 1 support instruments.

3.3.1 Market Price Support

Market price support was, until the 1990s, the primary policy instrument of the CAP and it remains important for several commodities. The main hypothesis tested by the project team in relation to market price support was that **CAP market price support contributes to the intensification processes of agricultural production.**

Farmers producing the highest levels of output benefit most from market price support. As a result, it is widely believed that the policy has contributed to intensification, specialisation and concentration of agricultural production in Europe.

The intensity and scale of farming operations are influenced by many factors other than market price support. These include the quality of the environmental resource base (local climate and soil characteristics), farm size, the level of capital investment and the spatial diffusion of innovations. None of these factors are distributed uniformly across the regions. As a result, some regions have distinctive sources of comparative advantage for specific types of agricultural production. In such a scenario, it is highly likely that, even in the absence of the CAP, a trend towards increasing specialisation and intensification would have occurred leading to an increase in the regional concentration of production. That said, in territorial terms, more favoured regions (in terms of productive potential) will have been able to take greater advantage of market price support.

An analysis was undertaken to test whether the intensity of agricultural production in each NUTS 3 region is positively correlated with the incidence of market price support, having controlled for different enterprises and farm size. The intensity of agricultural practices was approximated using the Farm Net Value Added per hectare of UAA taken from the FADN database and apportioned to NUTS 3 regions. The results reported in Table 3.9 confirm that

the spatial incidence of market support payments is positively related to the intensity of farming in regions.

Table 3.9 Factors influencing the level of Farm Net Value Added per ha

Dependent variable	Farm Net Value Added per Ha	
	Beta	t
(Constant)		2.78
MPS per Ha	0.249**	7.71
% irrigated	0.030	1.02
% rice	-0.019	-0.68
% vine	0.062**	2.09
% fruit	0.324**	10.80
% olive	0.154**	4.99
% pasture	-0.020	-0.63
% annual crops	-0.072**	-2.47
% complex cult.	0.001	0.04
% natural veg.	0.099**	3.29
Economic size (ESUs)	-0.042	-1.43
n	1035	
Adj. R squared	0.179	

Note: ** means significant at the 5% level

The review of literature supported the empirical findings. In particular, a study of structural features of agriculture across the EU-15 from 1987 to 1995 (Colino and Nogueueras 1999) found that developed regions with higher levels of support have intensified and this has led to increased regional divergence in terms of labour productivity. National studies also highlight the implications of intensification for average farm size. For example, Quendler (1997) found a stronger and faster process of farm amalgamation in intensively farmed regions of Austria.

No statistical evidence of a relationship between changing farm intensity and level of MPS was detected. In fact, change in FNVA over the period 1990 to 1998 was found to be negatively related to the level of MPS received by a region.

In order to assess whether the rate of change in the intensity of agricultural production has varied between different types of regions, a simple linear regression was estimated using dummy variables to represent OECD regional typologies. Predominantly urban lagging regions were selected as the benchmark area type. As previously, Farm's NVA per hectare was taken as the indicator of the intensity of production. The results shown in Table 3.10 suggest that, relative to the benchmark area type, increases in intensity were especially strong in intermediate lagging and rural lagging areas. However, the growth in the intermediate leading and rural leading regions was not far behind.

Table 3.10 Regression of the change in farms' NVA per hectare between 1990 and 1998 against OECD regional typologies

Variable	Parameter Estimate	Standard Error	t value	Pr > |t|
Intercept	-0.05764	0.02432	-2.37	0.0180
Rural – leading	0.18708	0.03553	5.27	<0.0001
Rural – lagging	0.22120	0.03510	6.30	<0.0001
Intermediate – leading	0.16591	0.03457	4.80	<0.0001
Intermediate – lagging	0.24329	0.03608	6.74	<0.0001
Urban – leading	0.08718	0.03126	2.79	0.0054

3.3.2 Direct income payments

A number of hypotheses were developed by the project team in relation to the territorial impact of direct income payments.

Firstly, it was hypothesised that **the shift of the CAP from product related support towards payments directly to producers leads to greater farming flexibility and thus increases the market orientation of farmers. This has territorial implications in terms of land use changes, etc.**

Although empirical evidence related to this hypothesis is limited, two studies on Spanish agriculture have identified shifts in land use arising from differential rates of direct income support for different commodities. In particular, the substitution of COP for olive trees in Southern Spain has been related to the particular payments schemes of the CAP (Gallardo Cobos *et al.* 2002, Gallardo Cobos 2001).

More generally, the review of studies for different countries suggested varying implications of direct income payments for different types of farms. The shift towards a stronger market orientation is likely to be greatest in regions with high proportions of large, fulltime, commercial farms. On the other hand, an increase in the provision of direct payments in regions with high proportions of small farms, or medium sized extensive farms, may lead to less focus on the market as payments become interpreted as the reward to farmers for providing a wider range of public goods. It follows that the territorial impact of the shift towards direct income payments is, like many of the other CAP impacts, tied strongly to the distribution of farm types across Europe.

A second hypothesis was that **the blanket environmental requirements for direct payments have contributed to measurable environmental improvements in the regions.** Data was not available to test this hypothesis statistically. However, various national studies expressed concerns that the baseline levels of good farming practice for cross compliance may be set too low, and the likelihood of being detected for being in breach of the agreed environmental obligations is considered to be very low (Bundesforschungsanstalt fuer Landwirtschaft1999, Feehan *et al.* 2002, Matthews 2002).

Finally, it was hypothesised that **some direct payments have had differential territorial effects by retaining in some areas farming sectors which would otherwise have diminished in size.**

Many studies support the argument that direct payments can help to sustain farmers in marginal areas. For example, Bardaji *et al.* (2001) show that in absence of direct premium, especially the suckler cow premium, the optimum response of farms in mountain areas is the abandonment of the production. Arguments specific to the LFA scheme in this respect are discussed in the following section.

3.4 Pillar 2 measures

From Chapter 2, Pillar 2 of the CAP comprises a number of quite distinct structural and rural development measures. For the purposes of analysis these have been grouped into three categories: the Less Favoured Areas (LFA) scheme, agri-environmental schemes and a third category, labelled rural development schemes, covering a wide range of different policy mechanisms including aids for farm investment, modernisation and diversification schemes,

aids for marketing and processing, aids for land re-parcelling and improvement and support for developing farm-related tourism and craft activities.

For the EU as a whole, LFA measures and agri-environmental measures dominate Pillar 2 of the CAP (Peters 2002). However, the relative importance of different Pillar 2 measures varies widely between member states, reflecting amongst other things different national priorities and different national budget constraints. The territorial distribution of support through each of these categories is considered separately in this section, along with a number of specific hypotheses about how they impact on EU regions.

3.4.1 The LFA scheme

Empirical analysis of the distribution of LFA support was based on data from the *Special Report No 4/2003 concerning rural development: support for less-favored areas, together with the Commission replies* (available at http://www.eca.eu.int/EN/reports_opinions.htm) and apportioned to NUTS 3 regions according to the method described in Appendix 3.3.

Given the objectives of the LFA scheme, it was expected that the scheme would operate in a manner consistent with the economic cohesion objectives of the EU. In other words, LFA payments would tend to be higher in regions with lower per capita GDP and higher unemployment rates. Regression analysis found no statistically significant relationships between levels of LFA support and indicators of economic cohesion, although the signs of the parameter estimates were as expected (see Table 3.11). Both Peters (2003) and AgraCEAS (forthcoming) discuss how the profile of different accompanying measures varies considerably between member states with certain richer northern States (including Finland, France and Luxembourg) prioritising the LFA scheme over agri-environmental, farm investment or early retirement schemes. This may explain why a stronger relationship with the cohesion indicators was not detected.

Table 3.11 The relationship between LFA payments and economic cohesion indicators, 1999

	GDP per inhabitant	Unemployment rates
LFA payments per AWU	-	+
LFA payments per ha	+	+

Note: ** means significant at the 5% level

LFA payments have been developed to compensate for persistent natural and socio-economic farming difficulties in designated regions. Thus, the project team hypothesised that **the extension of LFA payments has helped to reduce the marginalisation of these regions.**

In certain regions of the EU-15, LFA payments account for a significant proportion of total public support for farmers. For instance, in Austria from 1999 to 2001, compensatory allowances reached 14% of public support for all farms, 24% for farms in mountain areas, and 39% for mountain farms with greatest production difficulties. These levels of support can clearly influence the decisions of farm households under threat of marginalisation. They also help to alter the discourse and indicate the extent to which society values the management systems provided by these farmers (Dax and Horvorka 2003).

Studies on the LFA scheme in Ireland and Scotland also support the argument that, by sustaining farm household incomes above what they might have been, LFA payments have helped to retain low income yielding sectors such as cattle and sheep in marginal areas. In some instances the availability of such payments may have encouraged small scale dairy farmers to switch to less labour intensive enterprises such as cattle or sheep, which are also more compatible with part-time farming. However, it is difficult to assess the impact of LFA payments per se in isolation from other influences on marginalisation and studies suggest that

the assistance provided under LFA payments can only be part of a solution for problem areas (Frawley *et al.* 2000, AgraCAES, forthcoming).

Moreover, the fact that the level of LFA payments has been linked to volume of production has tended to perpetuate local intra-regional inequalities (Kearney *et al.* 1995), and has led to allegations that it is not satisfying its environmental objectives. In particular, the scheme has been criticised for allowing overstocking and overgrazing in some areas since, although there was a ceiling on the number of animals eligible for support, no ceiling was imposed on stocking densities. The recent switch to an area-based payment scheme under Agenda 2000 will have helped to address this issue, while the (re-) introduction of a basic tier of support being paid for the smaller parts of farms (calculated on the first ten hectares of mountain farms) will help to shift the distribution of support under the scheme in favour of smaller farms.

Based on a meta-evaluation of the implementation of the LFA scheme over the period 1994 to 1999, AgraCEAS considered whether the LFA scheme has met its fundamental objective of compensating farmers for the effect of natural disadvantage on their production costs (AgraCEAS, forthcoming). The authors conclude that the scheme has offset a significant (but not precisely measurable) proportion of the disadvantage incurred in a large number of member states but that this proportion has been lower in Mediterranean Member States where more weight was given to other structural objectives. In other words the effectiveness of the scheme, even in terms of its purely agricultural objectives, varies across European territories. They also argue that, because of the partially political nature of the way in which LFA areas are defined and the flat rate nature of payments, there may have been an element of under-compensation in the most severely disadvantaged regions and over-compensation in areas where disadvantage compared to non-LFAs was minimal.

3.4.2 Agri-environmental measures

The reforms of the early 1990s included the introduction of a number of accompanying measures, of which agri-environment schemes were the most notable. Eligibility to participate tends to be contingent on relatively low intensity farming, though not exclusively (as for example in parts of Spain).

Quantitative analysis of the territorial incidence of support through agri-environmental schemes was based on data from the FADN database showing the value of environment-related payments received by farmers. As previously, single variable regression analysis was carried out to assess whether the level of agri-environmental support is distributed in a manner consistent with EU cohesion objectives (see Table 3.12).

Table 3.12 The relationship between Agri-environmental support and economic cohesion indicators, 1999

	GDP per inhabitant	Unemployment rates
Environmental payments per AWU	+**	-**
Environmental payments per ha UAA	+**	-**

Note: ** means significant at the 5% level

The results suggest that higher levels of agri-environmental payments accrue to richer areas of the EU. In other words, the distribution of agri-environmental payments does not seem consistent with economic cohesion objectives. The EU level findings can, however, be explained by the fact that richer EU member states tend to prioritise agri-environmental objectives more than poorer regions. Sweden and Austria, for example, allocate over 50% of their total RD funding to the agri-environment (Peters 2002).

The only national-level study identified which considered the consistency between agri-environmental schemes and cohesion objectives related to Ireland (Lafferty *et al.* 1999). In this case the authors argue that agri-environmental schemes are contributing to the achievement of the economic and social cohesion goals and helping to constrain tendencies towards abandonment of farmland.

In terms of the territorial impact of agri-environmental schemes, the project team hypothesised that **the impact of agri-environmental measures, even though directed towards extensive land use systems, varies mainly a) in regard to farm types and b) in relation to regional production conditions.**

The argument that the impact is differentiated by farm type comes about as a result of different rates at which farm types have participated in agri-environmental schemes. In Austria, overall participation to the agri-environmental programme (ÖPUL) has been very high since its installation in 1995, with 72% of farm holdings participating in the scheme (farming 88% of UAA of Austria). Participation rates in more intensive farms are somewhat lower, because they require more significant changes in existing farming management (Groier and Hofer 2002). Similarly, in Ireland, participation in the agri-environment scheme REPS (Rural Environmental Protection Scheme) has tended to be low among the more intensive farms, which are also likely to be the farms causing most environmental damage. Low participation has been attributed to the level of payments being insufficient to compensate for income losses associated with a switch to less intensive farming. Highest take up rates are among low intensity, small farms which for historical and ecological reasons are concentrated in certain regions such as the west of Ireland (Department of Agriculture and Food 1999, Matthews 2002).

Regional production conditions influence the territorial impact of agri-environmental schemes in two ways. Firstly, farmers are only eligible for some agri-environmental schemes if they satisfy certain habitat-specific conditions and the ability to meet these conditions varies spatially. Secondly, the opportunity costs associated with complying with the conditions of agri-environmental schemes will vary across space as well as between farm types.

Finally, the project team hypothesised that **the uptake of AEP schemes is positively associated with environmental outcomes in the regions affected.** However, at present, insufficient evidence exists to substantiate this claim across all regions and all schemes.

3.4.3 Rural Development measures

Analysis of the territorial incidence of rural development measures was constrained by a lack of information on policy expenditures. However, some very general hypotheses relating to the territorial impact of RD measures were developed by the project team. Firstly, it was felt that **rural development measures improve the quality of life in rural areas and thus have helped to reduce the rate of population change.**

Studies suggest that some rural development measures, such as projects assisted under LEADER, have enhanced the quality of life in rural areas (Kearney *et al.* 1995. Hesina *et al.* 2002). LEADER projects activate the local people and help to identify new opportunities for the development of the region. With the support of European and national money, new jobs are created leading to an improvement of the quality of life. Equally, measures to assist with the establishment of young farmers and early retirement can improve the quality of life for the farm households that participate in these schemes. However, it is very difficult to say conclusively that they have contributed more broadly to a reduction in the rate of population decline: there are many other factors that influence local demographic trends.

Clearly the extent to which any benefits of rural development schemes are territorially specific depends on whether programmes are themselves spatially oriented (such as Objective 5b and LEADER). However, the incidence (and thus potential impact) of structural expenditures tends to be territorially focused even when structural expenditures are not, as the take up rates are usually variable across farming types or scales of farming, which in turn are regionally specific.

The project team also hypothesised that **rural development measures create additional non-agricultural employment, making farm households and rural areas more multifunctional. These have, in turn, helped to stabilise regional incomes and employment.**

The effects of schemes may clearly extend beyond participating actors. They may, for example, lead to an enhancement of regional identity and the emergence of space-based strategies, which in turn might result in positive socio-economic outcomes.

Despite the policy emphasis on diversification, the growth in off-farm pluriactivity during the late 1980s and early 1990s was more significant than on-farm diversification. Within this context it seems likely that closer investigation of the hypothesis will reveal that farm households are more dependent on the regional economy than vice versa.

Finally the project team hypothesised that **the success of rural development programmes that try to mobilise endogenous development is dependent on their adoption of the innovative potentials of a region.**

Many studies were found that supported this argument, most based on national or international comparisons of different case studies (see for example, Perez Yruala *et al.* 2000, Asamer and Lukesh 2000, Troeger-Weiss 1998 and Terluin 2003). Mobilisation of potential depends not only on the initial input by "pioneers", but also, later on, a persistent discussion of development options and critical assessment of regional position. More broadly, endogenous development requires a thorough understanding of regional potential and a long lasting commitment towards integrated approaches that reflect the participation of local actors, and the institutional development of the region. Walsh (1999) argues that success is more easily achieved when rural development is seen as part of a more comprehensive strategy for integrated regional development.

3.5 Agricultural policy in the CEECs

Most accession states have been preparing their agricultural sectors and policies for EU entry and CAP adoption by instituting CAP-like support systems, and seeking liberalised trade with the EU-15. The territorial aspects of agricultural and rural development policies in the CEECs are therefore complex, with significant differences between conditions in the early 1990s shortly after the start of transition to those expected in (say) the mid-2000s.

Policy data at NUTS 3 level relating to the CEECs was more scarce than that available for the EU-15. However, some preliminary regression analysis was carried out to test whether the national agricultural policies of some CEECs have been consistent with economic and social cohesion.

MPS data were derived from the apportionment of OECD country-level data to NUTS 3 regions using the method described in Appendix 3.1, while GDP per inhabitant, unemployment rates, and population changes were derived from the Regio database. Due to data constraints, the analysis was limited to four countries: Czechoslovakia (CZ), Slovakia (SK), Hungary (HU) and Poland (PL). The results are summarised in Table 3.13 with full details available on request.

Table 3.13 The relation ship between levels of Market Price support in certain CEEC countries and indicators of economic cohesion

	GDP per inhabitant	Unemployment rates
CZ		
MPS per AWU	-**	+
MPS per ha UAA	-**	+
PL		
MPS per AWU	+	-**
MPS per ha UAA	+	-**
SK		
MPS per AWU	-	+
MPS per ha UAA	-	-
HU		
MPS per AWU	(no data)	(no data)
MPS per ha UAA	+	-
All		
MPS per AWU	+	-**
MPS per ha UAA	+	-**

Where ** means significant at the 5% level

The results show that the way in which market price support is distributed varies between CEECs. In the Czech Republic, support in 1999 tended to be higher in areas with a low GDP per capita and with high unemployment rates. In contrast, in Poland, support was higher in areas with lower unemployment rates. No statistically significant results were found in relation to the distribution of MPS in Slovakia and Hungary. When considered overall, MPS payments in the four CEECs in 1999 tended to be higher in areas with a high GDP per capita and with low unemployment rates. In other words, as in the case of the EU-15, the policy of MPS did not complement objectives of improving economic and social cohesion. However, it should be noted that, in the case of the combined CEEC data, parameters representing the GDP per inhabitant were not statistically different from zero.

Further discussion of the impact of agricultural and rural development policy in the CEECS is given in Chapter 5.

Chapter 4

Territorial imbalances and regional discrepancies associated with the CAP and RDP

The Second Report on Economic and Social Cohesion stressed the need to promote a more balanced and more sustainable development of European territory and called for a better co-ordination of territorially relevant decisions. Based on the findings reported in Chapter 3, this chapter summarises the relationship between the CAP and RD policies and the strategic EU objectives of social and economic cohesion, environmental sustainability and more polycentric development in Europe.

4.1 Economic cohesion

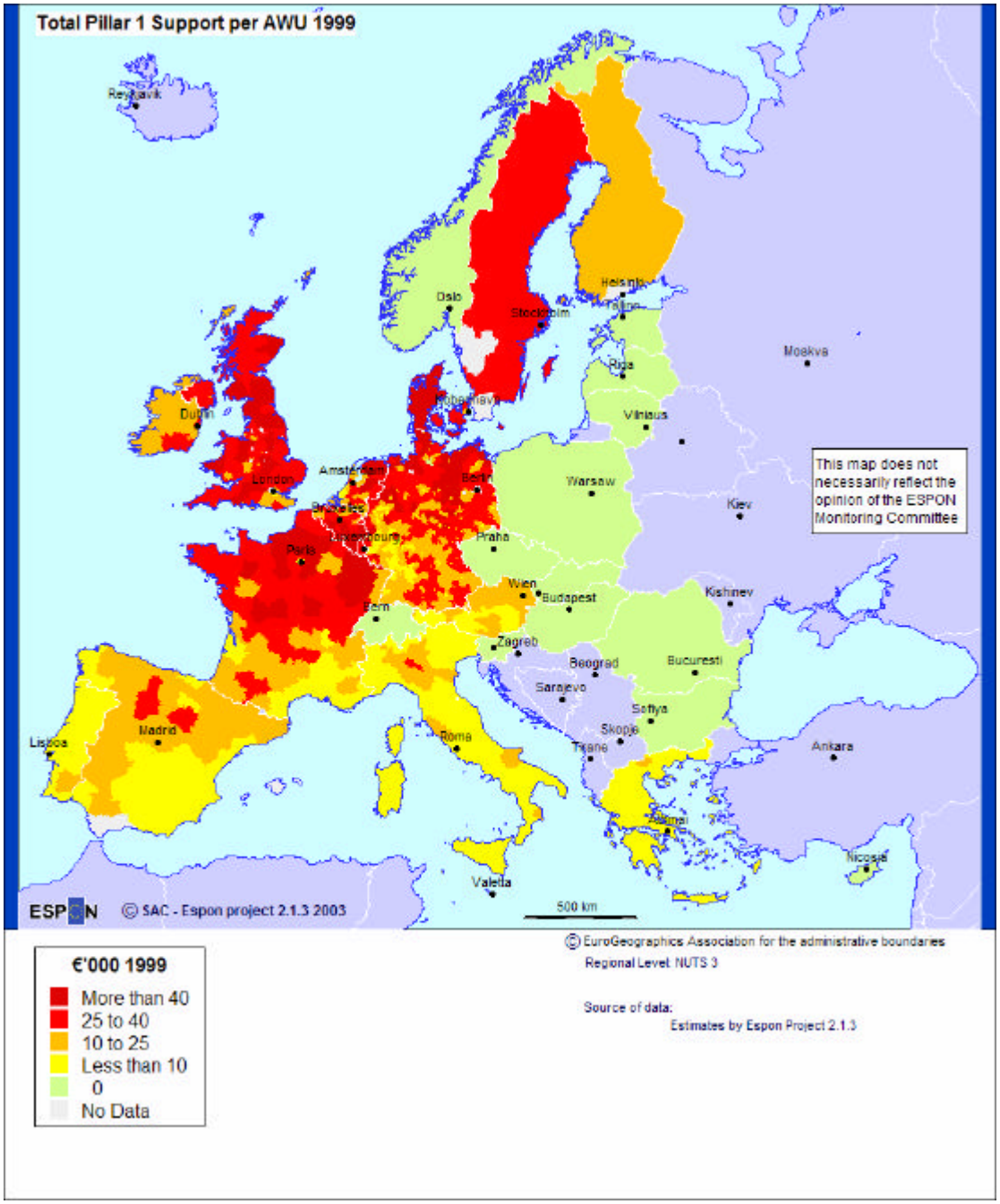
European farmers operate in a wide range of economic, social and environmental contexts across Europe. Moreover, there are considerable differences in natural production conditions, and high variation in agricultural structures and production methods across the EU-15. When considered across the extended EU territory, the differences are even more marked. Thus, application of the TIA method was expected to highlight territorial imbalances in both the incidence and impact of the CAP and RDP. However, the extent and nature of these imbalances were difficult to predict.

Analysis of the territorial incidence of CAP support in 1999 across the EU-15 suggested that both total Pillar 1 support (defined as the sum of MPS and direct income payments) and total Pillar 2 (comprising of LFA payments, agri-environmental schemes and other RD measures) were distributed in such a way that they tend to benefit richer regions with lower unemployment rates. In other words, the results implied that CAP support is not currently distributed in a manner consistent with the economic cohesion objectives of the EU. The following summarises the findings relating to Pillar 1 and Pillar 2 support in turn.

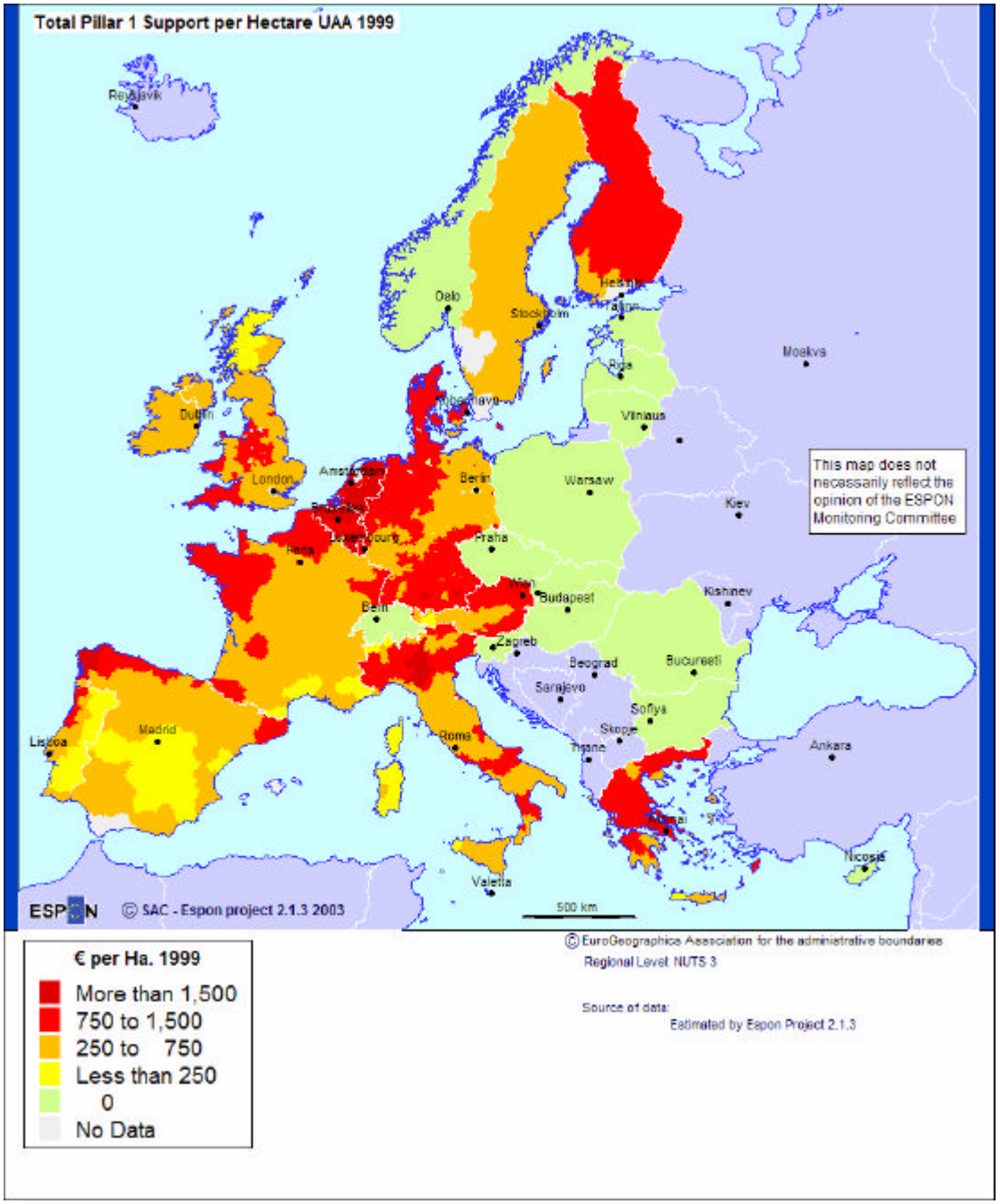
4.1.1 Pillar 1 support

The levels of total Pillar 1support in the EU are shown graphically in Maps 4.1 and 4.2. In the first, support is expressed per Annual Work Unit (AWU), in the second, per hectare of Utilisable Agricultural Area (UAA).

Map 4.1 Total Pillar 1 support per AWU, 1999



Map 4.2 Total Pillar 1 support per ha UAA, 1999



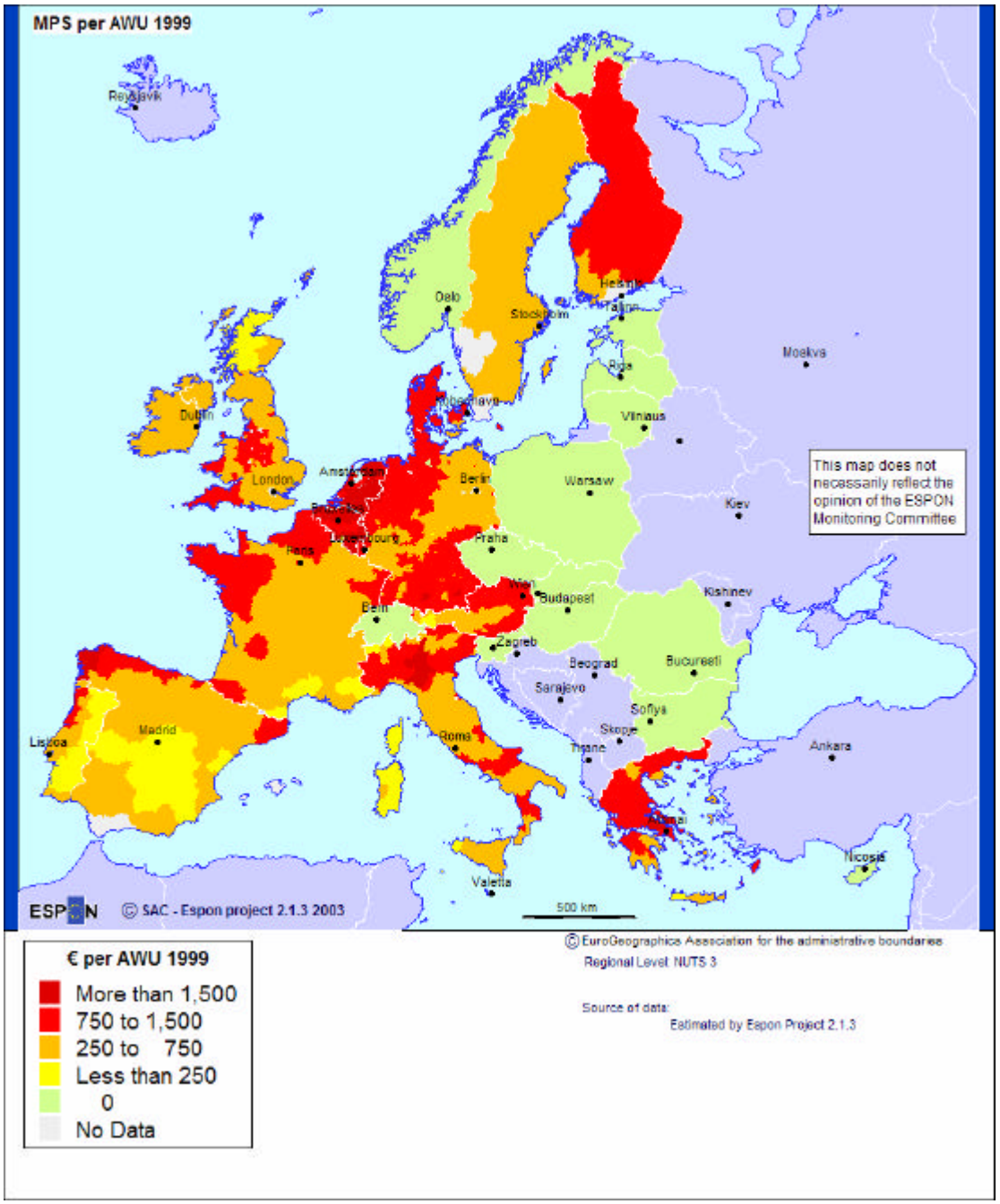
The two denominators (AWU and per ha UAA) are not closely correlated due to differences in the land and labour intensity of different agricultural production systems. As a consequence, Maps 4.1 and 4.2 provide different perspectives on the distribution of support. In particular, while Map 4.1 shows a concentration of Pillar 1 support per AWU in northern areas of Europe, the distribution appears more dispersed when expressed per ha UAA, as in Map 4.2. In this case, areas of northern Spain, parts of Italy and Greece are among the highest beneficiaries. In both cases, significant differences in the level of support received by farmers within national boundaries can be detected.

Analysis showed that CAP Pillar 1 support accrues disproportionately to large-scale farmers. This is because MPS and to a lesser extent direct income support has been coupled (either

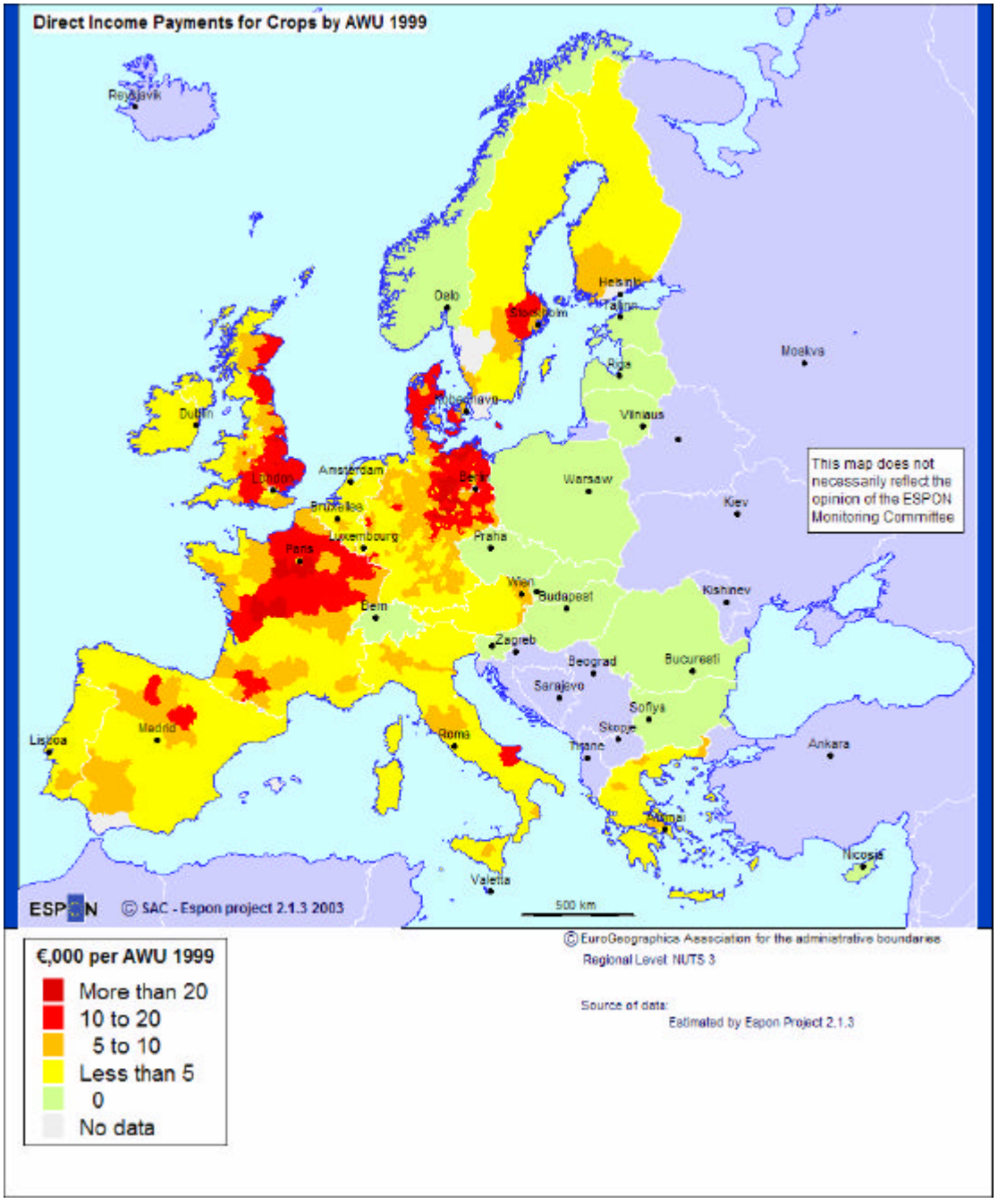
directly or indirectly) to the level of output produced by a farmer. However, the territorial incidence of Pillar 1 support cannot be explained by the distribution of farm sizes alone since the level of support varies between commodities and, in general, does not differentiate between production conditions. Regression analysis found that key explanatory variables in the investigated were farm size, land cover (as a proxy for the productive capability of the land and farm type) and the peripherality of the region (discussed further in section 4.5 below).

A different pattern of support was found when the two Pillar 1 policy instruments – MPS and direct income payments - were compared. Maps 4.3, 4.4 and 4.5 show levels of MPS, crop-related direct income payments and livestock related payments per AWU respectively.

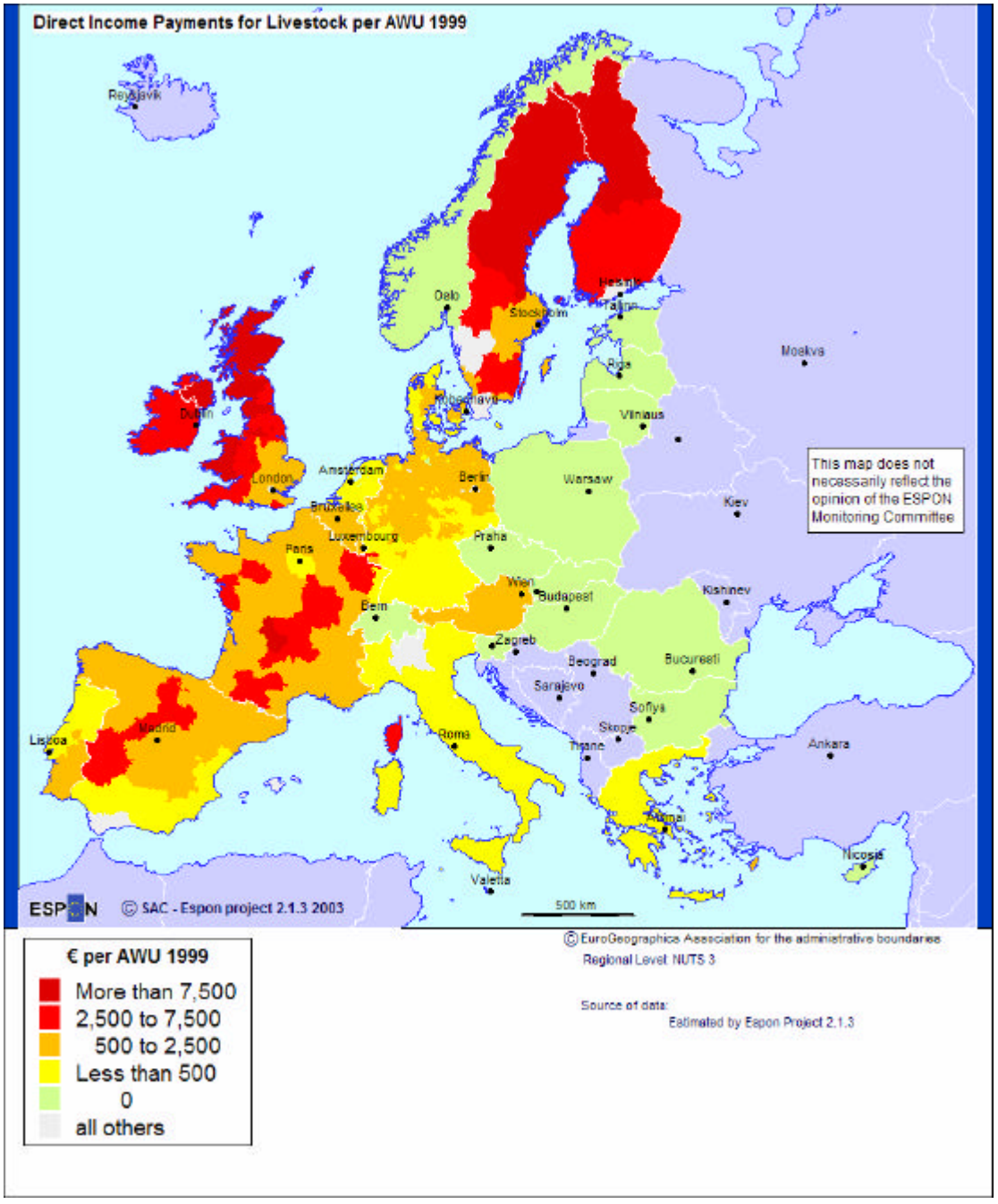
Map 4.3 Market price support per AWU, 1999



Map 4.4 Direct income payments for crops per AWU, 1999



Map 4.5 Direct income payments for livestock per AWU, 1999



The spatial distribution of support under the three support mechanisms are shown to be quite distinct and this was confirmed through statistical analysis. In particular, regression analysis confirmed that in 1999, MPS (such as total Pillar 1 support) was distributed in such a way that richer regions tended to receive higher levels of support. In contrast, crop-related direct income payments were found to be generally higher in areas with a low GDP per capita and with high unemployment rates. Direct income payments associated with livestock production were also found to be more equitably dispersed, with regions with lower levels of per capita GDP tending to get higher levels of support (although this relationship was only statistically significant when considering support per UAA).

The contradiction between the distribution of Pillar 1 support and economic cohesion objectives can be attributed to the historical focus of the CAP on sectoral issues such as improving productivity and ensuring stable food markets. This narrow focus may have been appropriate in immediate postwar years, but no longer reflects the demands faced by rural areas. The shift from market price support to direct income payments following the MacSharry reforms has helped to weaken the relationship between the level of aid to regions and agricultural performance and this may, in turn, lead to a more equitable distribution of aid between regions.

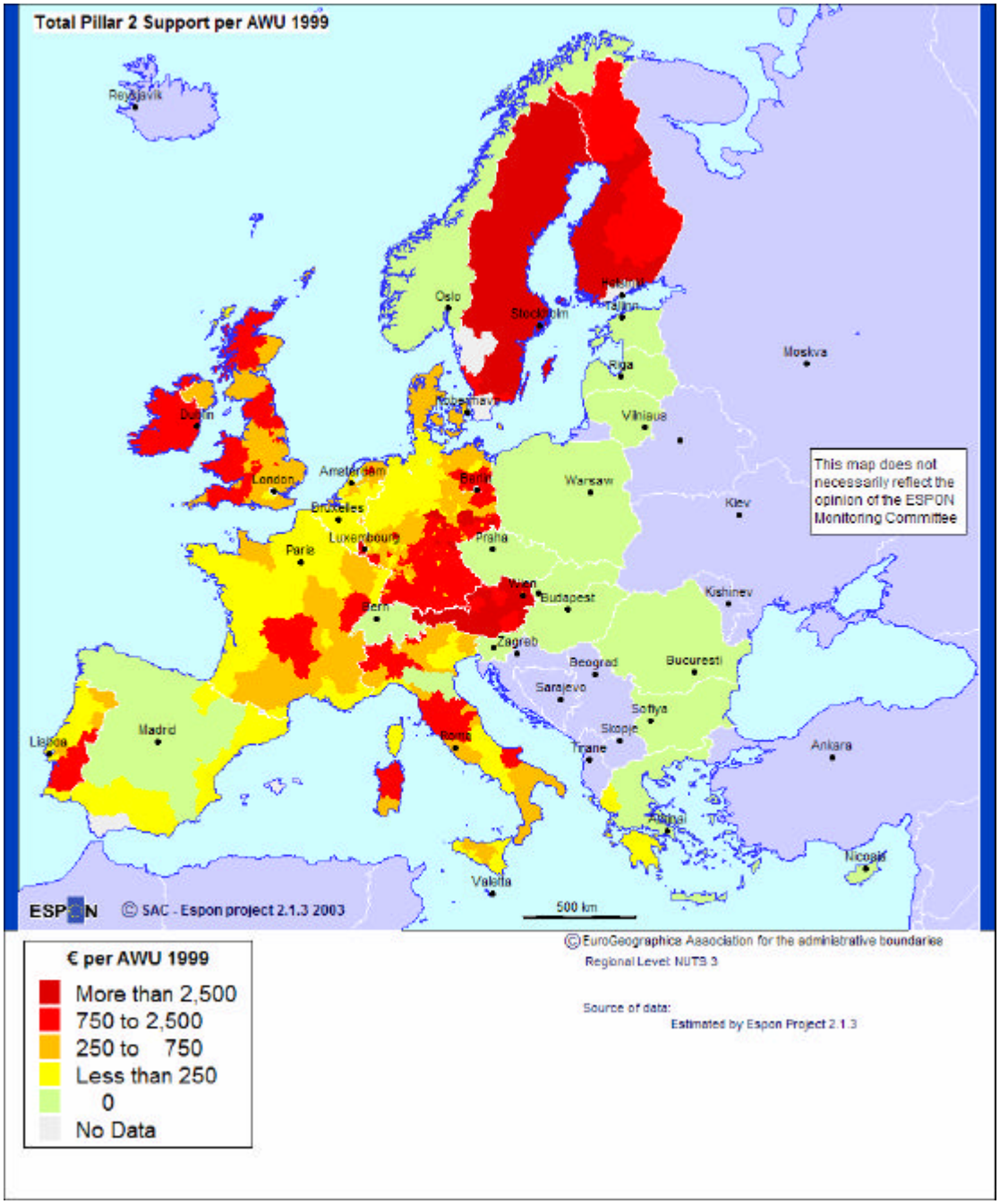
4.1.2 Pillar 2 support

The level of Pillar 2 support received by each NUTS 3 region was estimated in two ways:

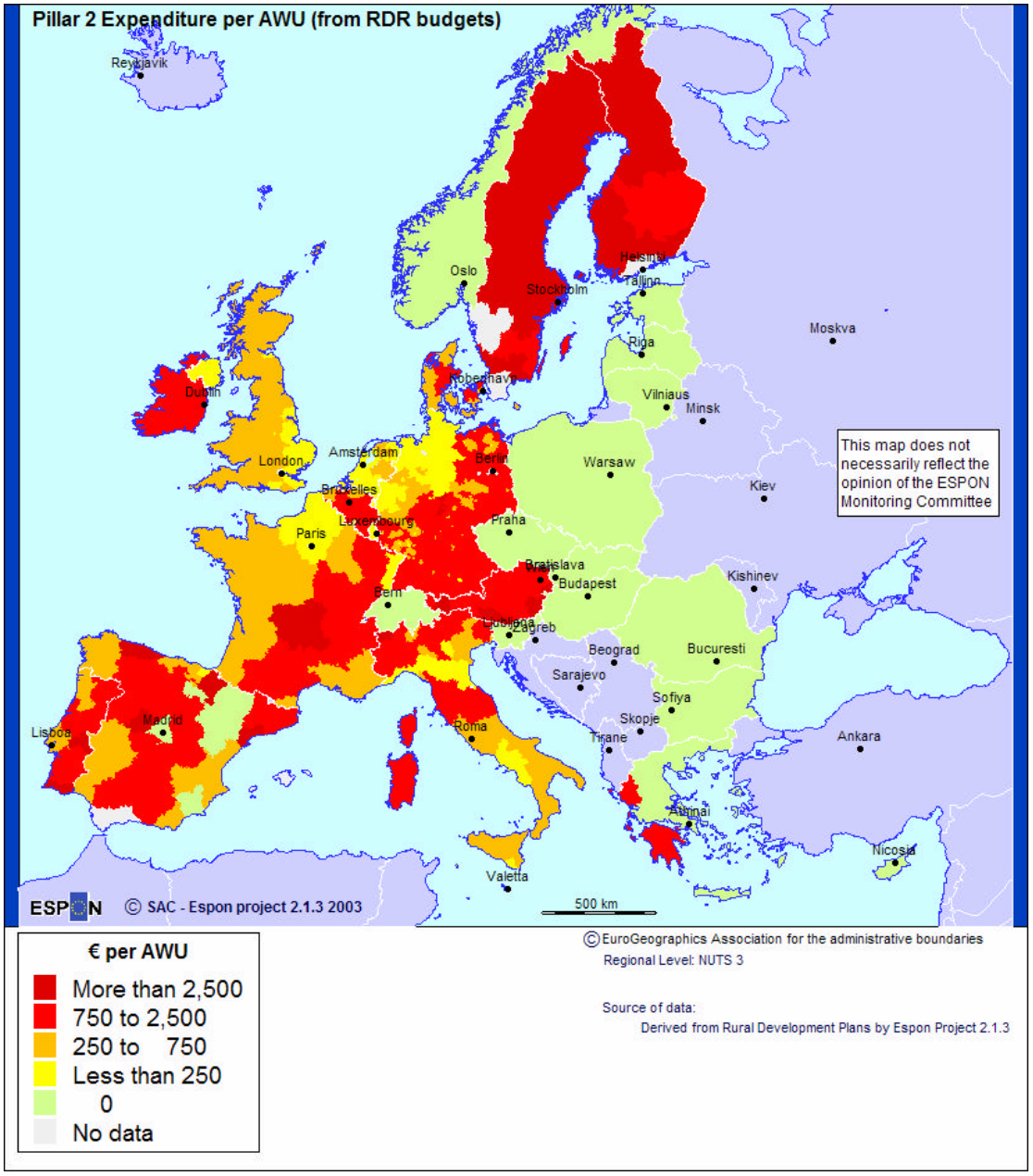
- Firstly based on the combined value of environmental subsidies and LFA payments received by farmers (derived from the FADN database),
- Secondly, derived through the apportionment of funds for Rural Development measures, taken from Dwyer *et al.* 2002.

These are shown (on a per AWU basis) in Maps 4.6 and 4.7 respectively.

Map 4.6 Total Pillar 2 support per AWU (based on FADN data), 1999



Map 4.7 Total Pillar 2 support per AWU (RD Fund), 1999



Differences between Maps 4.6 and 4.7 and the apparent inconsistency of Pillar 2 CAP support and the economic cohesion objectives promoted by the ESDP seems to result from differences in the use made of Pillar 2 measures by different Member States.

Dwyer *et al.* (2002) have recently analysed the use made of Pillar 2 measures across the EU-15. They found striking differences in the patterns of proposed expenditure on the RDR, which broadly reflect historical circumstances. Most interestingly, there are marked differences between those countries and regions for whom the RDR is clearly seen as a tool to promote environmental land management and those for whom it is a means for the modernisation of agriculture. It seems the richer regions of northern Europe tend to prioritise agri-environment and LFAs, whilst the poorer regions of the south and the accession countries prioritise agricultural development. For example, two-thirds of the Swedish budget for the RDP is allocated to environmentally friendly and organic farming, in contrast to Spain,

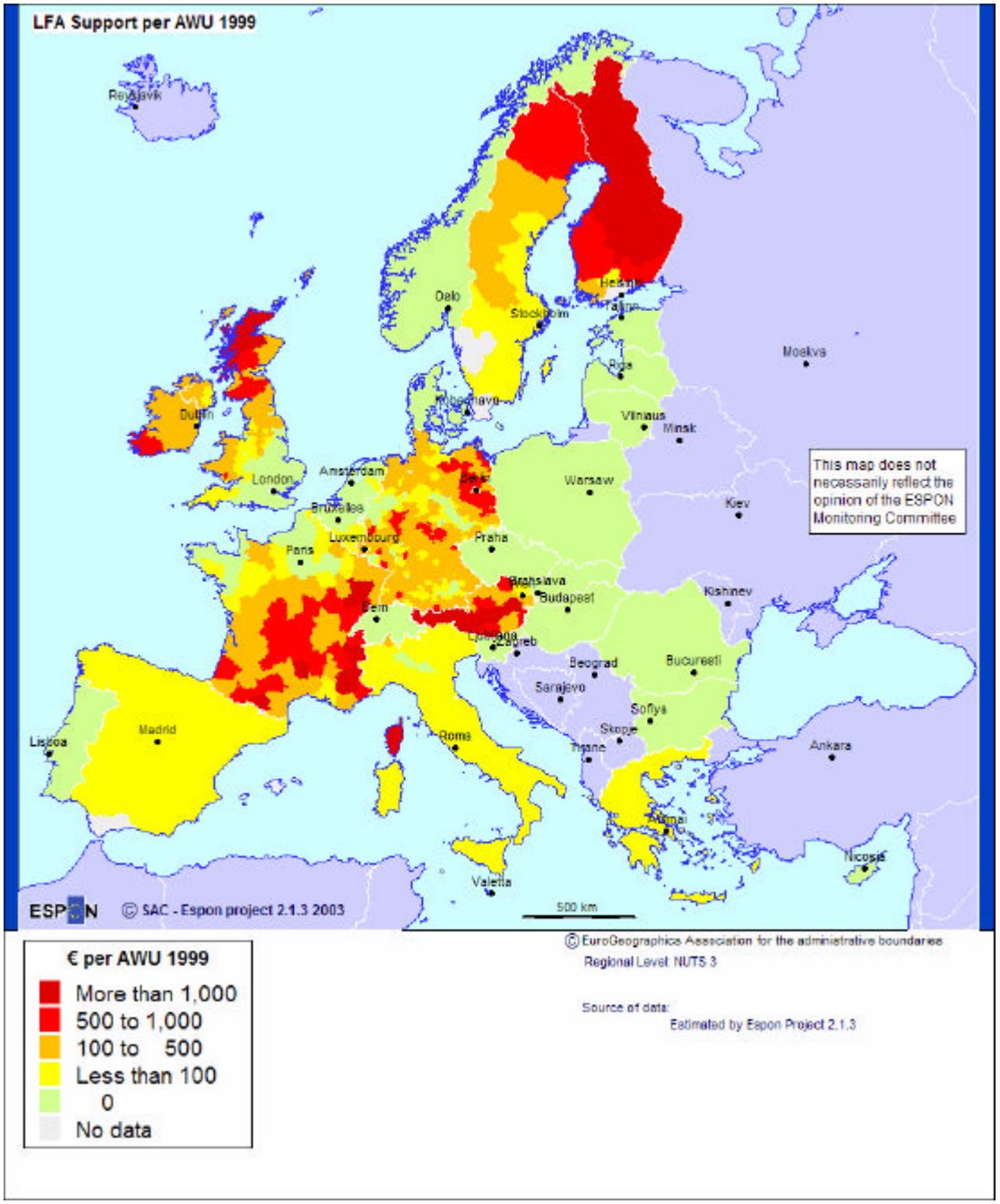
which allocates 57% to the modernisation of agriculture and the agri-food industries, and just 10% to agri-environment. This difference is not only between countries but is also evident between the east and west regions of Germany, for example, and between the north and south of Italy (INEA 1999).

Another source of regional and national disparities is the uneven allocation of EU RDR funds together with the co-financing requirements for Pillar 2 spending. Under the Agenda 2000 agreement, the RDR was allocated only modest funds for the period 2000-06, and this will remain the case after the MTR 2003 agreement. Moreover, "because RDR allocations were largely based upon historical spending patterns prior to 1999, countries with arguably the greatest environmental and rural development needs remain very short of funds" (Dwyer *et al.* 2002). Even when national and regional co-financing and modulation receipts are included, the levels of RDR expenditure per ha of UAA vary enormously from €3-400 pa in Finland and Austria to around €50 pa in the UK and Denmark.

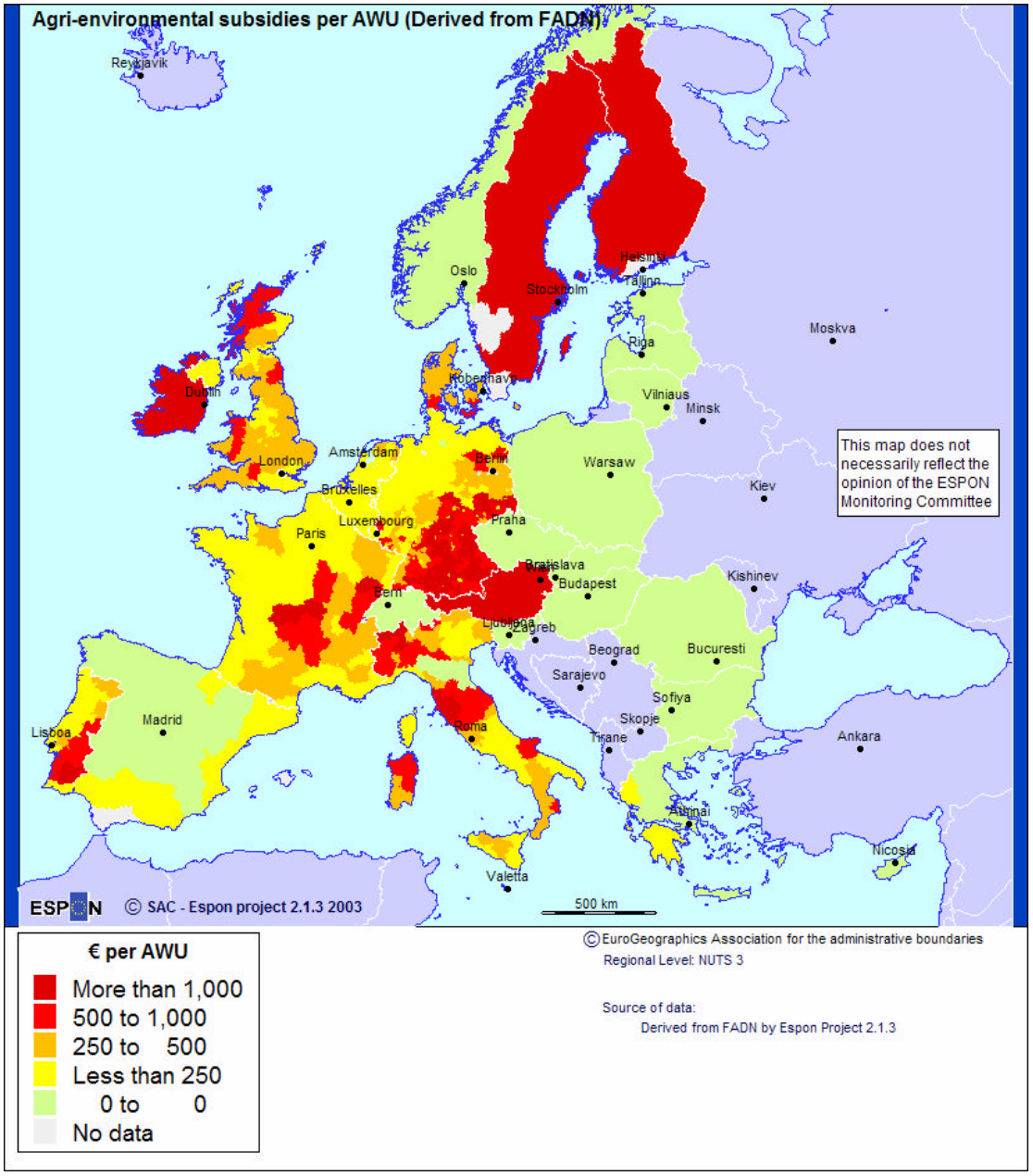
The co-financing of the RDR deserves special mention. As Mantino relates, "one of the most relevant criticisms emerging from the debate on MTR was linked to the difficulty of various Member States in national and regional co-financing new rural development measures." Thus, "low levels of co-financing have led to minimal use of many measures by resource-poor Member States, and there has been an unwillingness to rethink established ways of working when new money was so limited" (Dwyer *et al.* 2002). In short, the RDR measures may be used least in the poorer areas of the EU because of the lack of match funding.

Maps 4.8 and 4.9 show the distribution of two elements of pillar 2 of the CAP – LFA support and agri-environmental subsidies. Both are expressed on a per AWU basis. The latter shows a clear northern state bias and results from regression analysis found a positive association between the level of agri-environmental support received by e NUTS 3 region and its level of per capita GDP. No significant relationship between LFA support and per capita GDP or unemployment rates was found.

Map 4.8 LFA support per AWU, 1999



Map 4.9 Agri-environmental payments per AWU, 1999



4.2 Social cohesion

Analysis of the relationship between the CAP and the Social cohesion objectives of the EU was restricted by a lack of indicators available at NUTS 3 level. Regression analysis found a positive association between the level of Pillar 1 CAP support received by a NUTS 3 region in 1999 and population change in the preceding period (1995-1999). This implies a lack of consistency between the way in which Pillar 1 operates and the strategic objective of improving social cohesion in Europe. The results in terms of Pillar 2 support were more ambiguous with only one of the four regressions finding a statistically significant relationship between levels of support and population change. However, in this case too the direction of the relationship was positive (suggesting higher levels of support were tending to go to regions growing in population).

Two opposing arguments were identified in relation to the CAP and population change in rural areas. The first argument suggests a positive contribution of the CAP to social wellbeing and is based on the argument that agricultural support payments have helped to stem the outflow of labour from agriculture and, in doing so, have reduced the pace of rural depopulation in some remoter regions of the EU. In other words, it is argued that some CAP support mechanisms have enabled more farms to survive than might have happened in the absence of the policy and that this has had knock-on effects for the local economy. This may especially be the case in weaker rural areas where opportunities for alternative forms of development are more restricted. The second, opposing, argument is that by encouraging intensification, the CAP has accelerated the outflow of workers from the sector and has led to a negative social impact in some regions.

Within the EU, examples can be found supporting both arguments. For example, there are some marginal areas where the availability of support payments has influenced the decision of farmers to stay on the land (for example, mountainous areas of Austria). Similarly, there are some structurally weak areas where a decline of the agricultural population (associated with capital intensification and specialisation) has occurred without any compensating gains associated with the rest of the economy (for example, the west of Ireland). However, it is difficult and misleading to attribute trends in population levels in rural areas solely to the CAP.

A more general issue emerging from the literature is that the role played by agriculture in relation to the social wellbeing of rural areas goes far beyond its importance in terms of the numbers employed on farms, or the number of farm family members making use of and contributing to local services. Rather, there is increasing recognition of the symbolic importance of farming in rural life, the role farmers play in creating and maintaining landscapes and natural habitats, and the contribution of farm households and agriculture to local cultures. The relative importance of these externalities varies across space as does political recognition of their importance. This partly explains the differences in the current use made of Pillar 2 measures by different Member States discussed above.

Many studies suggest that rural development schemes have led to an enhanced quality of life in some rural areas. For example, LEADER projects activate the local people and help to identify new opportunities for the development of the region. With the support of European and national money, new jobs are created leading to an improvement in the quality of life. The effects of such schemes can extend beyond participating actors. In some cases they have been shown to lead to an enhancement of regional identity and, through time, emergence of space-based strategies which in turn might result in positive socio-economic outcomes. Clearly the extent to which any benefits of such schemes are territorially specific depends on whether programmes are themselves spatially oriented (such as Objective 5b and LEADER). However, even when structural expenditures are not explicitly territorially focused, the incidence (and thus potential impact) of such expenditures tends to be, as the take up rates are usually variable across farming types or scales of farming, which in turn are regionally specific.

4.3 Environmental sustainability

The CAP has been accused of adding to a number of environmental problems through its impact on farming methods. The intensification and specialisation of agricultural production the led to the loss of habitats for flora and fauna and has been associated, among other things, with river pollution, the eutrophication of lakes and methane gas emissions. Such impacts tend to be very territorially specific. However, in the absence of a "without CAP" scenario it is difficult to assess the extent to which the CAP is responsible for creating these negative environmental externalities.

Regression analysis found that having controlled for different enterprises and farm size, the intensity of farming in a region was positively associated with the level of MPS received by a region but no evidence of a relationship between changing levels of intensity and levels of CAP support was detected.

The intensity and scale of farming operations are influenced by many factors other than agricultural support. These include the quality of the environmental resource base (local climate and soil characteristics), farm size, the level of capital investment and the spatial diffusion of innovations. Certainly, the production of commodities not heavily supported through the CAP (such as potatoes, pigs and poultry) has intensified in some areas as much, if not more than, commodities that are heavily supported. Moreover, it is over-simplistic to assume that, territorially, the greatest environmental problems always arise in areas where the sector has intensified most. There are examples of adverse biodiversity effects resulting from the extensification and simplification of agricultural production systems, such as those that occurred following the loss of cattle from crofting areas of Scotland. Finally it should be noted that agriculture provides environmental benefits as well as disadvantages. The sector plays a vital role in shaping landscapes and supporting biodiversity. These benefits also vary from one region to the next.

Other issues identified in relation to the territorial impact of the CAP and environmental sustainability relate to the introduction of blanket environmental requirements for direct income payments and the growing importance of agri-environmental schemes in the CAP. Both should, in time, result in measurable increases in the quality of the environment across European territory and should help to reduce the tension between the CAP and environmental policy (see Chapter 6). It was noted that territorially, the impact of agri-environmental schemes will vary not just because of the differing priorities of Member States in relation to supporting agri-environmental schemes, but because of differing rates of participation in schemes where they are introduced. To date, uptake has tended to be highest among smaller farms with more extensive production systems.

4.4 Polycentric development

Another central element of the European Spatial Development Perspective (ESDP) is polycentricity, which is advocated as one of the key components of an integrated spatial development strategy. The ESDP suggests a paradigm shift from core-periphery ideas towards the promotion of a more balanced polycentric system which will "help to avoid further excessive economic and demographic concentration in the core area of the EU" (ESDP 1999, para 67). It also asserts that such a policy will more fully utilise the potential of all regions, and so enhance the overall competitiveness of the EU (and cohesion) within a global context, though this might more properly be regarded as a hypothesis to be tested. The vision is described as follows:

> "The creation of several dynamic zones of global economic integration, well distributed throughout the EU territory and comprising a network of internationally accessible metropolitan regions and their linked hinterland (towns, cities and rural areas of varying sizes), will play a key role in improving spatial balance in Europe." (ESDP 1999, para 20).

Although the concept rests on centrist thinking, which tends to view rural areas as residual spaces in between the urban nodes which generate growth and activity, polycentric development should not remain restricted to Europe's larger metropolitan areas because this would not be "in line with the tradition of maintaining the urban and rural diversity of Europe" (ESDP, para 71). The guiding principle is the concept of city hierarchies, but the idea of polycentric development is to be applied at different territorial scales: European; national; and regional/local.

The regional/local scale of polycentricity might be thought most relevant to rural areas. In this connection, the ESDP states that: "the small and medium sized towns and their inter-dependencies form important hubs and links, especially for rural regions. In rural "problem" regions only these towns are capable of offering infrastructure and services for economic activities in the region and easing access to the bigger labour markets. The towns in the countryside, therefore, require particular attention in the preparation of integrated rural development strategies." (ESDP 1999, para 93). However, global, European and national processes are also widely recognised as relevant for the uneven development of rural areas.

In our work we hoped to operationalise the three territorial scales of spatial development – European; national; and regional/local – through a peripherality index within the EU, and travel time to national and regional centres, respectively. Unfortunately only the first was available for submission of this report.

The analysis that was carried out confirmed that, although most CAP measures are aspatial, they have very discernible spatial impacts. In particular, the statistical analysis showed that decreasing peripherality (increasing accessibility) was positively associated with higher levels of Pillar 1 support, while increasing peripherality (at the EU level) was associated with lower levels of Pillar 1 support. The situation in relation to Pillar 2 support was found to be the opposite: the least accessible regions received, on average, higher levels of support.

Various other hypotheses were considered in Chapter 3 in relation to the effects of the CAP on spatial patterns of development. For example, it was argued that changes in the levels of farm household pluriactivity are more strongly associated with variables reflecting the strength of the local economy than the level of CAP support. Regression analysis backed this up with findings that the relationship between the level of CAP support received by a region and extent of part time farming was not statistically significant. However, in general it was felt that the case study work proposed for the second year of the project will provide a stronger base for exploring the role of the CAP on patterns of spatial development.

Chapter 5

Assessment of the implications of CAP/RDP reform

The CAP has been under continuous reform pressure almost since its inception, but, as described in Section 2.2, the major reforms actually achieved until 2003 were as follows:

1970s: Agricultural structural measures, e.g. LFAs
1984: Milk quotas
Early 1990s: Lower support prices, direct payments, set-aside, "accompanying" agri-environmental measures
2000: Further switch from market support to direct payments, and from Pillar 1 to Pillar 2.

Other important elements included the rural and agricultural development components of the Structural Fund reforms in 1988, 1993 and 2000, and the imposition of financial ceilings in 1988 and (as part of Agenda 2000) in 1999. More recently, the completion of the accession agreements for 10 CEECs included statements as to the adoption of the CAP in these countries. In the SAPARD fund, Agenda 2000 already involved pre-accession aid targeted towards the goals of EU rural development policy.

The most noticeable recent proposals for further reform of the EU's CAP and RDP have been:

- The recommendations of the 1996 Cork Conference, which have not been fully implemented since then (http://europa.eu.int/comm/agriculture/rur/cork_en.htm)

- The initial proposals by the Commission and others (e.g. certain Member States) for Agenda 2000, which were considerably altered in negotiations and thus only partly applied

- The July 2002 Mid-Term Review proposals of the Commission (COM (2002) 394), and the subsequent Commission Memorandum on "A Long-Term Perspective for Sustainable Agriculture" and Regulation Proposals (COM (23) 2003), notably the proposal to consolidate direct payments into a single decoupled farm income payment

- The integration strategy for the new Member States, concerning the gradual increase of direct payments and the production quota levels for the new member countries once they join the EU in 2004 (SEC(2002)95 of 31.1.2002), and the current negotiations on EU enlargement; and

- The proposals made by EU and its trading partners within the WTO framework, and on a bilateral basis (e.g. ACP and Mediterranean countries).

In addition, there are a number of other specific and general proposals for CAP/RDP reform, from national and regional governments, from social and economic partners, and from policy analysts.

From the perspective of the ESPON project and programme, the following questions arise:

- To what extent will these CAP reform possibilities address the cohesion objectives of the EU?

- Given a certain tension between different EU objectives, do these CAP/RDP reforms represent a better balance?

- What relationship will and should there be between the implementation (including delivery mechanisms and assessment) of CAP/RDP and cohesion policy at territorial level(s)?

- What is the relationship between the CAP/RDP and the rural aspects of the ESDP, i.e. the promotion of polycentric development?

In July 2002, the Commission brought forward its 2002 Mid-Term Review of the CAP (COM(2002)394) as scheduled in the Agenda 2000 decisions. The Review included a number of CAP reform proposals which were re-stated in more detail and with some modification in the Explanatory Memorandum to the Commission's Long-Term Policy Perspective (COM(2003)23) for agriculture. In June 2003, the Council of Agricultural Ministers reached agreement on a further major reform of the CAP. This reform seems likely to alter the situation both as regards EU enlargement and as regards the on-going WTO Doha Development Round, within which the EU and USA have subsequently (August 2003) agreed a compromise document in advance of the WTO meeting in Cancun, Mexico, in September 2003.

This chapter summarises existing analyses of these reforms (mainly the original MTR proposals of July 2002, since little subsequent analysis has yet been reported). It starts in Section 5.1 with a description of the various official reform proposals, and in Section 5.2 summarises a number of published "impact" studies, mainly of the July 20002 proposals. In Section 5.3, the results of quantitatively analysing at a NUTS3 level some of the estimates from one of these studies (CAPRI) are reported. Finally, In Section 5.4, the implications of CAP reform for the accession countries in Central Europe are discussed.

5.1 CAP Reform Proposals

5.1.1 The Mid-Term Review (MTR) Proposals, July 2002 & January 2003

Although now overtaken by the June 2003 reform agreement, the Commission's Mid-Term Review proposals of July 2002 and January 2003 are summarised here since they formed the basis for most published analysis, and do not differ very widely from the later package. These proposals involved the following main points:

Crops: In the July proposals, compulsory long-term (10 years) set-aside on arable land (replacing rotational set-aside) would form part of "cross-compliance" (see below). Support for non-food crops would take the form of a carbon credit, a non-crop-specific aid worth €45 per ha of energy crops up to a maximum of 1.5 Mha. In the January 2003 proposals, a 5% cut in the intervention prices of cereals, with increase in direct payments for cereals and oilseed areas. New payment system for protein crops.

Livestock: Milk quotas maintained until 2014/15. Agenda 2000 intervention price cuts to be introduced one year earlier (i.e., in 2004) and extended to 2008, with "asymmetric cuts in skim milk powder (-3.5%) and butter (-7%) and an increase in quotas. No specific proposals for beef, etc.

Single Decoupled Income Payment: This would replace all existing direct payments to producers, with a number of exceptions (e.g. durum wheat, rice), and be based on historical levels of payment to each farm. Payment would be subject to a number of statutory environmental, food safety and animal health and welfare standards, as well as occupational

safety requirements for farmers This "cross-compliance" should reflect regional differences, distortion of competition was to be avoided by means of a "common framework providing basic implementation criteria" within which Member States would define and enforce standards on a whole-farm basis. A compulsory farm audit was proposed for all commercial farms receiving over €5000 per year in direct payments.

'Dynamic [or degressive] modulation' would reduce all direct payments by 3% per year to reach 20% (the maximum agreed in Agenda 2000). However, a franchise of €5000 of direct payments applied to all farms with up to 2 full-time annual work units (AWUs) plus €3000 for each additional AWU would exempt around three quarters of all EU-15 farms but affect under a fifth of all direct payments. A 'capping' maximum of €300,000 in direct payments would apply to all farms. In its January 2003 proposals, payment totals over €5000 but below €50,000 would be cut by steps from 1% in 2006 to 12.5% in 2012, and by steps from 1% to 19% for payment totals over €50,000.

Rather than (as previously) allowing Member States to spend funds made available by modulation within their own accounts, funds saved by the June 2002 proposals would be distributed from the EU budget "to Member States on the basis of agricultural area, agricultural employment and a prosperity criterion, to target specific rural needs". This was expected to "allow some redistribution from intensive cereal and livestock producing countries to poorer and more extensive/mountainous countries, bringing positive environmental and cohesion effects" (COM(2002)394, p. 23). However, savings from capping would be redistributed according to the amount capped in each country. All such funds saved from Pillar 1 would be used by Member States to reinforce Pillar 2 rural development programmes financed under the FEOGA Guarantee section. In the January 2003 proposals, the first 6% of these savings would be transferred to Pillar2; the remainder would be used to finance future market needs.

Rural Development Policy would "consolidate and strengthen the second pillar by increasing the scope of the accompanying measures and widening and clarifying the scope and level of certain measures" (COM(2002)394, p. 24). New measures were to include new chapters on food quality and on meeting farming standards, and introduce animal welfare payments into the agri-environment chapter.

5.1.2 The June 2003 Agreement

The CAP reforms actually agreed on 26 June 2003 involve the following:

Crops: No change in the cereal intervention price, but a halving of monthly increments, i.e. a small effective reduction (but no additional compensatory payments). Minor changes were agreed in the regimes for rye, protein crops, rice, durum wheat, nuts, starch potatoes and dried fodder. A 'carbon credit' energy crop aid of €45/ha is to be awarded, to a maximum of 1.5 Mha.

Milk: The intervention price for butter is to be reduced by 25% over 4 years, i.e. an extra 10% cut compared to Agenda 2000 cut; and that for skimmed milk powder by 15% over 3 years as previously agreed, i.e. an overall cut of about 20% for milk. Only minor quota changes other than the Agenda 2000 increases scheduled for 2006 onwards. Direct dairy payments (agreed in Agenda 2000) are to be introduced as scheduled (i.e. from 2004), but kept separate from the single payment (see below) until 2008 at the earliest. This implies that the dairy regime is to be e maintained in roughly its present form for the foreseeable future.

Single Farm Payment: From 2005 (or 2006 or 2007), a single farm payment (SFP) direct to EU farmers will be based on historical (2000-2002) receipts (less 3%) of arable and livestock

payments, but independent of (i.e. 'decoupled' from) levels of farm output or resources (land area, livestock numbers, etc.). Eligible land (i.e. land with SFP 'entitlement') is all arable land and grassland, except land on which fruit, vegetables or table potatoes are grown, and land in permanent cropping (short-rotation coppice etc. is not regarded as permanent). This land need not be that from which the entitlement was first established. MSs may redistribute SFPs within regions, e.g. via uniform (flat-rate) payments per hectare, or separate aid rates in each region for permanent pasture and cropland. Existing set-aside obligations will continue. Entitlements may be transferred (e.g. sold or leased, after some use) to those with sufficient agricultural land, within national and possibly regional boundaries.

However, in order to avoid destabilising the present farming structure too much, Member States may retain up to 25% of arable payments, up to 50% of sheep and goat premiums (including LFA supplementary premiums), and up to 100% of suckler cow premium (on various bases). It appears possible that these retained payments may be re-allocated on a somewhat different – e.g. regionally differentiated – basis from that used to date.

Member States may also make additional payments, at national or regional level (but without co-funding), to encourage specific types of farming which protect/enhance the environment or to improve quality and marketing, up to 10% of national sectoral expenditure ceilings (arable, beef, sheep, dairy). The SFPs will then be reduced correspondingly.

The SFP will be linked to the maintenance of standards of environmental care, food safety, animal and plant health, and animal welfare, and the requirement to keep all farmland in good agricultural and environmental condition ('cross-compliance'). Farm advisory services will become compulsory in Member States by 2007, although farmer participation will be voluntary.

SFPs above a 'franchise' level of €5000 will be reduced ('modulated') at a single flat rate of 3% in 2005, 4% in 2006 and 5% from 2007 onwards, in order to finance rural development policy by about €1.2 billion by 2007 onwards. At least 1% will be re-distributed to the Member State, and the rest according to a Commission key, but Member States will receive at least 80% (Germany 90%, the extra for rye regions) of their 'own' modulation funds. New Member States are exempted from modulation and its financial (budgetary) effects until their levels of direct aid aligned with EU-15.

Rural Development Policy will be strengthened with more EU (modulation) funding from 2005 onwards for new measures and/or extra funding for: the environment (with higher Community contributions), food quality, young farmers, animal welfare, and to help farmers meet EU production standards.

Financing: If the CAP budget (subheading 1a, i.e. Guarantee) fixed to 2013 is considered by the Commission likely to be overspent, then direct payments will be reduced, but not to farmers below €5000 (and perhaps smaller reductions for additional, higher, franchises).

5.2 Published Studies of CAP Reform Proposals

A number of 'impact analyses' of recent CAP reform proposals have been undertaken, several by or at the initiative of the Commission. This Section summarises some of these studies and comments on their implications (usually indirect) for European territorial analysis. The first four are reported in European Commission (2003*c*), along with the Commission's own studies, and all compare the simulation estimates of the situation in 2009 if the MTR proposals were implemented (with no other changes in the CAP or in macroeconomic conditions, but usually with exogenous assumptions about labour, land and other productivity trends from a recent base period) with those of the estimated 'reference' situation for the same year if the CAP were unchanged (except for complete working out of the agreed Agenda 2000

reforms). The results, in percentage changes for physical amounts and prices, and sometimes in Euro for income and welfare effects, are thus 'comparatively static' in nature, isolating the MTR impact from other influences on agricultural performances. None of the models simulate the non-agricultural rural sector explicitly, and several are purely agricultural in nature.

5.2.1 The Commission MTR Studies

The Commission itself carried out two studies of the MTR proposals, one using its standard set of partial-equilibrium (i.e. agriculture only) dynamic models used for regular market outlook work, and the other using the ESIM model agricultural sector model originally developed to study the implications of EU enlargement. Compared to the reference situation, MTR implementation is estimated in the first study to reduce the area of cereals, oilseeds and fodder crops but to increase that of set-aside energy crops. Beef cattle numbers and output would decline, but prices would rise. Overall, factor income (GVA plus subsidies) would be almost unaffected, if it is assumed that most of the modulation savings are returned to farmers via Pillar 2.

The ESIM analysis of market reform, and decoupling and modulation (in the EU-15 only) of direct payments, also shows a fall in cereal area and output in the EU-15, though a rise in the accession countries. Oilseed area rises, while beef production falls: the decoupling of payments under the MTR avoids over-stimulating the beef sector in the CEECs.

In both reports (Chapters I and II in European Commission 2003*c*), very little is said about geographical implications of MTR implementation.

5.2.2 The FAPRI MTR Study

The Food and Agricultural Policy Research Institute (FAPRI) of the University of Missouri used a structural model of EU agriculture linked to a 'reduced form' of the full FAPRI model of world agricultural markets. The model is not spatial in any sense, and hence territorial effects are only implied. Comparing reference and MTR results for 2009, the findings for MTR effects in that year included:

- A modest reduction in EU production of most major farm commodities, with a consequent drop in net exports and a slight rise in world market prices.
- A 2% drop in the harvested area of nine major crops, with a marked decline for rye (-15%), and more modest ones for durum wheat, barley, oilseeds and rice. Reductions on low-yielding, marginal land would lead to slightly higher average yields per hectare. The area and prices of soft wheat remain largely unaffected.
- Sharp reductions in cattle and sheep production (-3.1% and -4.6% respectively, with a 12% fall in numbers of suckler cows), but a rise in market prices of 8% and 12% respectively. Dairy cow numbers (constrained by quota) and milk prices remain unchanged.

5.2.3 The CAPRI MTR Study

The CAPRI modelling system was developed at the EuroCARE centre at the University of Bonn and elsewhere as a FAIR3 project in 1997-99. It is being updated and improved in a new project, CAP-STRAT. The modelling system involves physical consistency balances, economic accounting, considerable regional policy specification (e.g. set-aside rates, direct payment rates, etc.; for non-EU regions, OECD PSE/CSE data are used), and standard micro-economic assumptions. A supply module of 200 aggregate programming (i.e. optimising) models at NUTS 2 level uses exogenous prices to produce results which "are aggregated into Member State level models, which are then calibrated to these results using techniques borrowed from Positive Mathematical Modelling". Then, a market module of all EU Member

States and 11 non-EU global regions (e.g. the CCs, the U.S.) produces prices for commodities (including feed and young animals), and any quantitative overshoots, which are then fed back to the supply models for iteration. The results include crop areas, animal numbers, and farming incomes (GVA at market prices, plus direct payments) compatible with the Economic Accounts at NUTS 2 level; consumer welfare indicators; and environmental indicators (N, P, K, NH3, GHGs, water) as well as bilateral trade flows, prices, market quantities (at Member State level), and intervention sales and subsidised exports. This subsection reports the results as published by the Commission (2003*c*); Section 5.3 reports ESPON Project analysis of these results when apportioned by the Project to NUTS 3 level.

The simulations comprised runs to 2009 as follows:

(i) A reference run (Agenda 2000) based on trend and other assumptions compatible with those for other models such as CAPSIM (see Section 5.2.4 below), WATSIM, DG Agri Outlook, etc., and calibrated to 1997-99 prices and quantities.

(ii) A MTR proposal run, in which direct payments are assumed to be uniform at regional level and based on 1997-99 (not ~2001) data, subject to dynamic and 'capped' (300,000 Euro per farm) modulation.

Comparing these two runs, the MTR is estimated to lead to reduced crop supplies (e.g. cereals by 7.4%) and red meat (beef by 6.6%) but price rises (cereals 0.6%, beef 5.6%). There are falls in (a) farm output value (1.3%), (b) FEOGA budget outlays (8.9%), (c) farming income (0.14%), and (d) consumer welfare (6.4%), leading to a rise of 0.08% in overall net welfare (c) + (d) – (b). Environmental effects are positive (GHGs down by 5%, N surpluses by 3.4%) Structural effects on farm size are uncertain.

The Commission-published account contains little territorial commentary. Map 4.2 shows major decreases (at least 13%) in set-aside and fallow land in Wales, parts of Ireland, southern Finland, and parts of Greece and Austria, with major increases (over 3%) in many parts of Spain, Portugal, southern France, and Greece. Map 4.3 shows major decreases (at least 10%) in total premium payments per hectare in parts of central France, north and south Italy, east England and southern Greece, and major increases (-2% up to 37%) in most other regions except in Germany (where the drop is "around -9%"). Map 4.4 shows global warming emissions dropping most in Spain, central and southern England, southern France and in parts of Austria and Greece.

The drop in cereal supply is said to be "rather pronounced in regions with very low yields and [a] high share of direct payments in income for the reference run", e.g. durum wheat area in Portugal down by 60%. Total premium payments are estimated to rise in regions with high levels of permanent grass land and cattle production (with consequent rises in land rent levels, so that income distribution effects depend on land ownership). It is argued that "uniform premiums at Member State level would provoke a redistribution from more productive regions … to less productive ones". Also, "[r]egions specialising in beef production often receive higher premiums per hectare of grassland than per hectare of arable land from the COP scheme. In those regions, an identical premium shifts support towards arable crops."

5.2.4 The CAPMAT MTR Study

This study, by the Centre of World Food Studies in Amsterdam and the Centre for Economic Policy Analysis in The Hague (CWFS/CPB), used a CAP Modelling and Accounting Tool (CAPMAT) based on programming modelling of farmer supply behaviour in each EU Member State (i.e. at country level) embedded in a general equilibrium model, though with a highly stylised non-agriculture sector[3]. World prices, considered as exogenous, were

[3] A previous version of the model was based on the ECAM model developed at Bonn.

projected into the future using a 1:1 Euro:dollar exchange rate. A number of other assumptions included flexibility constraints on farm adjustment rates, an assumed area (0.7 Mha by 2009) of energy crops, more non-agricultural use of agricultural land (0.282 Mha by 2009).

The results show minor changes in land use, largely since the dairy and sugar regimes are unchanged, and the MTR proposals included elements tending to avoid instabilities. However, the EU-15 wheat area falls by 8%, coarse grains by 4% (rye by 45%), rice by 26% and oilseeds by 8%. The (large) EU-15 grass area increases by 1%. The farm population is estimated to fall exogenously by 2.4% (from 6.7 to 5.9 million) between 2003 and 2009, but farm incomes per head rise by 3.3%. The overall effect on economic welfare (equivalent variation measure), assuming no development in non-agricultural value added, is a gain of just over €1 billion, with a fall in direct support for agriculture of €1.24 billion.

Commentary (by the modellers) on these results in the Commission (2003*c*) report includes the warning that the 2009 time horizon is "far too short to identify the long-term implications of the proposed reform," but suggests that "in regions with mountain farming, rough grazing or less favoured areas, where the link between livestock intensity and grassland is hard to establish, the present [i.e. proposed] MTR regulations might in the long run offer scope for concentration of payment rights, which would be conducive to further intensification." The CAP reform would preserve the 'anchor' of stable net farm revenue, but change its basis from administered prices and stock keeping to farm/farmer eligibility, limited tradability of payment rights and the postponement of dairy and sugar reform.

5.2.5 The CAPSIM MTR Study

The University of Bonn's EuroCARE centre was responsible for a second impact study, this time using the still-developing CAPSIM model which is a "straightforward partial equilibrium-modelling tool with behavioural functions for activity levels, input demand, consumer demand and processing." It appears to operate at Member State level, with extra-EU-15 trade prices (or volumes) set exogenously.

The alternative reference and MTR simulations differ as follows: falls in many crop areas and revenues (areas: soft wheat by 1%, durum wheat 24%, barley 2%, maize 1.3%) but rises in the areas of oilseeds (1.5%) and of arable fodder crops (5.7%). The most notable differences are for beef cattle (adult males and suckler cows), but small price rises on meat markets (still constrained by EU border protection). Agricultural GVA is therefore slightly higher (1.2%) under the MTR although dynamic modulation cuts product-linked subsidies by 8% and results in a small fall in NVA (1%). Consumers would lose a small amount of economic welfare due to higher meat prices; the Pillar 1 budget savings (6.5%) would be redirected to Pillar 2 rural development (unmodelled).

Little territorial interpretation of these results is offered, but the authors suggest that "environmental impacts are likely to be positive for different reason, e.g. reduced support for intensive production of some cattle, and for fodder maize, and cross-compliance obligations (unmodelled). The administrative burden may eventually fall, and equity within farming may be improved although the €300,000 cap (unmodelled) might affect efficiency.

5.2.6 The INEA MTR Study

This study (INEA 2002), carried out at the Institute for Agricultural Economics Research in Rome, used the well known comparative-static worldwide GTAP AGE model (Version 5), whose base year was shifted from 1997 to 2006 using exogenous projections. There were 16 'regions' – the present Member States (Belgium and Luxembourg were combined, presumably), a CEECs bloc, and the 'rest of the world', each with 15 products (mostly agricultural and food) and 5 endowments (land, natural resources, labour, capital, and one

other). Scenarios involved full decoupling, modulation (simulated as a 15% reduction in all decoupled payments, ignoring the franchise and capping) and enlargement, modelled by abolishing all EU-CEEC trade measures and making domestic CEEC support "consistent with the EU policies". Direct payments were made consistent with the financial guideline for the new Member States (rather than using fixing unit payments).

The results suggest that full decoupling (with or without modulation and/or enlargement) "may promote a significant and generalised reduction in the volume of agricultural production" in the EU-15. Cereal production (and presumably area to a greater extent) is estimated to fall by up to 30% in France, Belgium, the United Kingdom, Denmark and Germany, but also in Spain, Italy and Greece. Decreases in cattle production would be especially strong in Ireland (down by 25%) but also in the United Kingdom and France. However, falls in other sectors are much smaller.

The effect of (a reformed) CAP adopted in the CEECs is estimated to increase production there significantly for cereals, oilseeds and sugar, and milk to a more limited extent.

Economic welfare effects of the full package (decoupling, modulation, enlargement) are put highest for the United Kingdom and France, followed by Spain and Italy if enlargement is excluded. With enlargement, Germany becomes the third largest gainer, due to its close CEEC trade links. While not large compared to GDP, the gains are equivalent to about 30% of EU-15 public expenditure on agriculture, and derive almost entirely from decoupling and the consequent reduction in resource distortion, which, it is assumed, releases farm resources to other and more productive uses.

5.2.7 The Commission LTP Studies

In addition to its studies of the July 2002 MTR proposals, the Commission has published the results of its analysis of the modified Long-Term Perspective (LTP) proposals presented in January 2003. Its report (European Commission 2003*a*) summarises the main findings of two analyses: one "on the basis of a set of partial equilibrium, dynamic models covering the most important arable crops, animal and dairy products in the EU-15", which are "regularly used for medium-term projections"; and the other using the ESIM model (also equilibrium) which has been specifically developed and used to evaluate the impact of EU enlargement. The main findings are said to "generally converge".

The results (for years 2004/05 to 2009/10) are expressed in absolute terms and in terms of percentage deviations from continued Agenda 2000 policy measures, as a result of the legislative measures (the LTP proposals), and with assumptions as the trade policy framework, the macro-economic environment, and medium-term world market developments.

The impacts of CAP reform in the EU-15 in 2009/10 (compared with Agenda 2000 continuation) are assessed as follows:

- Arable: cereal area down by 2.6%, production down by 2.1%, esp. rye and durum wheat. Oilseed area down by 2.9%, More energy crops (0.8-0.9 Mha, mostly on ex-cereal land) and voluntary set-aside (+29%, 0.7 Mha) on "land with low profitability"
- Beef: production down by 2.7% but prices up by 7.1%
- Sheepmeat prices: up
- Pork and poultry: production and consumption up
- Milk: rise (with quota) of 2.0%; butter prices down by 23%, and production down: cheese and fresh dairy products production up (cheese production up 1.5%, prices down 5.5%); SMP production down 6.6%, prices down by 4.8%

- Farm incomes: 'very modest' impacts (-0.1%) but 8.5% higher than in 2001 in real terms, per work unit. Less favourable in dairy (-5%) and oilseeds (-11%) sectors, significant gains in overall meat sector (2 to 3%).

The impacts of EU enlargement (in 2004) and CAP Reform in the EU-25 by 2009/10 (compared with Agenda 2000 continuation) are assessed as follows:

- Arable: cereal area down by 4.1% (especially rye), production down by 3.2%; oilseed area up by 3.9%
- Meat: production down by 6.6% lower
- Dairy: production 1.6% higher (lower subsistence production offsets higher quotas); milk prices 10% lower (cf. EU-15 23% lower)
- Market revenue (GAO) 3.4% lower (crops 1.3%, animals 6%); GVA 2% lower; but (after direct payments) agricultural income 1.3% lower (real incomes in new Member States over 45% higher than in 2002 without enlargement)
- "Significant and sustainable improvement"

This report contains no territorial (e.g. national or regional) results or (except as above) discussion.

5.3 Territorial Analysis of CAP Reform Proposals

5.3.1 CAP Reform and Cohesion Objectives

The direction of current CAP reform (Agenda 2000 and the Commission's Long-Term Perspective proposals) can be characterised by:

- Lower market protection, especially for cereals but increasingly for milk, sugar and other products.
- Direct payments to farmers decoupled from production levels but linked (cross-compliance) to agri-environmental and other performance, and modulated (e.g. by size of total payments) to release funs for other purposes.
- A stronger and wider "rural development policy", including food standards and animal welfare but also farmer and farmland diversification and environmentally valuable farming methods.

Cohesion objectives include, in particular:

- The viability of rural communities and
- The reduction of urban-rural and rural-rural disparities of income, job opportunities and quality of life.

Comparison of these two lists suggests that CAP reform may have two different effects, i.e.

- Maintaining the incomes (and hence existence) of certain numbers of farmers who will receive direct payments at a level likely to ensure satisfactory standards of living which are comparable with urban and other rural citizens.
- Requiring the adjustment – perhaps by exiting the farming sector – of a number of farmers who are unable to replace income losses from lower market returns and/or lower direct payments by farm diversification and environmental enhancement.

The impact of these trends on the viability of rural communities depends primarily on the proportion of farm workers amongst the rural population as a whole, and on the ability of

those leaving farming (in whole or part) to find alternative employment and/or income without changing their community of residence. While houses abandoned by ex-farm households may not fall into disrepair, if used for occasional family or new-purchaser visits, or by incoming retirees and commuters, these new uses may not result in a satisfactory standard and variety of rural community life in terms of school attendance numbers, social activities, etc.

Even with retention of numbers of farms and farmers, the 'new CAP' is unlikely to form the foundation of viable rural communities if the farm occupants so retained are generally old, and/or have non-farm activities which take them away from their communities and surroundings for significant periods of time during the day, week or year. Payment for non-labour-intensive land-using activities such as woodland or nature reserves, for example, may allow and encourage such changes. In view of the generally rising average age level of EU farmers, this is of concern, although offset by the positive aspects of providing some of the increasing numbers of older EU citizens (some returning to farming after an active first career elsewhere) with an environmentally valuable lifestyle

An alternative – and perhaps parallel – development in agricultural patterns and practices is the development of farming enterprises which are substantial in terms of land use and/or business scale, and able to survive more adverse and more variable cost-price ratios than under the 'old CAP'. Such businesses are likely to use modern technologies, to develop their human resources, and be fully integrated into national and international food supply chains, thus providing their managers and employees with lifestyles fully comparable with other professional occupations.

From a territorial point of view, the relative levels of these developments is likely to vary by distance from major urban centres and tourist attractions, and by the quality and variability of agronomic resources such as soils, water and processing facilities.

5.3.2 Balance of EU Objectives

In terms of Project 2.1.3 hypotheses (Chapter 3) and the CAP itself, EU objectives may be considered at a number of levels, e.g. at a 'high' or 'strategic' level (global competitiveness (European Commission 1993), socio-economic cohesion and environmental sustainability), and, at a lower or more specific level, (e.g. 'fair' levels of farm incomes, strengthened and integrated rural development, and food safety).

The optimal balance of these objectives is, of course, ultimately a political decision, taking into account the demands of the various social groups concerned, and the trade-offs necessary between current and future uses and enjoyment of resources, taking into account projected changes in technology and consumer/citizen preferences.

Nevertheless, from a socio-economic point of view, the following remarks may be made:

- The increasing emphasis placed by EU consumers on environmental quality and food safety is likely to raise the relative importance of the objective of environmental sustainability; and this will increase if consumers in Central and Eastern Europe, and/or in other major food-importing countries in the world, follow the same trend.

- As the world's largest food trader, the EU has a basic interest in global competitiveness in the production of agricultural products. Nevertheless, its unique and varied pattern of rural resources is unlikely to enable all territories to compete effectively in major world markets in grains, basic milk products, sugar, etc. Instead, it must seek competitiveness through a combination of quality and distinctiveness, recognising that any such market advantages can be eroded by the actions of trading partners (cf. wine), and that continued

efforts must be made to persuade consumers to prefer EU produce over that of other countries. However, as a single market of over 400 million people, who possess marked regional, national and continental identities and are generally less mobile than e.g. in the United States, it should be possible for EU territories to establish market positions in food and drink products which can be defended against competition from elsewhere.

- As regards the relative priority to be given to food safety, this seems likely to remain of major significance in the EU. Moreover, food safety is more likely to be secured and maintained by large-scale 'modern' farm enterprises and processing/retailing chains than by small-scale enterprise; this indicates a difficult choice to be made between the expressed EU objective of supporting small and medium-scale enterprises (SMEs) and those of commercial competitiveness and dynamism.

5.3.3 CAP/RDP Implementation and Cohesion Policy at Territorial Level

The historical (and current) structure of the CAP/RDP and its instruments are largely non-territorial in nature. The major regional CAP designations – the LFAs – have arguably been drawn at too broad a level to be regarded as territorially targeted, and the amounts of extra funding attracted by LFA status are not large compared to the major expenditures and effects of the direct payments and other market-wide support measures.

Within Pillar 2 of the CAP, many other rural development measures are similarly non-territorial in character, with the exception of those Guidance measures restricted to Objective 1 regions "whose development is lagging behind" and to regions previously classed as Objective 1 or 5b but now subject to transitional measures. The Objective 1 regions include 22% of the EU's population, but a much greater proportion of its land area (farmed and total). The main criterion for Objective 1 status (GNP per head at or below 75% of the EU average) is entirely economic, and not agricultural or environmental in nature.

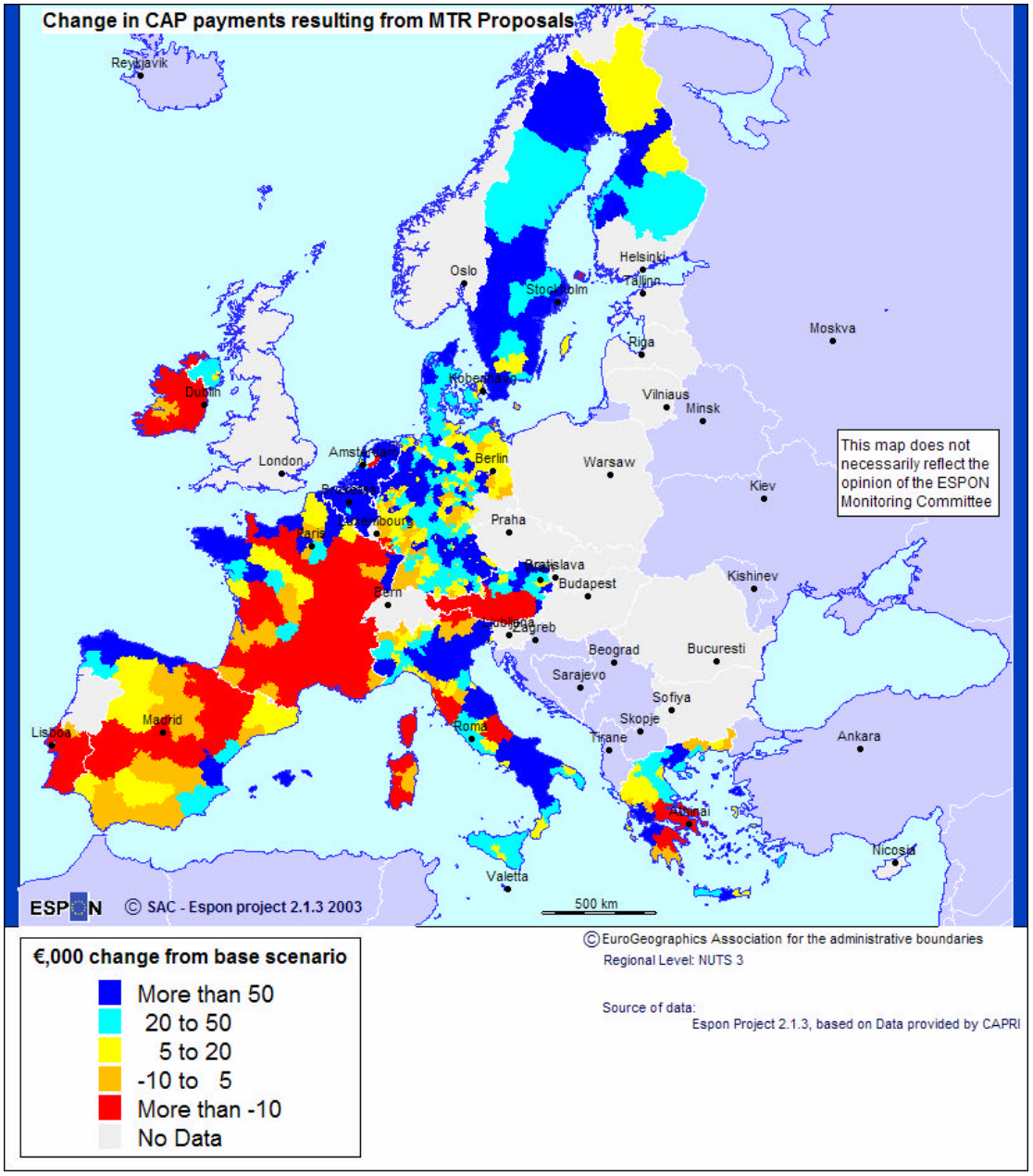
Thus nearly the whole of the CAP is operated separately from cohesion policy, with which it fits only 'accidentally'. At territorial (sub-national) level, this is even more true, because the Cohesion Fund applies only to four countries, and it and much other Structural Fund expenditure is focussed on national-level problem such as inter-regional infrastructure, often related to urban areas, e.g. major transport links and wastewater treatment.

5.3.4 Territorial Analysis of CAPRI Study Impact Results

In order to study the relationship between CAPRI impact measures and the EU's social and economic cohesion objectives, the CAPRI results were first apportioned from NUTS 2 to NUTS 3 level (see Appendix 5.1). These results were then analysed using mapping and linear regression techniques. Two CAPRI impact measures (both differences between 2009 estimates for MTR proposal implementation and those for the reference scenario, i.e. absence of MTR CAP reform) were considered in this analysis: CAP 92 premium payments, and farm Gross Value Added (GVA) plus CAP 92 premiums.

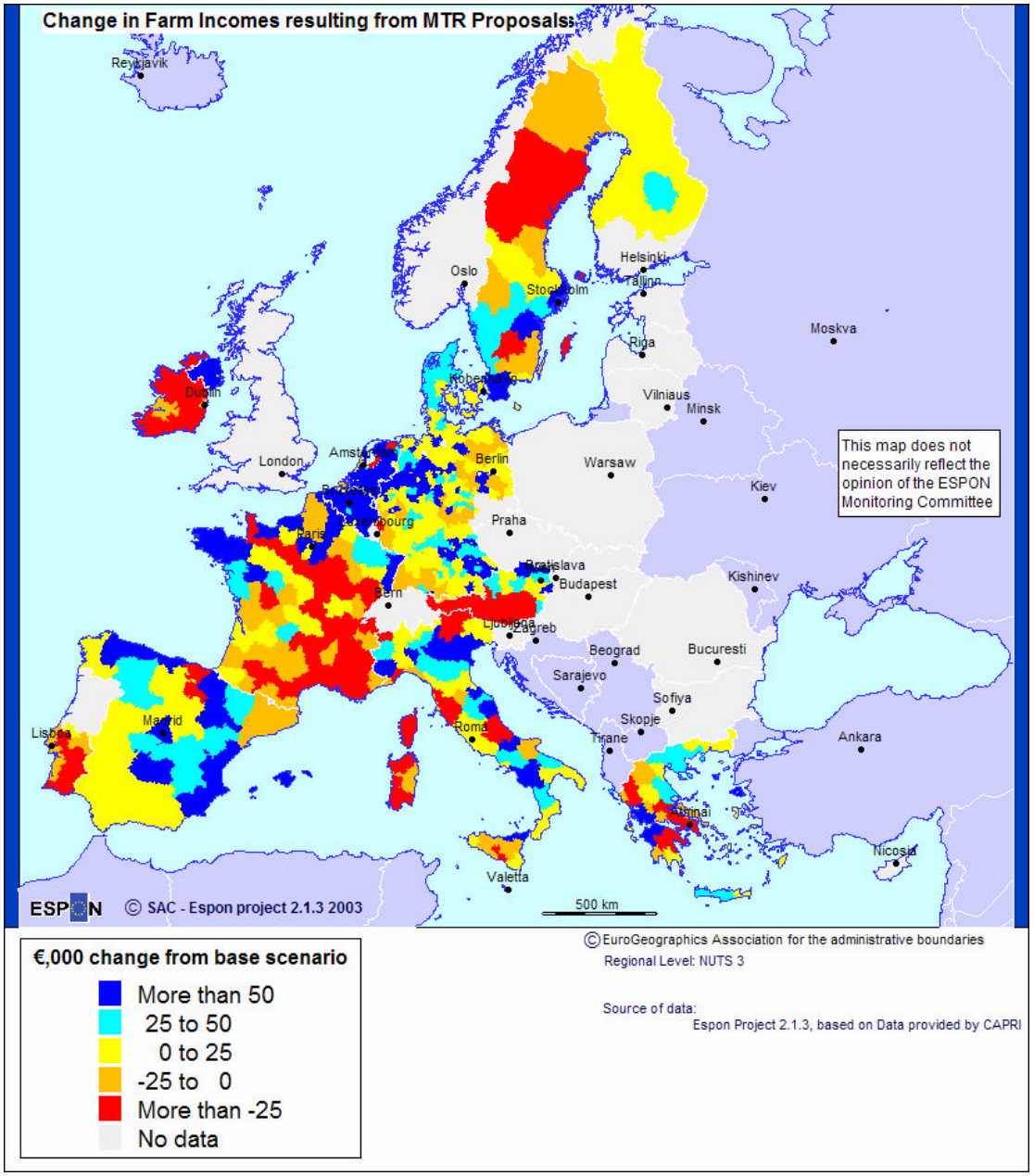
Map 5.1 shows absolute changes in CAP direct payments resulting from the MTR proposals. In cartographical terms, the largest changes – showing increased payment levels of over 50% in such payments – appear mainly in the Low Countries, in parts of Sweden, Germany and Italy, while decreases of more than 10% apply to much of Ireland, France and Austria and through the central parts of Spain and in southern Portugal. Such changes are of course designed to partly offset changes in market price support.

Map 5.1 Absolute changes in CAP direct payments resulting from the MTR proposals



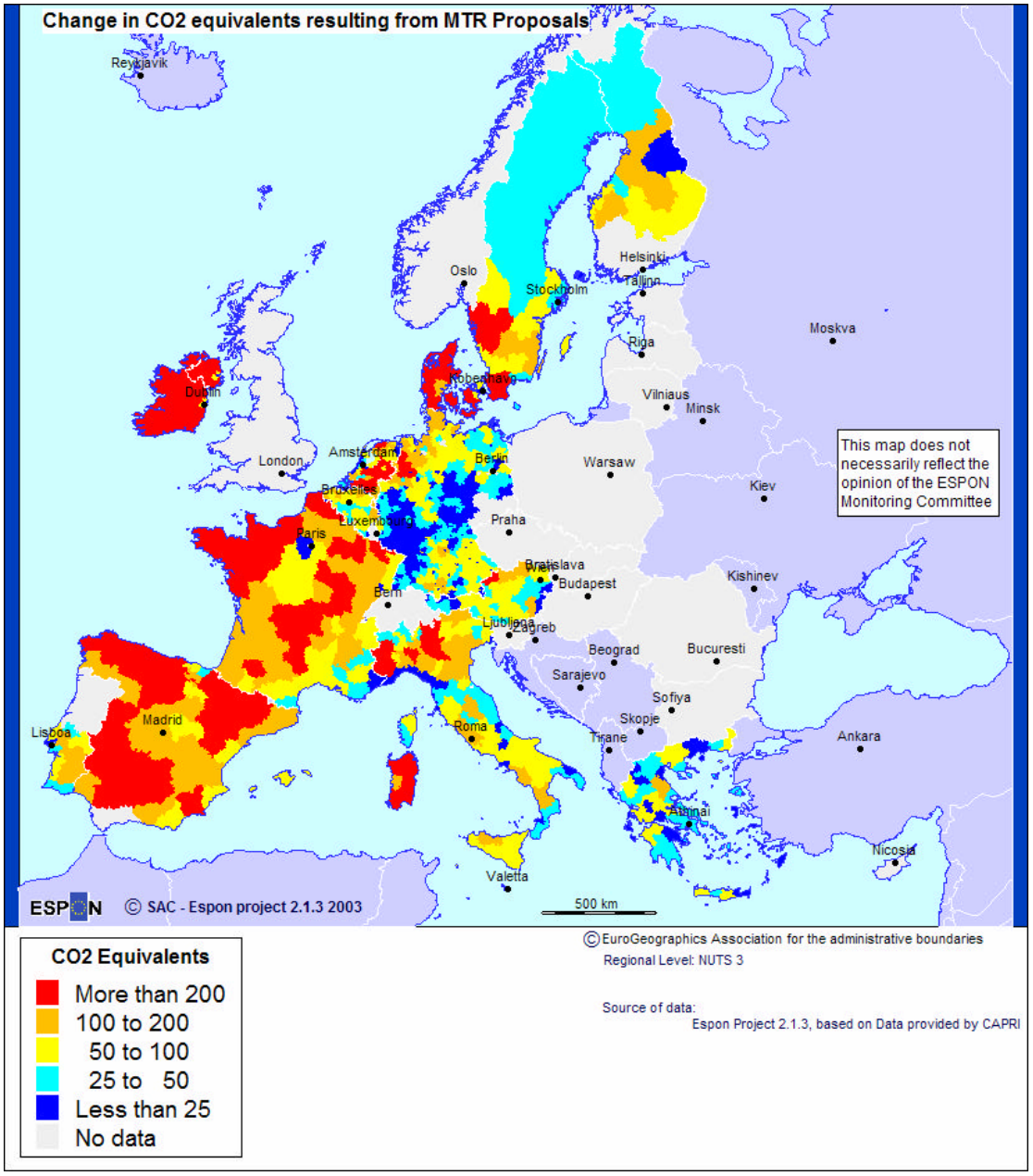
Map 5.2 shows estimated absolute changes in farm incomes resulting from the MTR proposals. To some extent, these follow the same pattern as those in Map 5.1, but whereas in some countries (Ireland, Austria) farm incomes fall as much or more than direct payments, in others (France, Spain, Italy) the income falls (or rises) or much more muted or even reversed (Sweden).

Map 5.2 Estimated absolute changes in farm incomes resulting from the MTR proposals



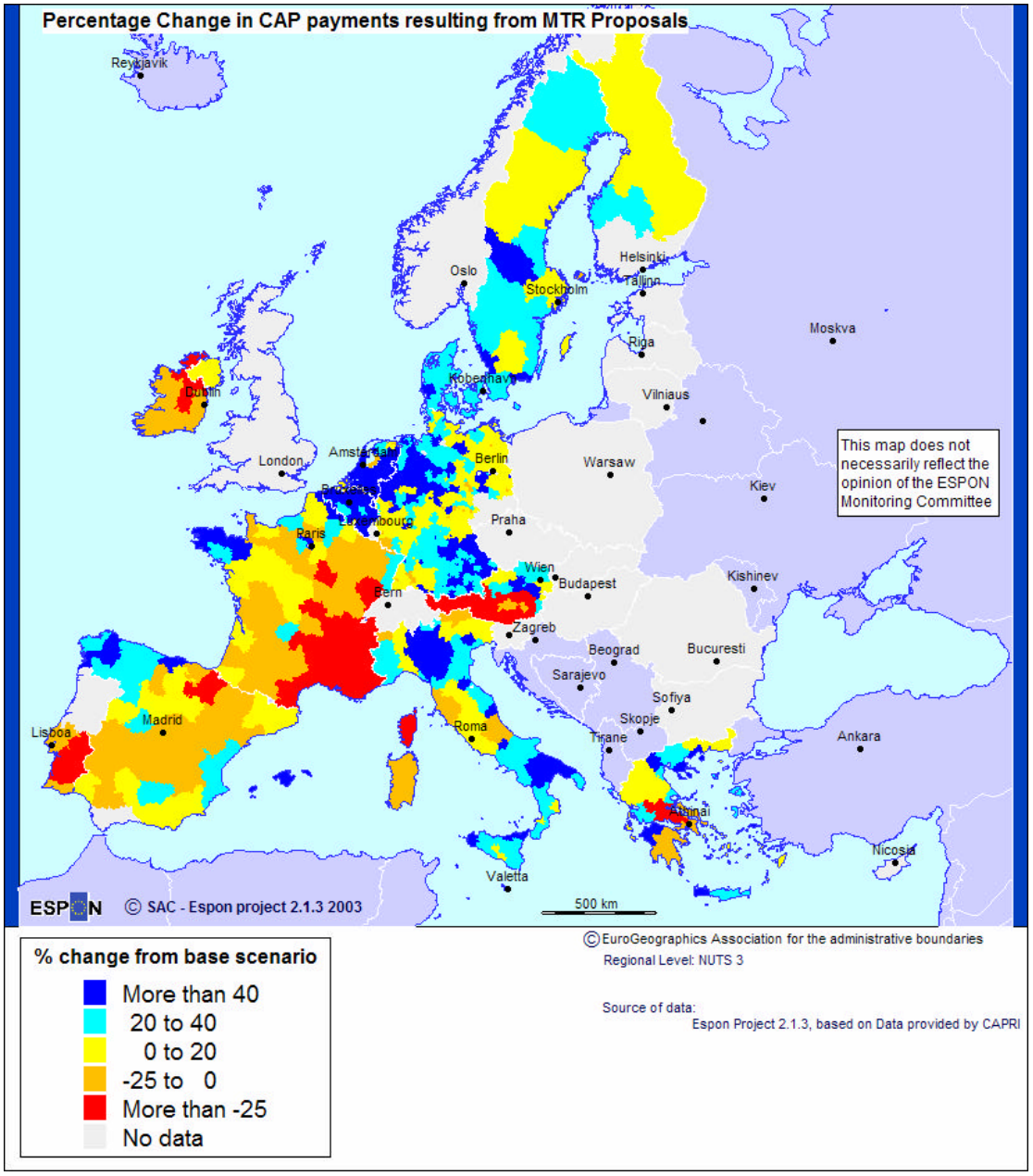
Map 5.3 shows absolute changes in an environmental measure (CO_2 equivalents) resulting from the MTR proposals. In almost all NUTS 3 areas, these are more than 200, suggesting an increase in this indicator, especially in many western regions.

Map 5.3 Absolute changes in CO_2 equivalents resulting from the MTR proposals

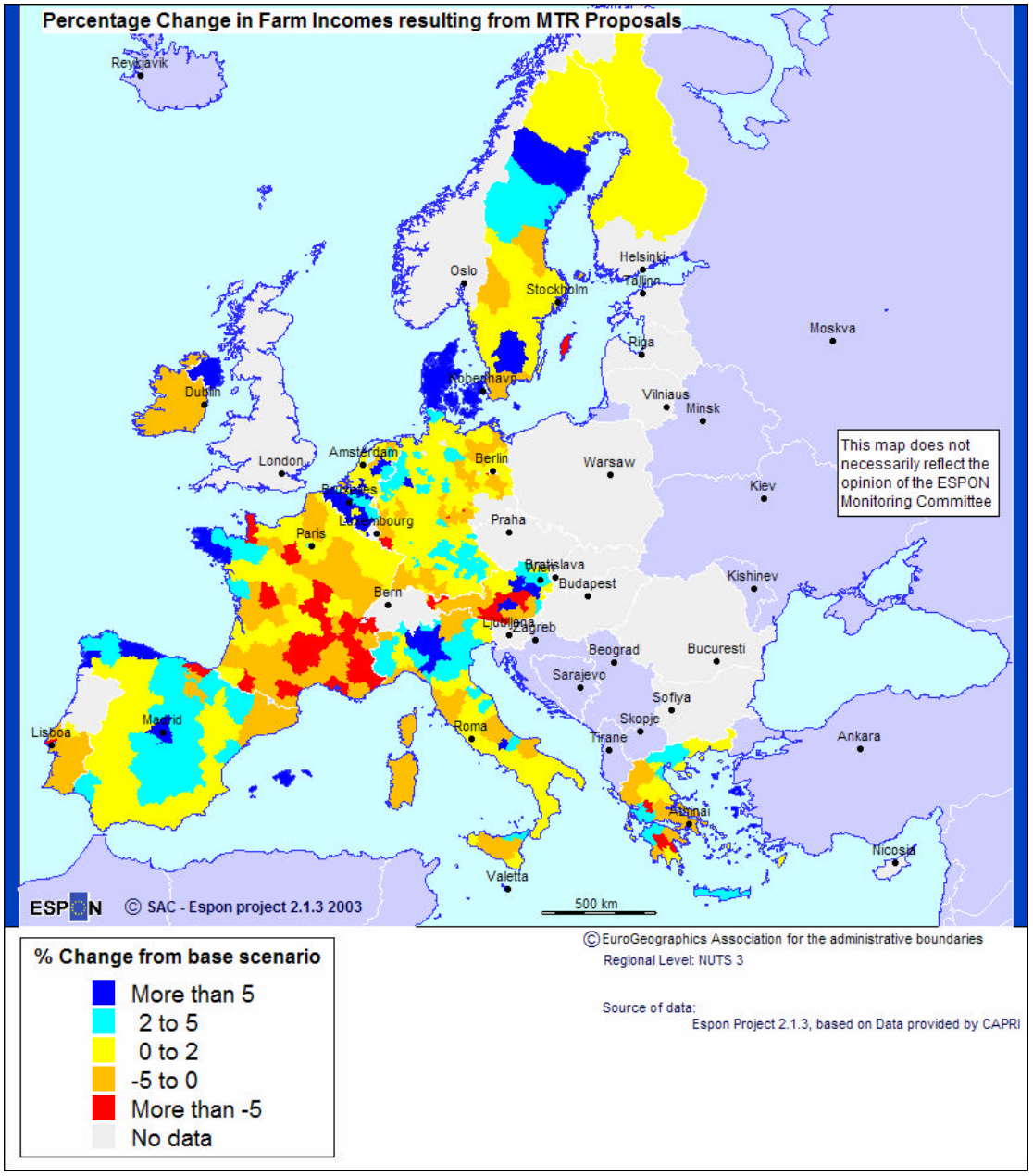


A second trio of maps show the same variables expressed as percentages of the reference level. CAP payments change by more than about 25% in relatively few regions, such as the Low Countries and parts of Northern Germany and northern Italy (increases) and southern France and Austria (reductions). Farm incomes are only marginally affected, with changes of more than 5% apparent only in a small number of NUTS 3 regions in France (mainly in the south) and Austria (both show falling incomes) and in some or all of Northern Ireland, Belgium, northern Italy, Denmark and Sweden (all show rising incomes). Of course, these percentage changes reflect the relative size of the MTR effects and the level of farm income in the base period (1997-99). As regards CO_2-equivalent emissions, rises of over 40% appear in northern Sweden, northern Finland, the northern half of Ireland, and in small parts of several other countries. Little or no change is apparent in East Germany, north central France and north central Spain – all areas where livestock are relatively scarce.

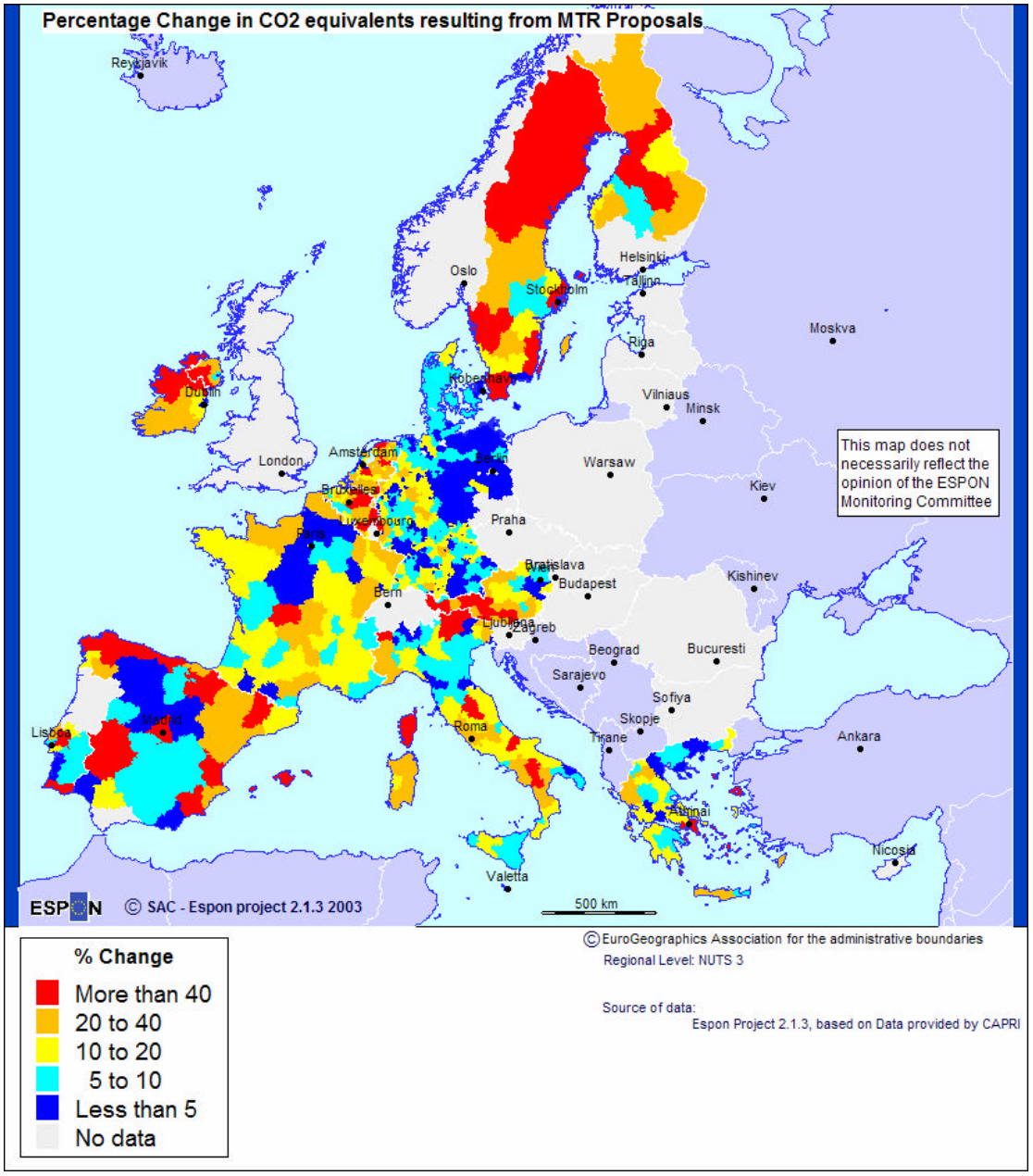
Map 5.4 Percentage change in CAP payments resulting from MTR proposals



Map 5.5 Percentage change in farm incomes resulting from MTR proposals



Map 5.6 Percentage change in CO_2 equivalents resulting from MTR proposals



In the first set of regressions, GDP per inhabitant and the unemployment rate, both in 1999, and the population changes between 1995 and 1998, were used as cohesion indicators. The results (see Table 5.1) suggest that the MTR CAP reform proposals would have increased CAP direct payments more in those NUTS 3 regions with higher values of GDP per inhabitant, i.e. the generally more prosperous areas. However, there was no statistically significant relationship with NUTS 3 unemployment rates. The results also indicate a negative relationship between the difference in CAP 92 premiums and increases in population between 1995 and 1998. Thus, as a result of MTR implementation, CAP premiums would have increased more, compared to the benchmark scenario, in those areas with more slowly growing populations in the late 1990s.

Regressions using farm GVA plus CAP direct payments showed no statistically significant relationship with GDP per head or with population change rates, but a weak, positive one with

unemployment rate, suggesting that MTR CAP reform would have increased this measure of farming prosperity in areas with higher unemployment.

Table 5.1: CAPRI Regression Analysis Summary: signs and statistical significance of NUTS 3-level relationships between CAP support measures and economic and social indicators, 1999

	GDP per inhabitant	Unemployment rates	Changes in population, 1995-99
Direct Premium Payments	+**	0	-**
GVA plus CAP92 Premiums	0	+*	0

Note: ** and * mean statistically significant at the 5% and 10% level respectively. A zero (0) means a lack of statistical significance at the 10% level.

Similar analysis was undertaken with the OECD region typology of 6 main categories of NUTS 3 regions, i.e. predominantly rural and leading, predominantly rural and lagging, intermediate and leading, intermediate and lagging, predominantly urban and leading, and predominantly urban and lagging.[4] Five dummy variables represented these categories, using Type 6 (predominantly urban and lagging regions) as the reference area type.

The results (Table 5.2) indicate that, as a result of the MTR implementation, CAP payments would, compared to the predominantly urban and lagging areas, decrease in rural and leading areas, and probably in both types of intermediate regions. Levels of farm GVA plus CAP premiums would fall, as a result of MTR implementation, in all OECD types except predominantly urban and lagging areas, and by approximately the same amounts (not shown).

Table 5.2: CAPRI Regression Analysis Summary: signs and statistical significance of NUTS3-level relationships between CAP support measures and OECD area categories

	Predominantly rural		Intermediate		Predominantly Urban	
	Leading	Lagging	Leading	Lagging	Leading	Lagging
Direct Premium Payments	-**	0	-*	-*	0	Ref.
Farm GVA plus Direct Premium Payments	-**	-**	-**	-**	-**	Ref.

Note: ** and * mean statistically significant at the 5% and 10% level respectively. A zero (0) means a lack of statistical significance at the 10% level. Ref. indicates the type of area with which others are compared.

[4] See chapter 4 in the SIR of ESPON Project 2.1.3 for further details on OECD region typology.

5.4 Impacts of CAP/RDP Reform on Accession Countries

5.4.1 Introduction

Analysis of the impact of CAP/RDP reform in the accession countries is complicated by a number of factors, including:

- The broad socio-economic transition process towards a mature democracy and a market-based economy, which has a major influence on living standards
- The effects of EU accession itself, including free east-west trade within the EU-25 as well as domestic effects
- The precise way in which CAP reform will apply to these countries, following long and strenuous negotiations over the adoption of the 'old' (Agenda 2000) CAP
- The considerable pre-accession aid being delivered to these countries by means such as the SAPARD fund (see Section 2.2.5), and the effect of the Europe Agreements and the growing commercial anticipation of successful enlargement in 2004.

In general, the following general tendencies in the land sector are expected to occur after EU accession by the CEECs:

- Limiting regulations and restrictions on the purchase of land will have to be abolished;
- In order to consolidate and enlarge the competitive and intensive core of their farm sectors, the CEECs will have to adopt land legislation much more favourable to tenant-farmers;
- Access to the Union's system of direct aid will increase farm incomes, and therefore the land prices and rents;
- The institutional and political convergence will activate and enlarge the markets for land and its leasing in the candidate countries, while gradually integrating them into those of the EU-15.

The other effect of integrating the land markets of the CEECs, where effective land values are currently about 5% to 20% of the Community average, will be a considerable increase in land prices, in particular for the major crops. This will further decrease the comparative competitiveness in the CEECs, a further reason to moderate the forecast for cereal and oilseed crop surpluses. The consecutive rise of the cost of fodder also strengthens the forecast of under-competitiveness in the livestock sector (Pouliquen 2001, p. 67). From the spatial viewpoint, the differences between more favourable and less-favourable areas might be expressed particularly strongly.

Table 5.3 overleaf shows budgetary estimates of the costs of CAP adoption by the CEECs under the agreed enlargement conditions, i.e. before the June 2003 CAP reform agreement, which did not directly involve the CEEC ministers. The commitments for rural development are substantial

Table 5.3: Estimated CAP Expenditures, Indicative Allocations and RDP Commitments to Candidate Countries, 2004-2006 (€m, 1999 prices)

	Czech Rep	Estonia	Hungary	Latvia	Lithuania	Poland	Slovakia	Slovenia	Cyprus	Malta	Total
Total Direct Payments											
2005	169	17	265	25	68	557	73	27	9	0.1	1,211
2006	204	22	316	31	84	675	88	33	11	0.3	1,464
Market Support (Budget Heading 1a)											
2004	45.0	13.6	63.6	8.9	23.2	135.2	16.9	14.9	4.9	0.7	327
2005	109.0	33.4	151.9	21.6	56.1	349.8	48.1	38.3	11.8	1.71	822
2006	111.0	34.4	152.0	23.6	59.2	376.5	49.2	38.8	11.5	1.7	858
Rural Development Commitments											
2004	147.9	41.0	164.2	89.4	133.4	781.2	108.2	76.7	20.3	7.3	1,570
2005	161.6	44.8	179.4	97.7	145.7	853.6	118.3	83.9	22.2	8.0	1,715
2006	172.0	47.7	190.8	103.9	155.1	908.2	125.8	89.2	23.9	8.5	1,825

5.4.2 The CAP in the CEECs

The current policies of CAP seem hardly suitable for the structural problems of the CEECs. The discussion in the negotiation period has concentrated on the application of CAP in the accession countries and transition periods useful for the sector and spatial integration. Rural development policy attains particular relevance under these circumstances, since it is assumed that a great portion of regions in the CEECs will be affected by further spatial divergence tendencies.

Community policies on agricultural enlargement, as defined by Agenda 2000 focus almost entirely on the combined capacity of overall growth in the CEECs and the structural aid to relax these constraints, by absorbing agricultural over-employment in urban and rural (non-agricultural) employment, and by financing increased national budgets for agricultural modernisation and restructuring (Pouliquen 2001, p. 83).

Transitional policies for the accession-countries are proposed to achieve a competitive restructuring process of the sector, and to focus on measures in favour of rural development and government aid for the transformation of the semi-subsistence-farming sector in order to keep the migration towards urban employment on a moderate level. The competitive restructuring covers direct aid to investment in intensive productions, notably livestock and horticulture, and in the related upstream and downstream industries. Basic infrastructures (networks of water conveyance, electricity, roads, rail and waterways, telecommunications, irrigation, and other para-agricultural investments) are of particular importance and furthermore a complex 'package' of other convergent policies, including relevant progress of the institutional framework are required (Pouliquen 2001, p. 83).

Direct Payments
In the run-up to accession, the application of direct payments has been controversially discussed. The *pro* and *contra* arguments give an assessment of the prospected impacts: the core argument in favour of the application of direct payments was that direct payments are part of the CAP *acquis*, and the permanent exclusion of the new Member States from direct payments would not reflect the EC Treaty's concept of a single market for agricultural products (EC 2002*a*: 5). The Commission, however, concedes that the application of direct payments without adaptation could have some counterproductive side-effects (EC 2002*a*:5), including negative impacts on restructuring, and creating considerable income disparities and social distortions in the rural societies of the new Member States, which might create imbalances both within rural areas (due to wide differences in land ownership) and between rural and urban areas, without adequately addressing the requirements of semi-subsistence farms. Many of the arguments against the application of direct payments could be also turned against support systems in the EU-15. A principal problem is that direct payments do not help the semi-subsistence farming sector, because this sector has not a significant base area.

The conclusion was to start direct payments at a low level combined with intensified support for restructuring, in particular through rural development actions. As an output of the Copenhagen summit in December 2002, direct aids for the new member states will be phased in over 10 years (see Table 5.4). They will thus receive 25% of the full EU rate in 2004, gradually phased in and by the year 2013 they will reach 100%. Furthermore there is the possibility of co-financed top-up direct payments.

The new Member States will have the option to grant direct payments during a limited period in the form of a de-coupled area payment applied to the whole utilised agricultural area. On the basis of its total envelope of direct aids and its utilised agricultural area, an average area payment would be calculated for each country (EC 2002*d*: 4). The selection of the implementation model of the direct payments (full or simplified schemes, modulation) will have a decisive impact on the effects, including a spatial variation of the prospects for the development of agricultural sector. In addition, a package of rural development measures will be available to accession countries from accession onwards.

Table 5.4: Phasing-in of direct payments, Budgetary Outlays

	Percentage	*Top-up direct payments*	*Amount of Money (Mio. €, 1999 prices)*
2004	25%	30%	1211
2005	30%	60%	1464
2006	35%	65%	1743
2007	40%	30%	
2008	50%	30%	
2009	60%	30%	
2010	70%	30%	
2011	80%	20%	
2012	90%	10%	
2013	100%		

Commodity and Spatial Effects
The specific conditions of entry were agreed in the Copenhagen decisions (phasing in of direct payments, top-up possibility, agreed production quotas; EC 2003*a*: 11). The accession

will remove the reciprocal protection between the CEECs and the EU-15. Vice versa the CEECs will benefit from (phasing in) direct payments and rural development measures.

There are several studies which forecast scenarios after entry of the CEECs (EC 2002*a*, EC 2003*a*). It seems to be common sense that a decline in livestock production and a modest growth in cereal and oilseed production would be the effect of the accession (Pouliquen *et al.* 2001). In all impact studies the specific spatial implications of the entry are a non-issue.

The main effects of the application of EU price policy in the candidate countries will be to encourage cereal production (due to rising price level) and discourage feed consumption. The effects on beef and dairy production are slightly positive, but not enough to cause a significant increase compared to current production levels. Pork production is likely to decline, at the same time as its consumption increases. The major impact of direct payments on production would be a further shift towards coarse grains and a faster development of specialised beef production, subject to the suckler cow premium ceilings (EC 2002*a*: 3).

It must be mentioned that the assumption of 'rising price level' (which is 'translated' into rising land-use and ensuing spatial effects) is highly volatile. It depends on the degree of the appreciation of the real exchange rate, and is also affected by the continuing alignment between Community and world prices (cp. Midterm-review). A continuing convergence of farm prices towards levels of the Union is observed, which will have a direct impact on the competitiveness of CEEC farm prices (Pouliquen 2001, p. 15). Meanwhile, there are examples where farm prices in CEECs have attained the level of EU-15 countries, and it seems that price levels can not increase much further.

Baldock and Tar (2002) estimate that the area of cereals seems likely to expand, partly absorbing land currently sown and altering it to crops where contraction may occur, such as potatoes. Some of the abandoned arable land might come back into production. Intensification seems unlikely to reach EU-levels, because of the lower land and labour prices, moreover the limited availability of credit and the low inputs of pesticides and inorganic fertilisers. More marginal cereal land may continue to justify little investment or new infrastructure and gradually be abandoned or be converted to other uses, e.g. forestry.

A more differentiated assessment of the CAP impacts is expected for livestock production. Semi-subsistence farming is important in the dairy sector, and with large numbers of small producers, many observers expect them to become less competitive and to withdraw from farming in sizeable numbers. This could be accelerated by the health and hygiene standards within the EU and the introduction of the milk quota regime. Therefore dual effects are probable: abandonment from small plots of semi-subsistence farmers and intensification of the large producers.

These views are shared by more recent assessment studies stating that husbandry will decline. An impact assessment of the CAP reform proposals (which incorporates the effect of decoupling direct aids) forecasts for EU-25 that the utilised agricultural area will rise stronger than the resulting yields: The new Member States add about 38,0 Mio. hectare of UAA to the 130 Mio. hectare of the old Member States, representing an increase of 30%. The EU-25 would produce in 2006 about 30% more cereals with 42% more cereal area and 25% more oilseeds with 37% more oilseed area (EC 2003*a*: 12).

5.4.3 Rural Development Policies

There is a broad consensus that rural development policies should be territorially defined and based on an integrated approach, embracing the economic, social and environmental aspects

of rural development (OECD 1997*a*: 22). The large portion of the accession countries which is dominated by rural areas underpins the relevance of rural development programmes.

Rural regions in the enlargement area are affected especially by transformation problems. They show sharp economic spatial disparities and have few urban centres. To a certain extent, the mix of sharp declines in production and employment levels, poor infrastructure and poor transport accessibility could lead to a massive wave of out-migration from rural regions, and as a consequence, to the collapse of their socio-economic viability (EC 1999*a*: 50). Yet, in many CEECs the formulation of rural development policies is at a rather early stage and they are still mainly targeted at the agricultural sector and the basic rural infrastructure (OECD 1997*a*: 22).

A tradition for spatial development and regional policies similar to those of many EU-states and as defined in the EU Structural Funds hardly exists. This can be seen through the lack of spatial development and regional policy instruments and institutions as well as by the fact that in general independent regional levels in the political and administrative territorial system do not exist (EC 1999*a*: 48-49). The OECD proposes an effective, well-designed and suitably targeted institutional adjustment, which is crucial for rural development policies.

> "Given their territorial and multi-sectoral character, rural development policies and programmes involve a wide array of actors including sectoral ministries, government agencies, intermediate and local administrations, local private business, trade associations and voluntary organisations. Therefore, an institution needs to be designed with the responsibility and authority to lead and co-ordinate rural development policies" (OECD 1997: 126).

As outlined above, most candidate countries cannot be expected to develop the administratively more demanding rural development measures on the basis of their current limited administrative capacity and experience alone (Baldock and Tar 2002, p. 12). The two programmes agreed at the European Council meeting in Berlin as part of the Agenda 2000 proposals, the Instrument for Structural Policies for Pre-Accession (ISPA) and the Special Action for Pre-Accession Measures for Agriculture and Rural Development (SAPARD), aimed particularly at this lack of institution building and supported the (technical) implementation of territorial development policies in the applicant countries.

As an outcome of the Copenhagen summit in December 2002 the EU decided a package of rural development measures eligible including:

- Early retirement of farmers
- Support for less favoured areas or areas with environmental restrictions
- Agri-environmental programmes
- Afforestation of agricultural land
- Specific measures for semi-subsistence farms
- Setting up of producer groups
- Technical assistance
- Special aid to meet EU standards

Additional rural development measures (investment in agricultural holdings, aid for young farmers, training, other forestry measures, improvement of processing and marketing, adaptation and development of rural areas) will be financed from the Structural Funds (EAGGF Guidance sector; EC 2002*d*: 2).

5.4.4 Distinction between CEECs

The pre-conditions for the CEECs accession with respect to implementation of rural development policies are highly diverse. For example, Slovenia and Slovakia recently established central co-ordinating bodies responsible for rural development policies. However, financial support for rural areas is still strongly linked to agricultural production, while support to other activities in rural areas is still negligible. In Latvia, Lithuania, Albania and Bulgaria, the restructuring of agriculture still predominates, and minor attention is being paid to the specific problems of rural areas at present. However, a growing number of projects aimed at tackling specific rural problems are being undertaken, usually with the backing of international donors. In Romania, no institutions exist for the specific purpose of promoting rural development, and rural policy is still equated with agricultural policy and primarily a centralised approach (OECD 1997: 22).

This leads to the two main types of institutional development: on the one hand, there are countries with central institutions co-ordinating rural development policies created, where the sector approach is integrated into regional strategies. In the Czech Republic, Estonia, Hungary, Poland, Slovakia and Slovenia, rural policies are distinct from agricultural policies; decentralisation of the decision-making process and the involvement of local actors in solving community problems seems to be most advanced, and central co-ordination bodies responsible for rural development policies are already established. Whereas rural development policies are conceived in close relation to regional policies, the financial support for rural areas still remains heavily concentrated on agricultural production, and support to non-agricultural activities in rural areas is marginal (OECD 1997: 130). Expectations of a more integrated approach and multi-sectoral programmes were disappointed by the practice of the pre-accession programmes (e.g. SAPARD) which tightly focused on competitiveness and sector aspects.

Latvia, Lithuania, Albania, Bulgaria and Romania are the second group. The discussion of the specific problems affecting rural areas is at an early stage and the restructuring of agriculture still predominates. A growing number of individual projects are aimed at solving specific rural problems, but there is no separate institution which co-ordinates rural development issues.

There is thus a great challenge for applying strategies for integrated rural development policy in the CEECs. The following aspects are particularly relevant and require greater attention (OECD 1997: 131-132):

- The low level of economic development leads to a domination of macroeconomic strategies, and preferential treatment of restructuring and privatisation issues. Programmes to decrease spatial divergence and support non-urban areas have still to be started. However, the tight central budgets leave only little resources for financing local governments' development initiatives.

- Public funds are channelled to rural areas almost exclusively through agricultural policy measures, partly because of the still important role played by agriculture and strong agriculture lobbies.

- Rural development is the result of a long-term process of institutional evolution and socio-economic development.

- The disruption of local development, and the experience of collectivisation and artificial creation of rural settlements (agro-centres) and the recent transformation period have increased insecurity and threats for local population. In many rural areas this has contributed to the weakening of the identification of the rural population with the area in

which they live. There is a rising need to re-shape local identities and to nurture potential of rural areas in CEECs.

- Insufficient means at local level to solve local problems, the dominance of top-down approaches, and lack of secondary and vocational education available for the rural population are further important handicaps for rural development activities

5.4.5 Mountain areas in the CEECs

As a specific spatial category, mountain areas reveal features of spatial divergence and environmental impacts more clearly than other areas. The case of the mountain areas is therefore presented here to focus on the particular need to less-favoured areas in the accession countries. Many parts of the CEECs are characterised to a large degree by such land use types, for instance the Carpathian mountains which extend over parts of the Czech Republic, Slovakia, Hungary, Poland, Ukraine and Romania. Due to natural difficulties and problems of the restructuring of agriculture, the income potential from agricultural production in these areas is substantially lower than in lowland areas. These areas are furthermore threatened by trends of growing inter-regional disparities. Appropriate strategies for the agricultural sector and rural development policies will play a decisive role, particularly in the more marginalized areas of the CEECs (Dax 2001, p. 2).

The features of mountainous regions in CEECs are very diverse (Dax 2001, p. 6). Whereas Slovenia and Poland have mostly well developed infrastructure in the mountain regions, other countries have limited social problems in mountains and rather good infrastructure (e.g., the Czech Republic, Slovakia and partly Bulgaria). Still others, like Romania and Albania, have a lot of small private farms, suffer from overpopulation and a lack of job possibilities, which implies high unemployment rates and badly developed infrastructures.

The degree of implementation of a specific less-favoured-area framework and policies is highly different. In preparation of the accession some CEECs (Czech Republic, Poland, Slovakia and Slovenia) have already provided support to farming in marginal areas and in particular mountain areas, especially to grassland based farming methods. Among the three Baltic countries only Lithuania has established a similar programme to date. On the contrary, Bulgaria, Estonia, Latvia and also Romania have not yet developed less favoured area type schemes (Dax 2001, p. 6). In all countries there is a lack of integrated approach in the mountain areas. Common aspects for all mountain regions are:

- Mountain areas are characterised by widespread poverty, with the mountain population with weak economic integration and participation in the economic and social life of the country.

- Mountain people have restricted access to public services such as hospitals, primary schools, or cultural activities.

- Mountain areas are characterised by their lack of infrastructure, such as roads, telecommunications or electricity, systems that once functioned, such as irrigation, sewage and heating networks have fallen to ruin.

- Open and hidden unemployment reaches dramatic levels, even if the statistics are lacking.

- Mountain regions and their populations are not taken into consideration in the political, economic and social life of the State – they have no effective representation.

- Mountain areas are affected by a wave of significant out-migration – however some areas have had substantial population growth due to people coming from urban centres, family and social structures have remained more intact in the mountains, semi-subsistence holdings may offer a modest living standard.

Mountain areas and other less-favoured areas cover a large space in the accession countries. The spatial importance results not only from the actual utilised agricultural area but from the economic point of view of spatial cohesion which might offer opportunities for a sustainable future.

Conclusions

The CAP reform proposals are expected to generate a sustainable improvement in the medium-term perspectives of the agricultural sector of the EU-25. It is assumed that in the new member states, the CAP reform would secure the income gains generated by the enlargement which could reach up to 45%, when taking account of the phasing-in of direct payments and rural development measures (EC 2003*a*: 4). Although a differentiation of the effects of the reform are rather difficult to calculate, it is concluded that the reform proposals would have diverging impacts across regions and the various sectors, leading to declines in the milk and (food) oilseed sectors, broadly stable development in the cereal sector, and significant gains for the meat sector. There might, however, be additional spatial aspects, particularly for accession countries, for the internal development of the agricultural production depending on structural and region specific factors.

Appendix 5.1: The Apportionment of CAPRI Impact Measures to NUTS3 Regions

The purpose of this procedure was to apportion CAPRI impact measures from NUTS 2 to NUTS 3 level. Attention was centred on the following three "impact variables": CAP 92 premiums, gross value added (GVA) plus CAP 92 premiums, and global warming potential (CO_2 emissions). Values of these variables were available from the CAPRI project for two situations, i.e. the benchmark scenario (absence of MTR), and the implementation of the MTR of the CAP, both forecast for the year 2009. The first two of these variables were available for 8 groups of commodities (cereals, oilseeds, other arable crops, perennial crops, fodder, set aside, cattle and other animals); global warming potential was not disaggregated by commodity.

For the CAP 92 premiums and GVA plus CAP 92 premiums results, one of the 8 standard apportionment variables (see SIR, Section 6.4 and Appendix 5) was assigned to each commodity group, as below:

CAPRI commodity group	Apportionment variable
Cereals	Arable area
Oilseeds	Arable area
Other arable crops	Arable area
Perennials	Permanent crops
Fodder	Number of beef cattle
Set aside	Utilised agricultural area
Cattle	Number of beef cattle
Other animals	Agricultural holdings

The apportionment variable values were summed across NUTS 3 regions in each NUTS 2 region, and the NUTS 3 shares thus derived were used to apportion the two CAPRI impact measures.

Once both the two impact variables were apportioned for each of the eight commodities, these were summed across commodities to get a single estimate, for each NUTS 3 area, of the CAP 92 premiums and the GVA plus CAP 92 premiums. The 2009 CAPRI-forecasted differences in these two variables were then computed, and the result expressed as a percentage of the base scenario value.

For the CAPRI global warming potential variable, the selected apportionment variable was utilized agricultural area. After apportioning this variable from NUTS 2 to NUTS 3 level, the 2009 CAPRI-forecasted differences in CO_2 emissions for the MTR scenario relative to the reference scenario were determined as percentages.

Chapter 6

Interactions between CAP and Rural Development Policy and other Territorially Relevant Policies

A primary objective of the ESPON Programme is "to contribute to a better understanding of the spatial dimension of the Structural Funds, cohesion policy and other Community policies, and national sectoral policies" (ESPON 2006 Programme, p. 9). While ESPON Project 2.1.3. is primarily concerned with the territorial impacts of the CAP with special attention to Rural Development Policy, it is also required to consider the interactions between this predominantly sectoral policy and other territorially relevant EU policies. Therefore, the focus here is on whether the CAP and RDP assists, complements, hinders or contradicts the actions to achieve the goals and objectives of other policies that have an influence on territorial development and spatial planning, and also on the interactions of these policies with the CAP and RDP. Four policy areas are considered:

- Structural and Cohesion Funds Policy
- Environmental Policy
- Transport and Communications Policy
- Social Policy

Other policy areas related to trade and energy are not covered separately as the territorial aspects of their interactions with CAP and RDP are referred to in the discussion of the four chosen policies.

6.1 Interactions between CAP and RDP with Structural Funds Policy

The adoption of the Single European Act in July 1987 which included new objectives in relation to economic and social cohesion paved the way for a more coherent EU approach to spatial development which was likely to become even more necessary in the context of the single European market after January 1993. The objectives of the Economic and Social Cohesion policies addressed via the Structural Funds were first set out in 1988 for the period 1989-93. Five objectives were identified:

- Objective 1 – programmes in regions where development is lagging behind and where per capita GDP is less than 75% of the EU average,
- Objective 2 – programmes in regions seriously affected by industrial decline
- Objective 3 – combating long-term unemployment,
- Objective 4 – facilitating the entry of young people into the labour market,
- Objective 5 – supporting programmes concerned with (a) the adjustment of agricultural structures and (b) the development of rural areas.

These were modified slightly for the period 1994-1999 principally through the inclusion of an additional objective for extremely low population density rural areas in Finland and Sweden. Additional support for the four poorest member states – Ireland, Spain, Portugal and Greece – was made available from the newly established Cohesion Fund. Following a further review in the late 1990s a smaller set of three consolidated objectives have been adopted for the period 2000-2006:

- Objective 1 – programmes in regions whose development is lagging behind, including regions whose per capita GDP does not exceed 75% of the EU average, sparsely populated regions of Finland and Sweden and the most remote regions,

- Objective 2 – programmes in regions undergoing conversion including industrial or service sectors subject to restructuring, a decline in traditional activities in rural areas, problem urban areas and difficulties in the fisheries sector,
- Objective 3 - modernising training systems and promoting employment.

6.2 Agriculture policy up to the early 1990s

The principal instruments of the CAP prior to the 1992 reforms, namely market support and protection measures, were designed to achieve multiple objectives including an expansion of agricultural output. Combined with technological advances the CAP measures contributed to increasing intensification, specialisation and concentration. The spatial distribution of the incidence of market support payments is linked to the intensity of farming and the extent to which different farm enterprises attract support payments. Variations in the intensity and scale of farming operations are influenced by many factors which are not distributed uniformly across the regions; rather they frequently combine resulting in some regions having distinctive sources of comparative advantage for specific types of agricultural production. The trend towards increasing specialisation when combined with regional differences in comparative advantage for particular farming types has resulted in an increase in the level of regional concentration of production.

In broad terms the CAP has contributed to improving the economic and social situation in rural Europe. CAP support mechanisms have helped to maintain agricultural production in some regions at levels that would not have been possible in an environment of more open competition. The specific instruments to ensure guaranteed prices and to provide protection from lower priced imports have enabled more farms to survive than might have happened in the absence of the policy. This is especially the case in some weaker rural areas where opportunities for alternative forms of economic development are more restricted. The Guidance section of the EAGGF has provided assistance for structural reform and modernisation of on-farm production and off-farm processing of farm output. The CAP has also ensured a secure supply of food for the entire population of the Community while at the same time removing much of the uncertainty that producers would face in a more market oriented policy environment. Thus it may be argued that the CAP has, at the broad inter-sectoral level, contributed to the objective of promoting more balanced regional development.

The role of the CAP in supporting the rural economy has been augmented since the late 1980s by the consolidated and enlarged structural funds. In particular, assistance towards investments in physical infrastructure, water distribution systems, farmyard facilities for storing and managing sources of pollution, and also investments in targeted training and advisory programmes have complemented the objectives of the CAP and more recently those of the rural development programmes.

The positive outcomes noted above, however, should not be allowed to disguise some serious concerns that have arisen from the application of the CAP in different parts of the EU. The empirical evidence in relation to the spatial distribution of the incidence of market price supports demonstrates that the highest levels of payments per AWU and per ha UAA tend to occur in some of the richer regions of the EU (see chapter 3). Overall, the incidences of price supports are lowest in the poorest regions due to weaker agricultural structures, and also in regions with the highest unemployment rates. Thus, while in aggregate terms the CAP may contribute to reducing disparities between rural and urban regions, it does not assist in reducing intra-rural disparities in incomes. This outcome contradicts the economic and social cohesion objectives for which the Structural and Cohesion Funds were consolidated.

6.3 Agriculture and Rural Development Policy since the early 1990s

Since the early 1990s there have been a number of initiatives to reorientate the CAP so that it becomes more in tune with international market conditions. The shift towards greater emphasis on supply control measures, compensation payments and more comprehensive rural development programmes has the potential to significantly alter, in a positive way, the relationship between the CAP and the Structural Fund policies. The incidence of supply control measures introduced for a variety of commodities including milk, sugar, cereals, oilseeds, protein crops, beef and sheep varies considerably between regions. Institutionalised price supports continue to remain at high levels for commodities such as milk and beef, favouring the more pastoral regions, while in some of the core arable zones producing crops such as wheat, barley and oilseeds prices have been significantly reduced.

The introduction of compensation via direct payments is problematic for two reasons (Buckwell 1996):

- Firstly, the level of payments is not sufficiently linked to the income reductions associated with the lowering of commodity price supports. This has led to over-compensation of some groups of farmers, especially cereal growers who are mostly located in some of the richest EU regions.
- Secondly, there has not been a clearly articulated rationale to support an indefinite continuation of such payments for a one-off policy change. Extending the provision of such payments to the accession countries will require significant adjustments in order to avoid further market distortions and increased levels of social inequality between the farming and non-farming populations.

The imposition of ceilings on compensation payments has ameliorated to some extent the effect of variations in intensity and scale of farming. Thus, the most recent evidence for the distribution of direct payments at NUTS 3 level shows a significant degree of consistency or complementarity with the Structural Fund Objectives in relation to per capita GDP and unemployment rates. The contribution of direct payments to total agricultural income is particularly strong in low intensity farming regions, including upland areas where cattle and sheep farming systems are the most common types of farm enterprises. They are also significant in some regions with large areas under cereals which include some relatively underdeveloped sub-regions as, for example, in Spain.

A number of issues need to be considered in relation to the role of such payments in the future, including: the likely level of public support for their continuation over the longer term; the relative rate of economic return from such payments; whether they hinder or restrict diversification; and their impacts on the wider economy, especially the agri-processing sector. For example, the move towards decoupled direct payments as envisaged in the Luxembourg Agreement (2003) may lead to reduced numbers of livestock that may in turn result in lower levels of purchased inputs and also less volume for processing, in which case there may be further rationalisation as processors compete more for supplies.

Progress towards establishing a comprehensive rural development policy with a stronger territorial dimension has been disappointingly slow. The introduction of the Less Favoured Areas scheme in the 1970s was the first explicit recognition of the need for special assistance in designated areas and as such was an important first step in the process of introducing a territorial dimension into a mainly sectoral policy. Despite the significant conceptual and methodological difficulties associated with measuring the impact of LFA payments, it is likely that the overall outcome complements the structural fund objectives. However, any conclusion regarding the impact of LFA payments must be qualified by the following concerns:

- the very small share of the EAGGF expenditure allocated to LFA payments, given the severity of the problems to be overcome in these areas;
- the intra-regional distribution of LFA expenditure is linked to volume of production; thus it does not address sources of local inequalities;
- the availability and scale of LFA supports, especially when coupled with other subsidies, has in some cases restricted progress in relation to restructuring of production that would lead to larger and more competitive farms;
- the LFA and related supports may have also hindered efforts to promote alternative landuses, especially afforestation, thereby resulting in suboptimal resource use.

These and other issues are discussed in more detail by Kearney and Associates (1995) in their evaluation of the impacts of the Compensatory Payments in the Less Favoured Areas of Ireland. Notwithstanding the limitations noted above, LFA payments remain as a significant component of the current round of rural development programmes.

The reforms of the early 1990s included the introduction of a number of accompanying measures, of which agri-environment schemes were the most notable. Such schemes have multiple objectives. As eligibility to participate tends to be contingent on relatively low intensity farming, though not exclusively as for example in parts of Spain, the distribution of participants and levels of payment per AWU and per UAA are expected to be highest in the weaker rural regions. Therefore, such schemes are expected to contribute to the achievement of the economic and social cohesion goals. However, the statistical analysis reported in Chapter 3 refutes this hypothesis at the level of NUTS 3 regions across the EU. This result may reflect a tendency for some member states to give higher priority to agri-environment measures in response to the severity of the problems that have already arisen from their intensive production systems. Given the variation between member states in the operating rules for agri-environment supports it is necessary to interpret cautiously any EU generalisations. The evidence from Ireland points to a higher incidence of agri-environment payments in the weaker farming regions (Lafferty *et al.* 1999).

It is also necessary to qualify any conclusion about such payments by relating the level of expenditure to the total level of support provided under the CAP. The positive contribution of agri-environmental measures in weaker regions may not be sufficient to counter the effects of product supports in the stronger regions. Therefore it is likely that for specific regions, total CAP expenditure continues to be at variance with the economic and social cohesion objectives. While it is difficult to empirically test this hypothesis across all the regions of the EU, the evidence for Ireland in the late 1990s is supportive.

The desirability of a transition to a more elaborate framework for sustainable and integrated rural development was first discussed at the 1996 Cork Conference on Rural Development hosted by the European Commission. The ensuing Declaration, which sought to lay the basis for 'making a new start in rural development policy', proved to be overly ambitious and had to be significantly altered in order to achieve the requisite level of political support. The Commission proposals for Agenda 2000 introduced the notion of rural development as the Second Pillar of the CAP. However, by the conclusion of the negotiations over CAP reform, the commitment to a new approach to rural development was severely curtailed. The main outcome was the Rural Development Regulation RDR (1257/99) which falls far short of the objectives contained within the Cork Declaration.

The RDR as adopted in Berlin in 1999 aims to provide a single, coherent package of support to all rural areas in three main ways:

- by creating a stronger agricultural and forestry sector;
- by improving the competitiveness of rural areas;
- by maintaining the environment and preserving Europe's unique rural heritage.

These aims are to be achieved through the implementation of nine measures which include as 'accompanying measures':

- agri-environment schemes
- LFA compensations
- Aid for afforestation of farmland
- Early retirement aid

The following are also included as 'non-accompanying measures'

- Investment in agricultural holdings
- Setting up of young farmers
- Training
- Improving of processing and marketing of agricultural products
- Promoting the adaptation and development of rural areas

While the establishment of the RDR is to be welcomed as an initial step towards the more ambitious goal of sustainable and integrated rural development, the reality is that it amounts to little more than an amalgamation of pre-existing measures to provide support for activities close to agriculture (Dwyer *et al.* 2002). It does not provide a coherent basis for a truly integrated approach to rural development.

The evaluation by Dwyer *et al.* (2002) of the Rural Development Programmes prepared for ten countries identifies marked differences between member states. While agri-environment schemes are a compulsory component of each RDR Programme, the relative allocation of resources to this measure is highest in some of the countries with the least severe environmental problems, such as Sweden, Finland, Austria and Ireland. LFA payments are of very limited importance in intensively farmed countries such as Denmark and the Netherlands in contrast to countries with extensive upland and low intensity grazing areas as in France, Greece, Austria, Ireland and the UK. In the intensively farmed countries of Northern Europe – Denmark, Netherlands and Belgium – the emphasis has been placed on measures to improve structures and marketing.

The limited evidence available thus far in relation to the design and implementation of the RDR programmes suggests a number of significant weaknesses that need to be addressed. Fundamentally, the second Pillar is much too closely aligned with agriculture and the imbalance in the allocation of resources between Pillars 1 and 2 is so large that it is impossible to conceive of strategies aimed at achieving the objectives of sustainable and integrated rural development. There is an urgent need to:

- Place rural development as a component of comprehensive strategies for integrated regional development that explicitly recognise the extent of old and new types of rural-urban relations. Small scale localised actions are not a sufficient response to the many diverse challenges confronting rural areas. In order to achieve the territorial goals associated with the Structural and Cohesion Funds, a higher level strategic approach to rural development is needed that will require closer alignment of the measures contained in RDPs with those in the Structural Fund Operational Programmes.

- Ensure that the allocation of rural development assistance attaches more emphasis to medium and long-term development potential based on strategies to combine endogenous and exogenous resources and that extend the range of supports beyond the farming community (Terluin and Venema 2003).

- Adjust the balance of support between CAP and RDP so that the outcomes from this policy area can become more supportive of economic and social cohesion goals. The traditional relationship between agriculture and rural development where the former is regarded as the driver needs to be reversed, so that comprehensive RDPs can be regarded as frameworks for ensuring the long term sustainability of the European model of agriculture based on the concept of multifunctionality. The specific proposals by Buckwell *et al.* (1997) to transform the CAP into CARPE (a Common Agricultural and Rural Policy for Europe) are still valid. These include further reductions in direct supports for various commodities with a shift towards increased allocations to rural development incentives, environment and cultural landscape payments and for a limited period some transitional adjustment assistance.

- At the level of implementation there should be more objective assessment of the relative needs for rural development and more careful targeting of resources towards the elimination of market failures that work against the achievement of rural based public goods. These include the quality of food, soil, water and atmospheric resources, biodiversity, habitats and landscape and also the development of viable and sustainable rural communities and economies. There is also a need to ensure that implementation procedures facilitate greater local participation and permit sufficient flexibility to enable local customisation of strategies. The current round of RDPs are the result of a predominantly top-down preparation process, that has relied heavily on amalgamating pre-existing measures and which has maintained an approach that regards rural development as an adjunct to agriculture policy. This methodology is very much at variance with the pilot experiments involving innovative approaches to rural development promoted by the EU Commission in conjunction with local action groups with assistance from Community Initiatives such as LEADER (for a comprehensive overview of the outcomes from the LEADER approach see Moseley 2003).

The challenges confronting agriculture and rural development in the accession countries are very large. The analysis by Buckwell *et al.* in the 1990s pointed to many risks associated with transferring the 'western' CAP, even after the 1992 reforms, to the context that prevails in the accession countries. There are many instances of dualistic production structures, as for example in Hungary (Ferenczi 2003), which require much greater emphasis on rural development programmes that are integrated at the level of regions with other support programmes. As in the EU territory, there is a very strong case for shifting from a sectorally defined commodity support framework to a broader territorially defined set of integrated support measures which will support a stable and efficient food producing sector that will be embedded in sustainable rural environments populated by sustainable rural communities.

The commencement of the implementation in autumn 2002 of the SAPARD Regulation for pre-accession countries provided an opportunity to support economic and social reforms in these countries. In general terms the measures supported by SAPARD mirror those included in the RDR programmes with the exception that assistance for early retirement, setting up young farmers and for producers in Less Favoured Areas are excluded. Furthermore the assistance towards agri-environment schemes is very much restricted to pilot actions. Dwyer *et al.* 2003 have noted that the impact of SAPARD to date has been limited by the relatively small amount of resources devoted to it, start up delays and an emphasis on developing institutional capacity in the central administrations. Nevertheless, SAPARD has already had a significant indirect effect in encouraging a number of accession countries (for example Hungary) to introduce, as early as 1999, alternative approaches to rural development which are similar to the EU. As in EU15 there is a need for a reallocation of further resources towards rural development, which must be guided by strategies containing a more explicit territorial focus and which facilitate greater participation of a wider range of stake holders at local and regional levels. The adoption of a programme approach is a welcome initiative, but

this needs to be developed further with more emphasis on integration across sectors and development dimensions at regional levels, and also with more resources for local and regional capacity building. These objectives can be achieved more effectively through closer alignment of CAP & RDP policies with those for the Structural and Cohesion funds.

6.4 Interactions between CAP and RDP with Environmental Policy

This section examines a range of outcomes that have been associated with a policy era in which agricultural and environmental policies evolved almost independently of one another. This is followed by a discussion of the implications of a more explicit concern about integrating environmental and other policies as required by the Sixth Environmental Action Programme of the European Community.

For most of the first thirty years of the CAP, the policy did not have any explicit environmental objectives. The development of EU environmental policy over the same period was very gradual and was mostly guided by a mainly reactive type approach. It is not surprising, therefore, that the productivist orientation of the CAP until the early 1990s supported increasing levels of intensification and specialisation which have resulted in a wide variety of negative environmental impacts. These include reductions in biodiversity, degradation and erosion of soils, contamination and excessive abstraction levels of water resources, air pollution by ammonia and greenhouse gases, destruction of wildlife habitats, and significant alterations to many distinguishing features of the European rural landscape. The incidence of environmental damage due to late twentieth century farming practices is not confined to the EU, nor indeed can they be ascribed as being even primarily due to the CAP per se.

During the socialist era in Central and Eastern Europe agriculture and food production were promoted by government plans that paid little attention to the suitability of production systems to the local environment. The pursuit of objectives related to increased production resulted in more intensive landuse practices supported by inorganic fertilisers, and development of extensive drainage and irrigation schemes. While the levels of reliance on inorganic inputs remained much less than in the EU area there is evidence of considerable environmental damage.

It is important to note that in addition to the differences between the EU area and the Central and Eastern Europe regions there are also significant differences between regions in the two parts of Europe in relation to outcomes from the interaction of agricultural and environmental policies. Such differences are associated with contrasts in the levels of resilience of local environmental factors, the scale of operations and the modernisation/ productivist stage attained by agriculture in each region.

Since the early 1990s the relationship between agriculture and environmental policies has changed significantly. On the one hand the importance of promoting more environmentally friendly farming practices has been adopted as part of the CAP objectives, and indeed the elaboration of the European Model of Agriculture with the concept of multi-functionality has identified new policy-relevant roles for farmers as custodians of many rural-based public goods. On the other hand, EU environmental policy is now guided by sustainability principles which place more emphasis on prevention supported by a comprehensive regulatory system and there is more explicit emphasis on integration between policy areas.

In Central and Eastern Europe, the reform programmes introduced following the change of political regimes in the early 1990s have resulted in a decline in the overall intensity of agriculture with fewer livestock and reduced usage of inorganic fertilisers and pesticides. The currently widespread pattern of relatively low input and more extensive farming systems provides an opportunity for the development of more environmentally sustainable agriculture.

The Special Accession Programme for Agriculture and Rural Development (SAPARD) includes an opportunity for applicant countries to include in their plans measures to support agricultural production methods designed to protect the environment and maintain the countryside. According to the EEA report on Europe's Environment (2003) many countries have included such measures in their SAPARD programmes but there have been considerable delays with implementation, and most countries have given higher priority to improving competitiveness of the agri-food sector than to agri-environmental measures.

Before detailing examples of specific types of agriculture-related pressures on the environment, it is also important to note that agriculture production is itself impacted upon by a number of environmental pressures. These include, for example, the loss of agricultural land for other uses such as housing, transport, recreation/leisure, waste management, etc. Another impact is associated with air pollution from industrial sources and, over the medium to longer term, the prospect of climate change. The designation of environmentally sensitive habitats as special areas of conservation can often be perceived by some farmers as an additional pressure on agricultural production.

6.5 Agriculture pressures on the environment

The report by Baldock *et al.* (2002) to DG Agriculture on behalf of the Institute of European Environmental Policy reviews on a sectoral basis the evidence in relation to the effects of specific CAP measures upon the environment. One of their main findings is that there is very little empirical evidence to support definitive conclusions on the direct impacts of CAP measures per se. Among the major methodological difficulties associated with measuring CAP environmental effects are the interactions with other driving forces including changes in international market conditions, technological improvements, and adjustments in the wider economy especially in relation to demand for labour. A further set of complications are associated with the highly variable set of production conditions prevailing throughout Europe with many examples of localised contrasts that make it very difficult to arrive at general conclusions. The report cautions that it is difficult to verify claims that CAP policies are the primary driving force in relation to substantive environmental impacts of agriculture. For example, the impacts of intensive dairy farming on ground water are similar in countries with much lower levels of price supports to those that have arisen in parts of the EU.

A wide range of environmental issues associated with agriculture in Europe are summarised in the following table compiled by Baldock *et al.* (2002, p. 29).

Table 6.1: Environmental issues associated with agriculture

Environmental issue	Major agriculture sectors
Maintaining extensive pastoral landscapes	Beef, sheep, goats, dairy
Maintaining extensive southern arable	Arable
Declining marginal farming systems	Beef, sheep, goats, dairy, arable, wine, Olives
Eutrophication of water and related decline in biodiversity	Pigs, dairy, beef, horticulture, arable, olives, sugar
Pesticides in water	Horticulture, arable, olives, vines, sugar
Excessive abstraction of water for irrigation	Arable, olives, horticulture, sugar, wine, forage maize
Ammonia form indoor livestock	Beef, dairy, pigs
Greenhouse gas production	Cattle and pigs as contributors Grassland & energy crops as mitigators
Biodiversity/landscape – loss of habitats to intensive agriculture	Arable, dairy, beef, sheep, goats, wine, olives, sugar, horticulture
Biodiversity – decline in farmland species related to pesticides, nutrients, field enlargement	Arable, dairy, intensive 'southern' crops, Sugar
Decline in biodiversity and landscape from neglect of management	Pastoral systems, traditional olives and vine groves, areas of former mixed farming
Soil erosion	Cereals, maize, oilseeds, horticulture, sugar, sheep, goats

The table illustrates that most sectors are in fact associated with a number of environmental issues, and also that the severity of any issue depends upon the intensity of production within each sector. For example, low intensity cattle and sheep production can help to maintain extensive pastoral landscapes and high levels of biodiversity while high intensity production systems in the same sectors are likely to produce opposite outcomes.

In the dairying sector approximately 84% of milk production comes from intensive dairy farms. Excessive nutrient levels in manure and other farm wastes from these farms can result in pollution of soils and water; there are also high risks associated with the storage of large quantities of slurry; zero grazing systems as for example in the Netherlands can lead to high emissions of ammonia; and the cultivation of extensive areas of forage maize has contributed to increased soil erosion and loss of biodiversity. However, given the difficulties of separating CAP from non-CAP effects, Baldock *et al.* conclude that "the evidence for significant CAP effects in the environmental impacts of the EU dairy sector is inconclusive". The reforms of the 1990s have not altered the overall trend towards fewer, larger herds and increased productivity per cow with the related environmental impacts. It is most likely that these trends will continue regardless of any further changes in the policy context.

Throughout the EU there are a variety of beef production systems which are supported by a complex system of policy instruments. The current regime has only a limited capacity to encourage more environmentally sustainable systems because its mechanisms are not flexible enough to reflect the variety of environmental conditions and the capacities of beef production systems throughout the EU. The provision of direct payments on a headage basis has been widely criticised as it tends to encourage production levels beyond local carrying capacities in environmentally sensitive areas.

Cereals, oilseeds and other arable crops occupy about one-third of the EU utilised agricultural area with about 80% of cereal production concentrated in France, Germany, the UK, Italy and Spain. For the EU as a whole, the trend in arable systems over recent decades has been one of

increasing intensification. In southern Europe the split between irrigated and un-irrigated cropland is especially important, as there is a tendency towards intensive production assisted by fertilisers and agrochemicals in the irrigated areas. In northern Europe there is a significant distinction in environmental impacts between crops that are winter sown compared with those sown in spring, with the former requiring greater inputs of fungicides and chemical fertilisers. Over recent years there has been an increase in the proportions of arable crops that are irrigated and of those sown in winter. The provision of direct payments to forage maize producers after the 1992 CAP reforms has increased the area subject to environmental impacts such as soil erosion, pollution of water by nutrients and soil sediments, ploughing up of extensive pasture lands, and pesticide effects on wildlife (Poux 2000).

Attempts to estimate the CAP effects on the environmental impacts of cereals and other arable crops lead to the conclusion that until 1992 cereal price supports encouraged production at higher levels and higher intensities than would otherwise have occurred, with some detrimental environmental effects. The move towards direct payments since 1992 and the introduction of obligatory set aside has altered the significance of the CAP as a driver of cereals production. While these changes have brought about the possibility of less detrimental environmental effects the methods of determining compensation payments may have introduced some additional environmental risks, in particular with respect to increased area of forage maize production and an increase in the area of irrigated farmland.

Olive production illustrates well the contrasts between intensive modern systems with high risks in relation to the environment and the more traditional low input systems which play an important role in the maintenance of regionally distinctive cultural landscapes. Most olive production is now from the more intensive and increasingly irrigated plantations in regions such as Jaen and Cordoba in Spain, Puglia in Italy and Crete in Greece. The main environmental issues associated with intensive production are soil erosion, water pollution, depletion of aquifers, and loss of biodiversity. As with other sectors, it is very difficult to isolate the CAP effects from those associated with the introduction of new technologies and the effects of trends in the wider economy that increase labour costs and lead to the abandonment of traditional management practices on many small farms. However, the introduction of the CAP olive regime in Spain and Greece in the 1980s combined with infrastructural investments (e.g., irrigation schemes) supported by the structural funds have contributed to significant increases in production and intensification in parts of these countries. In this way, the specific supports available for olive production are contributing to a deterioration in the environment as a result of the combined effects of intensification and marginalisation / abandonment.

Viniculture is highly concentrated, with France, Spain and Italy accounting for four fifths of the total land area devoted to vine growing in the EU. Despite the paucity of empirical research on the environmental impacts of the sector, the available evidence suggests that the CAP wine regime is likely to have detrimental environmental consequences in some areas. In southern areas the main cause is restructuring aided by EU market supports which has contributed to larger areas of intensive production in some regions while simultaneously there has been little support for traditional and marginal farming systems in areas of significant landscape character. The environmental effects are similar to those associated with intensive olive production. In other parts of Europe beyond the Mediterranean regions modern viticulture relies heavily on use of chemical pesticides which are associated with increased environmental risks.

Fruit and vegetable production is a major feature of agriculture in some regions, especially in the Netherlands, France, Spain and Italy. Over recent decades the sector has become highly intensive with greatly increased used of energy, artificial inputs and irrigation. Like all intensive production systems there are environmental risks, especially in relation to water pollution, depletion of water reserves, and soil erosion. However, since 1996 more stringent

conditions attached to the provision of aids to producers along with measures to limit production have provided an opportunity for a shift towards more environmentally benign production systems.

The European Environmental Agency Report 2003 has summarised the range of agriculture related pressures on the environment into four broad categories:

(a) Fertiliser and pesticide consumption
Increased usage of inorganic fertilisers and pesticides has almost always accompanied the drive towards more intensive agriculture. However, excessive usage of nitrates and phosphorous have resulted in serious contamination of water resources, including those used for supplying drinking water. For example, over half of all nutrient inputs to the Danube in the early 1990s were from agriculture. In order to prevent further eutrophication of the Black Sea, fertiliser inputs to the Danube basin will need to be maintained at about half of their 1991 levels in Bulgaria, Romania and Hungary.

Pesticides are a common source of pollution of drinking and ground water resources. One response to the need to reduce dependence on pesticides is the emergence of new management practices such as integrated crop management (ICM). The concept is slowly gaining acceptance in the EU, where ICM methods are now applied on about 3% of the utilised agricultural area. Since ICM methods promote a reduction in the use of pesticides and fertilisers they are also likely to have positive side effects for biodiversity. In the Central and Eastern European countries there has been a reduction in the use of pesticides probably in response to economic restructuring. However, there are also other encouraging signs such as the provision of training programmes to promote ICM methods.

The usage of artificial fertilisers and pesticides declined significantly in accession countries in the 1990s. The support measures in the future should aim to encourage farmers to maintain low levels of consumption and thus avoid the experience of significantly increased consumption and related environmental impacts in Greece, Spain and Portugal following their accession.

(b) Irrigation
Irrigation is especially essential in Southern Europe for achieving economic yields. In central and western Europe irrigation is often used to ensure high crop yields in dry summers. The extent of irrigated areas has increased in southern Europe, especially in Spain, Greece and Italy and also in parts of France. Many heavily irrigated regions in southern and eastern Europe have experienced a lowering of water tables, salinisation, land degradation and desertification, and the destruction or degradation of wetlands and aquifers. Related impacts are reductions in breeding areas for birds.

(c) Livestock numbers
While total livestock numbers have been relatively stable throughout the EU since the early 1990s, over the same period there has been a reduction in Central and Eastern Europe. There are a number of potential problems associated with high densities of livestock. These include excessive concentrations of manure leading to increased risks of water pollution; the problem is compounded when large scale intensive livestock farms are located in areas with natural impediments to drainage. In countries such as Poland and Romania where there are weak or non-existent legislative controls and also very poor quality farm-based containment systems there are many instances of localised excessive nutrient loading.

Intensive cattle production is also a major contributor to the problem of methane gas emissions which is a significant factor in climate change. The shift from traditional extensive grazing systems has had particularly serious negative effects on biodiversity. This has been especially the case in vulnerable environments such as heather moorlands, uplands and

seasonal grazing zones in floodplains where intensive grazing has damaged habitats. In some areas (e.g., some uplands in western Ireland) where increased livestock numbers have lead to overstocking that resulted in overgrazing the primary cause was the provision of EU funded headage payments without appropriate coordination of agricultural and environmental policies. The introduction of cross-compliance as an eligibility criterion for assistance in such areas has helped to overcome this particular problem.

(d) Farming practices impacting on biodiversity and semi-natural grasslands
Agricultural practices impact severely on biodiversity as farmland based habitats support the largest number of bird species of any broad habitat category in Europe, including the greatest number of threatened species. Changes in farming practices associated with the productivist orientation of the CAP pose a major threat to farmland-dependent species. These changes include alterations to the timing of sowing and harvesting of crops, conversion of grassland into arable land, removal of field boundaries, mechanisation and in some areas abandonment. The economic marginalisation of farming in some disadvantaged regions has also resulted in a retreat of traditional farming and the associated husbandry practices with adverse impacts on biodiversity, for example in the internationally acclaimed Burren karstic landscape in the west of Ireland. The issue of abandonment is currently a very significant problem in Central and Eastern Europe, and is likely to remain so during the transitional years after EU membership. For example, 30% of farmland in Estonia is currently abandoned.

6.6 Integration of CAP & RDP with Environmental Policy

The Sixth Environmental Action Programme places considerable emphasis on the integration of environmental policy with other policies. The Programme provides a binding framework for the period up to 2010. Already a significant number of Community environmental measures affect agricultural production and establish standards which farmers are required to meet. These are frequently supplemented by national and regional measures. These standards are almost entirely established outside the CAP framework. Once they are adopted the role of the CAP is to assist in their enforcement by facilitating and encouraging farmers to adjust their farming practices to the changing expectations of wider society in regard to the environment.

The Baldock *et al.* report from the Institute for European Environmental Policy (2002) has proposed a strategy for integrating agriculture and environmental policies which relies heavily on active pursuit of complementarities and synergies between the two policies. The integration of environmental concerns into the CAP requires an approach that seeks to address the broad range of agricultural production, not just individual sectors. More fundamentally, agriculture policy in the future must place more emphasis on supporting a realistic alternative to the productivist model by one based on behaviours more in accordance with the principles of ecological modernisation (Hajer 1995, Evans *et al.* 2002). It is especially important that the levels of supports provided via agri-environment measures in accession countries are large enough to encourage a high take up rate in order to avoid an orientation of the majority of producers towards 'modernisation style' productivist patterns.

Agriculture production must respect fundamental principles such as the Polluter Pays and comply with international standards as laid down by Directives or Regulations relating to water, nitrates, birds and habitats, etc. Integration strategies need to be developed at national and regional levels that will enable agriculture to comply with the requirements of the Water Framework and other directives.

The task of achieving environmentally sustainable farm management practices by means of conventional support policies is a major, if not impossible, challenge. Future patterns of agriculture production will be influenced by several factors including new technological developments, adjustments in the wider economy which will impact on the availability and

cost of labour, new international trade agreements, and changes in consumer preferences with more emphasis on the quality of food and also on environmental impacts of different production systems. The reforms of the CAP can assist in achieving more environmentally sustainable production systems by restricting production aids, decoupling compensation payments from production and through greater emphasis on rural development which includes agri-environment schemes as a component of Pillar 2.

Under the Pillar 1 regimes a variety of changes can be made to support an integration strategy, including:

- Amending or eliminating measures which under current circumstances provide incentives for environmentally damaging forms of production and other environmental pressures at a level which otherwise would not arise. These include aids for tobacco, cotton, sugar and also forage maize under the arable regime.
- Breaking the link in several sectors between the extent of support provided and the volume of production. A move towards decoupling should lead to more environmentally sustainable levels of livestock production, similarly a move towards area based payments for olive production could lead to a reduction in environmental risks.
- Making more substantive use of the principle of cross-compliance.
- Incorporating environmental considerations into marketing and food labelling policies associated with the CAP market regimes.

Pillar 2 provides an opportunity to significantly enhance the level of integration with environmental policy, though in order to do so effectively a significantly larger share of the CAP budget needs to be allocated to the Rural Development programmes. The following possibilities for Pillar 2 measures have been identified by Baldock *et al.* (2002):

- Agri-environment schemes that are designed to cater for local conditions have the potential to address a large number of environmental concerns. More attention is required in the identification of the reference levels of good farming practice, and to promoting the schemes in order to achieve higher take-up rates.
- Supports for sustainable farming in Less Favoured Areas should be adjusted to reflect local carrying capacities.
- Greater emphasis on targeting farm investment aid towards achieving environmental standards that may become mandatory in the future.
- More support for training, marketing and processing in order to encourage more sustainable land management and food production systems.

6.7 Interactions between CAP and RDP with Transport Policy

Transport and communications infrastructures have a major influence on the spatial distribution of economic activity and also on the underlying dynamics of change throughout the European territory. Project 2.1.1 is concerned with the territorial impacts of EU transport and TENs policies. Here the concern is with the interaction between CAP & RDP on the one hand and EU transport policy on the other hand.

The principal theme of EU transport policy that is of relevance here is the Trans European Networks initiated in the 1990s.The primary objective of the TENs project is to support the Community objectives of competitiveness and cohesion. Inter-regional competitiveness is expected to be enhanced through cost reductions resulting from more efficient transport systems. The TENs project provides new links and improvements to some existing network sections. The project will result in an improvement in both the quantity and quality of infrastructure. By extending the networks into peripheral regions, which are more heavily

dependent on agriculture, it is anticipated that there will be greater convergence between core and peripheral regions and, therefore, greater cohesion.

ESPON Project 2.1.1 has noted that 8 of the 14 priority projects of the TENs programme are located in peripheral regions, but that relatively large improvements in accessibility will translate into only relatively small increases in regional economic activity. In general it is anticipated that the impact of transport investments on economic development will be larger in regions with less developed networks than in the regions with dense and better developed networks. However, Project 2.1.1 cautions that the overall impact of transport investments will depend on the competitiveness of the regional economies: a peripheral area may benefit from better access to markets but its production may also be subject to a higher level of competition from imports. These conclusions are particularly important for agriculture and rural development.

The CAP support system has protected EU producers from more competitively priced imports, and also through the intervention system for some products (e.g., beef) delayed restructuring towards high value added processing and thereby supported relatively inefficient sectors in some regions (e.g., Ireland). In these and other ways the CAP has probably restrained some regions from achieving their full potential and left weaker regions more at risk from increased external competition which is enhanced by improvements to inter-regional and international transport infrastructures. Some evidence for this scenario is provided by trends in the food retail sector where technological improvements related to maintenance of food quality, accompanied by transport improvements and also by the emergence of international food retail chainstores, have resulted in higher levels of competition for locally produced food products.

The trend towards a more market-orientated agriculture will lead to greater emphasis on competitiveness, which will in part be influenced by the costs of reaching markets. Thus for rural-based food processing industries, it is important that domestic transport policies of member states are coordinated with improvements to the international networks. Similarly, the marketing of products arising from farm diversification programmes will require transport systems that provide timely and cost effective access to the main centres of population.

The most likely scenario emerging for agriculture production in many regions is one where there will be a relatively small number of intensive and large scale internationally competitive producers, while the majority of farm households will become increasingly dependent on alternative sources of income. The opportunities for additional income will be influenced by trends in the non-farming economy, especially in the services sector, and will need to be assisted via comprehensive rural development programmes. This inter-sectoral shift also has implications for spatial patterns of development, with urban centres having a vital role. The nodal position of small towns in respect of several networks is likely to be a critical influence on their level of competitiveness as locations. In order to maximise the opportunities that may emerge from rural development programmes it will be necessary to ensure that the quality of local transport infrastructures is enhanced in order to facilitate spatial integration at the local and regional levels as well as integration with networks providing access to national and international markets. The quantity and quality of the domestically provided local and intra-regional infrastructure is probably at least as important for successful rural development as are the inter-regional and international networks, which are the main focus of EU transport policy to date. Thus, in summary, there is a need for better coordination and closer integration of supranational, national, regional and local transport policies that will enhance the competitiveness of agriculture-based and other rural enterprises.

6.8 Interactions between CAP and RDP with Social Policy

The evolution of EU social policy has been very closely linked with policies to strengthen the economic competitiveness of the Union. For the most part, the primary objectives of European social policy have been regarded as providing support for economic development policies. Thus, most of the actions supported via the European Social Fund, usually as components of programmes assisted by the Structural Funds, have been focused on making labour markets more efficient, and on enhancing the productivity of workers through training and retraining programmes. Over the 1990s the social agenda was gradually broadened to include working conditions and workers rights and also issues related to labour migration, in order to facilitate the emergence of a common labour market. In addition, since the early 1990s there has been a more explicit focus on tackling social exclusion, which was regarded as an important part of the social dimension of the internal market. There was a recognition of the basic right of a person to sufficient resources and social assistance to live in a manner compatible with human dignity.

Concerns over the balance between efficiency and equity priorities have been a constant feature of the debates about European social policy. The objectives that were adopted for the CAP at the outset contain similar tensions. For example, the objectives require that 'a fair standard of living for the agricultural community' is ensured and that account shall be taken of the particular nature of agricultural activity which results from the social structure of agriculture. The social concerns that are reflected in the CAP objectives, and which have been supported explicitly by measures such as the LFA payments, help to distinguish the European model of agriculture from its North American counterpart.

The multi-functionality orientation of the policy since the late 1990s provides a basis for continuing to provide supports for the achievement of social objectives in rural areas. The shift towards decoupled direct payments may lead to a reduction in underemployment in the sector and facilitate more efficient regional labour markets in accordance with the objectives of European social policy. Similarly, the provisions for encouraging adaptation, diversification and training under the rural development programmes will contribute to the broader social policy objectives. Equally, the availability of Social Fund assistance via Structural Funds Programmes to support training and advisory services for farmers will facilitate the adjustments required by the CAP reforms as the policy adapts to an ecological modernisation orientation from its traditional productivist focus.

While the CAP can contribute to the achievement of EU social policy objectives at the broad inter-sectoral level, the implementation of particular CAP measures has contributed to increased levels of intra-sectoral social inequalities. The provision of supports via the Guarantee section of the EAGGF has in many cases contributed to highly polarized income distributions with large shares of the farming population earning very low incomes (see for example Frawley *et al.* 2000). The disproportionate concentration of low farm incomes in certain regions is influenced by several factors, especially the quality of the physical resource base which strongly influences types of farming, and also by the distribution of farm sizes. Many regions with weak agricultural potential are also characterised by weak urban systems and significant infrastructural and human capital deficits. Such areas continue to be inhabited by households that experience a wide range of challenges such as poor quality housing, inadequate transport systems, restricted supply of public and private services, lack of employment opportunities and distorted demographic structures. These conditions have been documented in detail for Scotland as evidence of serious process and system failures that lead to social exclusion and deep inequalities (Philip and Shucksmith 2003). Social exclusion in rural areas is a multi-dimensional, dynamic concept which refers to a breakdown or malfunctioning of a range of social, economic, political and legal systems that should guarantee the integration of individuals and households within their communities.

In order to redress the characteristics identified above, it is essential that rural development policies are guided by a stronger emphasis on the social dimension and on both horizontal and vertical policy coordination. The issues are more complex than providing basic income supports. A fragmented, uncoordinated approach to address the symptoms of social disadvantage in rural areas is likely to lead to a vicious circle culminating in increasing numbers of socially excluded rural residents. There is therefore a need for more coordinated and integrated strategies that deal with social concerns as an integral component of sustainable rural development policies.

Chapter 7

First Policy Recommendations

7.1 Methods for Improving Agricultural and Rural Development Policy and policy instruments in support of territorial cohesion and the ESDP

The principal conclusions from the first year of this ESPON project are that in aggregate the Common Agricultural Policy works against the ESDP objectives of balanced territorial development, and works especially counter to the objectives of economic and social cohesion. Moreover, in terms of polycentricity at the EU level the CAP appears to favour core areas more than it assists the periphery of Europe. In recent years the CAP has undergone a series of reforms, but it is not evident that these will ameliorate these conflicts of objectives to any great extent. Nevertheless, there is potential in the future for further reforms to make the CAP more consonant with the objectives of the ESDP, and these are suggested in this section.

The dominant element of the CAP, Market Price Support, works overwhelmingly against social and economic cohesion, and therefore our principal recommendation must be to reduce this element of the CAP and instead to enhance and improve the Pillar 2 measures of the Rural Development Regulation (RDR). Although Direct Payments to farmers do support territorial cohesion, these measures are highly inefficient, so that we would not favour enhancing this element of Pillar 1 either. Future progress must be made through Pillar 2.

Unfortunately, we have found that many elements of Pillar 2, as designed and implemented at present, also work against economic and social cohesion. In particular, agri-environmental payments and less favoured area payments paradoxically tend to assist richer regions with lower rates of unemployment, because of a combination of differing national priorities, uneven allocations of RDR funds, and difficulties in raising the matching funding in poorer regions. Nevertheless, we believe there is scope to amend Pillar 2 to favour cohesion, and that this holds out the best potential for improving agricultural and rural development policy and policy instruments in support of territorial cohesion and the ESDP.

We concur with the conclusions of the recent report by Dwyer *et al.* (2002) that "the RDR is an innovative tool with considerable potential to support sustainable rural development throughout Europe, particularly in promoting a more integrated and multifunctional approach to rural land management, environmental integration and economic and community development," but that this potential is not currently being realised. "Planning and implementation of the RDR and SAPARD do not reflect the ambitions of the Commission's objectives" for the Second Pillar, because of: "lack of time for planning; complex administrative procedures; inadequate funding; and limited incentives for countries to re-think and re-design existing policies to reflect fully the scope of this new instrument and its requirements." Moreover, "the RDR and SAPARD need to be less focused on agriculture and should use the range of measures available more effectively."

The first priority, then, should be to increase funds substantially for Pillar 2 of the CAP, while also seeking to reduce Market Price Support by far more than envisaged in the MTR. This would involve reform of internal market support regimes so far largely untouched (sugar, milk, beef) and further "final" reform of the internal market regime for coarse grain and oilseeds, together with substantial reductions in border protection which is largely unaffected by the MTR. The effects on EU production seem unlikely to be great: the major concern may be to ensure that substantial gains go to poorer EU trading countries such as the ACP group, and are not largely captured by Australia, Brazil, Thailand, etc. The RDR should be broadened to focus less on agriculture and more on sustainable rural development. The increase in the RDR budget should enable increased funding for both accompanying and non-

accompanying measures without the need for additional Member State co-financing, since this inhibits the use of the RDR in poorer regions. Moreover, the entire RDR budgets for Member States, including Accession Countries, should be allocated according to criteria of relative needs for rural development and environmental management.

A recent paper by Mantino (2003) has illustrated a variety of ways in which this last point might be addressed, to the benefit of territorial cohesion.

In its design and in its implementation, EU Rural Development Policy must acknowledge the huge diversity of Europe's rural areas which will be even greater in the enlarged EU-25. Rural areas as "complex economic, natural and cultural locations" (ESDP 1999, para 89) differ markedly from each other in their economic structure and activity, their natural and human resources, the peripherality of their location, their demographic and social conditions, and culture (Bryden 1997). As such, they experience a diversity of strengths, weaknesses, opportunities and threats, especially in relation to processes of global change as discussed in Chapter 2. This ESPON project has demonstrated this diversity across the enlarged EU, both in agricultural terms and also in broader rural development terms, and we intend to explore this further in our next year's work.

To address this diversity, there is a need to move away from centralised policy-making with inflexible, one-size-fits-all measures, and this has been reflected in the evolution of national envelopes in the Agenda 2000 reforms and, most recently, in the MTR. Nevertheless, Dwyer *et al.* (2002, 109) found that "with the exception of LEADER+, rural development policy suffers from an overly prescriptive and top-down approach. This is particularly so with the RDR and SAPARD that are constrained because funds and measures are still rooted in a 1960s sectoral and productivist CAP-culture." This is confirmed by a number of other authors (cf. Marsden 2003, Buller 2003), although Buller, Lowe and Ward (2002) have shown how the discretion to apply modulation in different ways allowed quite different models of rural policy to be pursued through the RDR by the UK and France, without compromising the fundamental CAP principles of common pricing and financial solidarity. They foresee the CAP evolving into a broad regulatory framework, within which member states can operate an increasing range of discretionary support measures, directed towards territorial priorities of agricultural landscape maintenance, employment, and sustainable rural economies.

There is scope for the RDR to enable greater subsidiarity, and thus for the EU and Member States to tailor Rural Development Policy more appropriately to the diversity of territorial needs across rural Europe, but this will require a broader menu of permitted measures, with encouragement given to innovation. This should build on the lessons of LEADER and Objective 5b, and will require greater harmonisation with regional policy. It will also require attention to be paid to appropriate institutional structures for multi-level governance.

The related issue of appropriate institutional structures of multi-level governance is addressed more fully in Chapter 8. The ESDP challenges us to move towards an holistic and integrated approach to both the understanding and the implementation of sustainable development. The need for this reform appears to be greatest in the poorest regions of the Community, eligible for Objective 1, where a "very high degree of sectorialisation" prevails (Robert *et al.* 2001), but is also required elsewhere. In the next chapter we will argue that local development strategies offer a means of integrating the approach to policy delivery and combining various instruments and funding streams for maximum effectiveness. Strategies should seek horizontally integrated solutions combining actions in different sectors (economic, social, environmental). It is also imperative, however, that they should achieve vertical integration between local, regional, national and international funding and actors. We therefore would highlight the recommendations of the OECD (1998) with which we end Chapter 8:

> "Those operating at EU, national or regional level must play an important role in setting a coherent framework within which local development initiatives can best add value to top down approaches. In particular, they should secure co-ordination at the highest levels where mainstream policies and strategies are formulated, so that top-down policies can effectively be integrated at local level by local development agencies and so that vertical integration can be achieved between local, regional and national policies. In addition, there must be a suitable mechanism for effective co-ordination of local development programmes, to avoid duplication or conflict."

It will also be helpful to encourage a horizontal learning process between regions and between local actors in different territories.

Although in absolute terms CAP reforms have been minor up to now, there have been subtle conceptual shifts, with important implications for the debate and for our understanding of farmers and their behaviour. For example, the increasing focus on diversification measures[5], which began with a rather defensive notion of multiple job holders and shifted to a more active recognition of pluriactive farm households, now increasingly emphasises activities to harness potential for niche markets, quality production and activities to extend the production chain (processing and marketing of farm produce). This evolution of the discourse of diversification is significant in that it suggests a stronger link of farm activities to the territory. Thus, there is a growing recognition (if still low) that farming activities, particularly in areas threatened by marginalisation, are very dependent on the regional economy, and there is a reciprocal dependency between both. As this inter-dependency has been addressed more and more in considerations on the multifunctional roles of agriculture, this is an important issue in the territorial aspect as well.

In this context, only the integrated development of land use, linkage to local other sectors, and the creative development of region specific programmes (as outlined above) is likely to enhance the cohesion aspects of the CAP. Such an approach would imply stronger regionalised programming for specific rural development measures, and the opening of "Rural Development Programmes" to all the rural population, rather than only or mainly to farmers, even if administrative rules militate against this at present.

In this project, we have sought to look at the CAP not only from the perspective of territorial cohesion and sustainable rural development, but also in terms of polycentricity. Some writers have viewed this concept as threatening to rural areas. Although the concept rests on 'centrist' thinking, which tends to view rural areas as residual spaces in between the urban nodes which are assumed to generate growth and activity, nevertheless polycentric development should not remain restricted to the larger metropolitan areas because this would not be "in line with the tradition of maintaining the urban and rural diversity of Europe" (ESDP, para 71). Thus, while the principle underlying this concept is that of city hierarchies, in the ESPON programme there has been agreement that the idea of polycentric development must be applied at different territorial scales: European; national; and regional/local.

In this context it is possible to make an analogy based on the prevalence of centralising forces at each of these three scales. At the EU level, the centralising forces of the single market are offset by the Cohesion Funds. At national level, similarly most Member States operate some form of regional policy to offset the centralising forces which act within nations. *At regional or local level, therefore, perhaps there is an intellectual and political justification for the Rural Development Fund to be used to offset the centralising forces which operate within regions, targeting rural hinterlands within* every *region at the third level of polycentric*

[5] Note - the EU is especially interested in diversification of farm incomes in terms of tourism employment and share of tourism employment; change in share of tourism employment; change in employment in the environmental sector and landscape protection; and activities in nearby towns such as crafts, SME start-ups, IT.

development. If this idea were pursued, the Rural Development Fund would have a clear territorial raison d'être, and a broader constituency consisting of all those who live in rural areas, as defined at micro-level. This might be an attractive way of reconciling rural and regional policy, bringing Pillar 2 of the CAP explicitly alongside the structural funds and within the logic of the ESDP.

Finally, an important set of policy recommendations will follow from our analysis of the factors underlying the competitiveness of rural areas, mainly drawn from literature review in the first year of this project but explored further in year 2. These recommendations will suggest how, in different types of rural problem region, the regional potential for development may be encouraged and realised, and it is likely (from our work so far) that these recommendations will emphasise governance, innovation, human and social capital, and especially knowledge assets. While tangible factors such as natural and human resources, investment, infrastructure and economic structure have traditionally been seen as the main determinants of differential economic performance, more recent research has highlighted the important role of 'less tangible' or 'soft' factors, including various kinds of social, cultural, institutional, environmental and local knowledge which constitute the basic capital for regional development. Social capital, especially, has been identified as crucial (Putnam 1993). A recent EU project on the Dynamics of Rural Areas (DORA) has suggested that it is the relationship between the tangible and less tangible resources, and how these interact in the local context, which conditions opportunities and constraints for local development. "It is not so much the tangible resources themselves that matter for economic performance, but the way the local people are able to exploit those available to them" (Bryden and Hart 2001, 45). *It is likely that Rural Development Policy will be more effective if the role of intangible factors such as governance, innovation, social capital and knowledge assets is acknowledged.*

7.2 Recommendations relating to data requirements

We have encountered persistent difficulties in capturing territorial specific information on CAP performance in general, and on separation of different CAP instruments, despite the huge surveillance of farmers. For example, it became evident during our work that DG Agriculture apparently has no information on the regional pattern of CAP expenditure. The only indicator from the REGIO dataset widely available at NUTS III level relating to agriculture is employment in agriculture, forestry and fishing (derived from the Regional Accounts), and missing data is a problem for many other variables. Similarly the FADN dataset only provides data at NUTS II or NUTS I level, and sometimes in non-standard areas.

One conclusion is that information on CAP expenditure and implementation at regional level is poorly developed, and support to overcome this information gap is limited. It will be very important to support policy-making in future through improving the database so as to enable comparable European wide analysis, and this will require administration of CAP instruments to take into account the regional and territorial dimension.

At the same time the lack of useful regional information also reveals a lack of understanding or appreciation of the territorial relevance of CAP amongst officials. Instead, it appears that they tend to think predominantly or only of linkages as upstream and downstream within the agri-food sector, rather than as existing in space. This may be a natural consequence of their responsibilities (as recently confirmed in e.g. the Lisbon statement) to have regard to commercial competitiveness at the European and global levels. However, it ignores the possibilities of inter-sectoral and social linkages which could strengthen competitiveness (or at least resilience to shocks) and increase gains from agricultural and rural support. A cultural change amongst officials is needed if they are to address the territorial dimension of agricultural and rural development policy in future.

Chapter 8

First propositions on the Institutional Aspects of Spatial Coordination

The primary goal of the ESDP is balanced and sustainable development of the regions of the enlarged EU. At the heart of the concept of sustainable development is that it is holistic and integrative in the sense that it is inclusive of economic, social and ecological dimensions. These three dimensions must therefore be treated together in an integrative way, both conceptually and in practice, through the resolution of different values and viewpoints through legitimate democratic and participatory systems of governance. Furthermore, the implementation of a coherent, effective and integrated intersectoral policy is explicitly the aim of the Community's rural policy, as set out in The Future of the Rural World (COM (88) 501).

8.1 The need for vertical and horizontal integration

We have seen in earlier chapters that the CAP and RDP are far from harmonised with the goals and objectives of the ESDP, acting contrary to broad EU objectives of economic and social cohesion, and so revealing a lack of integration between different EU policies both at the strategic and the local levels. This is not only a feature of the outcomes of the CAP and RDP but also appears to be ingrained into the culture of the administration of the CAP, in so far as little consideration is given to the territorial aspects of agricultural policies. The poverty of agricultural-related data at regional level, which would be necessary to a more integrated territorial approach, is in itself indicative of this lack of consideration.

This suggests the need for a new paradigm to guide our future institutional frameworks, which challenges the traditional way of managing public life (and intellectual endeavour) based on fragmentation, specialisation and sectoralisation of issues, institutions, competencies and disciplines. Instead, the ESDP (and the Rural World document) challenges us to move towards an holistic and integrated approach to both the understanding and the implementation of sustainable development. The need for this reform appears to be greatest in the poorest regions of the Community, eligible for Objective 1, where a "very high degree of sectorialisation" prevails (Robert *et al.* 2001), but is also required elsewhere.

One recent recognition of this has come from the Labour Government in Scotland, which has asserted that sustainable development is the over-arching theme at the heart of its policies for rural Scotland (Scottish Office 1997):

> "Sustainable development depends on taking an integrated approach to each of three main policy objectives: economic, social and environmental. We want to secure more job opportunities and greater prosperity for rural Scotland. We want to improve the quality of services and enable local communities to retain population and expand social and cultural facilities. And we want to safeguard, and where possible enhance, the natural heritage and environment of rural Scotland. These three facets of sustainable development - economic, social, environmental - are equally important. We must have regard to all three when taking decisions on any issue affecting rural Scotland, maximising social and economic benefits from environmental investments, as well as maximising environmental benefits from economic and social investments.
>
> The key to achieving sustainable development in all three of its facets - economic, social and environmental - is to put local people in the position of subjects of their own

development rather than objects of development. Development is something that individuals and groups do. It is not something done to them."

While the LEADER community initiative has piloted this approach, it has operated in the spaces between the more dominant pre-existing sectoral policies. Indeed, current sectoral policies relating to agriculture, including both Pillars 1 and 2, are generally acknowledged to be unable to deliver sustainable rural development (Marsden 2003, Dwyer *et al.* 2002). Attempts to reform the CAP have introduced some positive measures, as discussed in earlier chapters of this report, but have failed to alter the basic sectoral nature of the policy or to develop an integrated or coherent rural policy designed to address the environmental, social and economic needs of Europe's rural areas.

8.2 The integrated rural development approach

The key elements of an integrated approach to local rural development are well understood and have been extensively documented (OECD 1993, Chanan 1999, Lowe *et al.* 1999, Moseley 2001, Community Development Forum 2001, etc.). The OECD (1998), for example, sees this approach as "a means of integrating different policies and programmes at a local level, thus releasing synergies and improving co-ordination, and as a means of improving local governance through involving local people and networks in the formulation and delivery of policy." A number of these key elements have been summarised in the recent report to DG Regio on the Spatial Impact of Community Policies and Costs of Non-Coordination (Robert *et al.* 2001), as follows:

- It is related to a specific territory;
- It includes all sectors of the economy (agriculture, industry, services);
- It constitutes an integrated approach of governmental actions;
- It is necessarily based on the indigenous potentialities of rural areas;
- It is animated by a spirit of partnership and of dialogue between private and public organisations at regional and national levels;
- It is conceived according to the specific requirements and needs of the region concerned.

Similarly, the OECD (1993) identifies several key characteristics of the local development approach:

- There is an emphasis on the notion of 'development' (broad, structural and qualitative) and its capacity to generate new activities (in contrast to purely quantitative growth).
- It is based on the idea of highly differentiated processes and paths in different local areas due to the diversity of economic and historical conditions.
- The local territory provides the focus for the development process, for its decisions and actions, and constitutes a pool of potential resources to be tapped. Initiatives have a clearly local content, responding to local problems and objectives, to be initiated and carried out by local people.
- It involves a plurality of local actors who design, develop and implement these schemes or strategies, people and institutions which have often been ignored by past policies.
- The local approach attempts to build up the processes of development over the long term by emphasising the economic and social dynamics and the behaviour of actors and improving local capacity to take the initiative in response to events.

"Part of the logic of local development policies is that by using these approaches local actors can add value to economic development and social policies designed and implemented by national governments. Firstly, the mobilisation of local actors through local development initiatives helps to generate additional proposals for action and resources and competencies to help achieve them. Local development policies enable

local actors to act as catalysts for development and draw on the ideas, energy and commitment of local people. Secondly, local awareness of needs and opportunities and local involvement in strategy development helps to tailor policy solutions towards the distinct requirements of each area and provides feedback on the effectiveness of the actions that are undertaken. Thus local development policies adapt responses to local need. Thirdly, local development structures provide a forum for an integrated approach to policy delivery in which various instruments and funding streams are combined for maximum effectiveness. This can lead to better co-ordination of policy, which is important given the multiple causes of unemployment, poverty and social exclusion for example." (OECD 1998).

Robert *et al.* (2001) go on to review the experience of integrated rural development in Objective 2 and LEADER areas and conclude that the adoption of a truly integrated rural development policy is far from being obtained. "The persistence of problems as regards coordination and cooperation shows that considerable efforts are still necessary at all levels (Community, national, regional, local) and between these administrative levels" (Robert *et al.* 2001, 142). In this context, the report suggests the following:

- Institutional readjustments at Community, national and regional levels to allow the establishment of a correct balance between the various administrative levels associated with the sectoral and territorial policies affecting rural areas;
- Greater flexibility of operational programmes and Community initiatives, and even certain aspects of the CAP, to take account of the differentiated countryside, notably in the most fragile rural areas;
- Input into strategic objectives and visioning from local communities who "are the actors of any development strategy, the recipients of policies or of programmes."
- Partnership arrangements, at the operational level, which provide the mechanisms to guarantee an institutional framework for integration, both vertically and horizontally, "centred more on territorial than sectoral aspects."

An integrated approach thus requires institutional and policy reform at both central and local levels; the focus of the former being on improving the support systems for local rural (or urban) development (co-ordination, consistency, efficiency); the focus of the latter being on how to bring together, in a single framework, the three key dimensions of sustainability. The aim at both local and regional levels should be to reach wide agreement on a sustainable development agenda (economic, social, environmental) at all levels, and on what social, environmental and economic public 'investments' are needed to further that agenda (including intangible investments), maximising synergy between these three dimensions in terms of both goals and activities, and achieving both horizontal and vertical integration.

This process requires a formal regional partnership of public/ civic agencies/ departments relating to environmental, economic and social development, together with the private sector and civil society. Such regional partnerships should be complemented by local partnerships, created largely on a voluntary basis, bringing together local interests and organisations, encouraging active participation and involvement of local people, and creating their own strategies, which would then feed in to regional strategies.

At this stage in the ESPON 2.1.3 project we have yet to undertake the detailed case study work which will provide us with practical insights into improving the institutional aspects of spatial coordination. In this interim report we will therefore sketch out an idealised, but perhaps unrealistic model, and draw on the findings of earlier studies to draw out the lessons of experience so far.

8.3 An idealised model of institutional arrangements for spatial coordination

In idealised form, there would ultimately be a single rolling Integrated Local Strategy for each locality, and each region, to guide the activities of the agencies, local authorities and organisations in that area. It would also form the basis of a 'contract' with central government departments, sectoral agencies and, where relevant, the EU, with these central levels providing support in the form of a 'global grant'. There would be a single set of targets and indicators for each region, embracing social, economic and environmental dimensions, and this would allow a single system of monitoring and evaluation, so avoiding conflicts which derive from different performance targets for each agency and department. Central government and/or the EU would have one negotiation with each region, and all EU schemes would feed into one integrated regional strategy.

Regional partnerships in this idealised schema would thus develop strategies which go beyond the confines of physical land use planning and include physical, economic, social, environmental and spatial planning. These partnerships would include not only regional and local government, but also the relevant public agencies (environmental, training, and development agencies, health, education, social services etc.) and departments, as well as representatives of local entrepreneurs (including farmers), voluntary organisations and other members of civil society. These regional strategies would be flexible, subject to regular review, and based on locality planning which is participatory and inclusive of all interests. Such a structure of regional and local partnerships should cover the range of policy arenas relevant to specific regions and locales, and should avoid the present multiplication of partnerships at all levels which is straining the resources of both public agencies and departments and the voluntary and private sectors, as well as inhibiting integration. Single regional strategic programmes can then be used to negotiate what would be 'global grants' from the EU and national government, and this principle could be followed through in relations between localities and regions. Such programmes would be the basis of a spatial and devolved approach to sustainable rural development.

Such arrangements must also take into account the interests of those outside that community of place, in line with the principle of transfrontier responsibility noted above. We live in global, European and national, as well as local, societies where interests are negotiated through political arenas at different levels and where rural and urban people (as with first world and third world people) are inter-dependent in terms of a sustainable present and future. Legitimate and democratic structures have to recognise, and provide for, all the interests concerned, whilst also ensuring an appropriate and equitable distribution of power between different levels and between different social groups and classes.

8.4 Lessons from Member States

How far it is possible to approach such idealised institutional structures for spatial coordination will be addressed in the second year of the ESPON 2.1.3 project through examination of the experience of pilot schemes and other initiatives in the Member States. Local development initiatives first emerged strongly in the 1980s and have been increasingly taken up in Europe and elsewhere in the OECD. They comprise measures introduced by individual regions, cities and localities, as well as many national government programmes designed to allow local flexibility and decision-making, integration between sectors of government, and to provide policy support through partnership with local agencies. In the UK, for example, local actors are responsible for delivery of national programmes to combat unemployment and exclusion under the 'Single Regeneration Budget', 'Employment Zones' and the 'New Deals'. In France, local actors are responsible for the 'Contrats de ville', 'Comités de bassins d'emploi' and 'Plans locaux d'insertion par l'économique'. In Ireland, local actors are involved in the 'Community Development Programme', the 'Local Enterprise Programme' and 'Area Based Partnerships'. In Italy there are 'Territorial Pacts' and 'Area Based Contracts'. There are many other examples. The EU itself has also introduced the local

development concept into the operation of the Structural Funds and certain Community Initiatives, such as LEADER, as noted above.

Some of these attempts at enabling a better territorial coherence of public policies have already been reviewed by Robert *et al.* (2001, 150). According to their report:

> "various national examples suggest that the success of any effort of territorial coherence of public policies is mainly conditioned by a series of factors:

- a first condition, essential to any coordination effort, is the existence of a basic agreement (established at political level) with regard to the broad objectives to be pursued;
- the territorial coherence of public policies depends narrowly on the 'institutional anchoring' of the territorial planning policy within the politico-administrative system and on the quality of the procedures established to regulate conflicts or to create a consensus; and
- a last condition is the provision of political and financial means necessary to organise the communication and to set up processes aiming at searching for consensus and compromises."

This explains that considerable progress still has to be achieved in a large number of Member States in the field of territorial coherence of public policies. It was observed that in a number of countries, the political position of the central spatial planning bodies is relatively weak, compared with that of other sectoral ministries. Moreover, the vertical relations between the various levels are not always very harmonious, so that the principle of reciprocity (bottom up and top down), understood as a process enabling them to gradually and continuously harmonise their policy priorities and their territorial impacts, do not generally function without friction." (Robert *et al.* 2001, 151). There are therefore challenges for the EU, as well as lessons, in the experiences within Member States, and these will be pursued in year 2.

On the other hand, the OECD (1998) has derived a simplified model from its study of the experience of local development in three Member States (Ireland, Spain and Portugal). This is set out below, in Figure 8.1 and in the text below, seen as an ongoing process of action, feedback and adjustment, as a basis for further enquiry in the second part of this ESPON project.

Structures: Initially local development structures need to be created, involving the creation or nomination of a lead agency, the recruitment and training of managers and development workers and the establishment of partnership mechanisms with other local agencies. This should be done within a supportive national and regional framework.

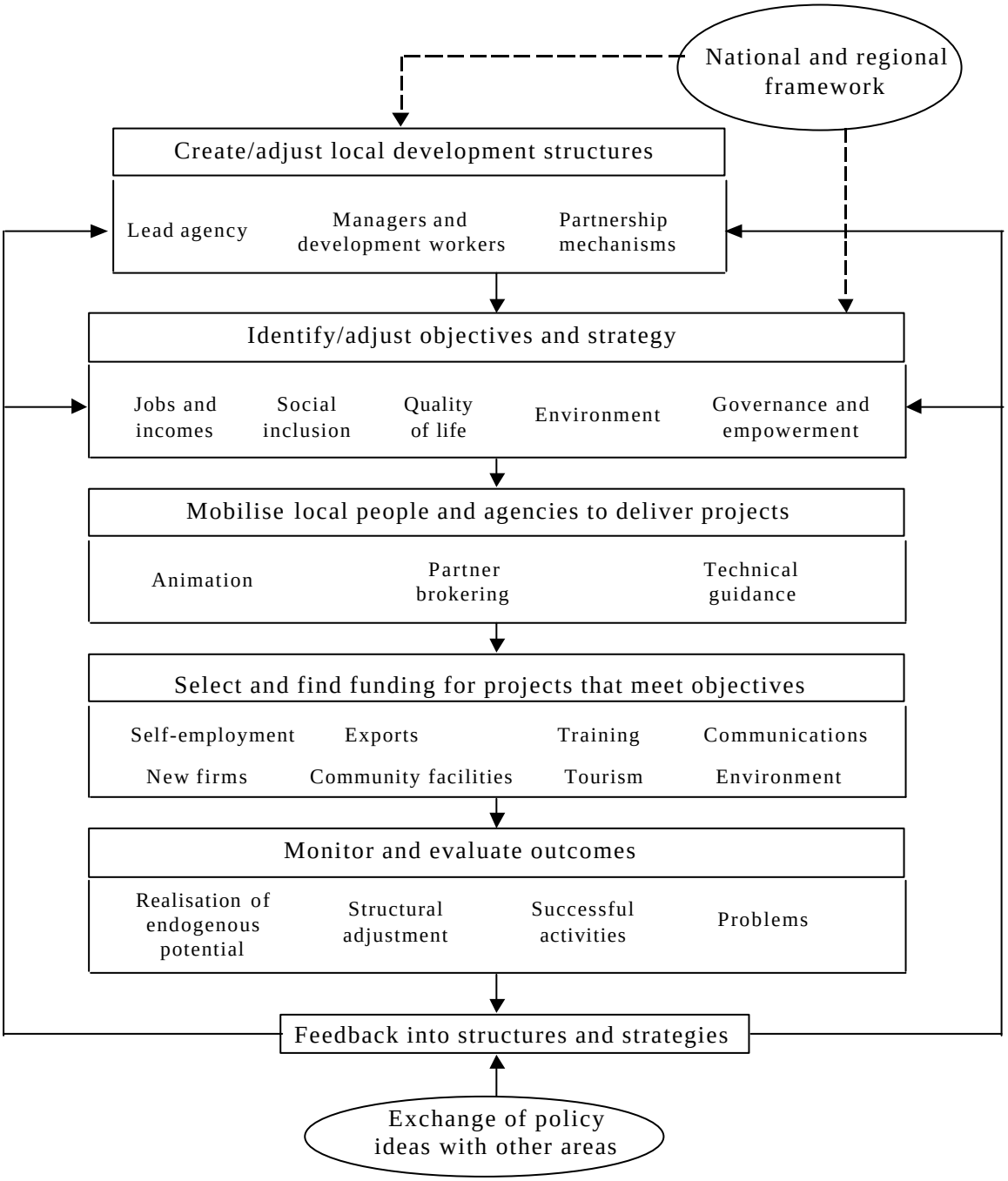
Strategies: Once a structure is in place it is possible to identify key objectives and undertake the process of strategic planning. Local development strategies should stress measures that will help achieve sustainable development by improving the local economy, social well-being, the environment and the participation of local people in policy decisions and actions.

Functions: Local development agencies then need to fulfil a range of key functions in order to implement these strategies. These functions include mobilising local people and agencies to develop projects (through animation, partner brokering and technical guidance) and selecting and finding funding for those projects that will best help meet the strategic objectives. Local development programmes also need to monitor and evaluate the outcomes of the activities that are being supported. Finally, the results of these assessments and policy ideas from other areas should be used to adjust structures and strategies.

Integration: Local development strategies are a means of integrating the approach to policy delivery and combining various instruments and funding streams for maximum effectiveness. Strategies should seek horizontally integrated solutions combining actions in different sectors (economic, social, environmental). They should also seek vertical integration between local, regional, national and international funding and actors. It should be recognised that a self-generated process of growth is unlikely to be achieved by acting on one sector alone.

Clearly, this simplified model does not elaborate the possible articulation with the CAP, except as implied in a box labelled national and regional framework. This is an issue which requires much further exploration and elaboration.

Figure 8.1: A simplified model of the local development process (OECD 1998)



However, the OECD (1998) does offer some guidance on the articulation of local development initiatives with higher level actors in government and these have relevance for this issue.

"Putting budgets and policy decisions at the discretion of different local development agencies raises a number of issues for the relationship between local development agencies and national and regional agents that imply a need for appropriate national and regional structures. External policy-makers are concerned to ensure that decentralisation does not lead to unacceptable inequities between policy provision in different areas, in particular between those with strong budgets and those with weak budgets. They also need to ensure that local development approaches are sufficiently co-ordinated with each other and with other levels of the territorial hierarchy. A third issue concerns the need to strike a balance between allowing local development bodies sufficient autonomy to assess and respond to local needs on the one hand and achieving a clear accountability for public funds and a responsiveness to broad national and regional priorities on the other."

These three issues are all important in relation to any attempts to territorialise the CAP and to integrate it more effectively with other policies at local level.

Because of these issues it is clear that agents operating at national or regional level have an important role to play in setting a coherent framework within which local development initiatives can best add value to top down approaches. According to the OECD (1998), they should:

- Provide technical support structures to assist local agencies to learn about good practices, for example in strategy development, financial management and monitoring and evaluation.
- Secure co-ordination at the highest levels where mainstream policies and strategies are formulated, so that top-down policies can effectively be integrated at local level by local development agencies and so that vertical integration can be achieved between local, regional and national policies.
- Provide a mechanism for effective co-ordination of local development programmes at the local level to avoid duplication and harmful competition between areas (for example in attracting inward investment) and to maximise synergies (for example through shared use of infrastructure).
- Permit some flexibility in the local application of nationally designed and funded policies and give local agencies an incentive to innovate and develop programmes tailored to their own needs.
- Encourage local areas to develop the type of strategies recommended in this study (for example based on endogenous and sustainable development), through the dissemination of good practice guidance and the development of appropriate national and regional instruments that can be applied at the local level.
- Encourage local areas to develop the type of structures recommended in this study (for example based on capacity building, partnership and local empowerment) through the dissemination of good practice guidance and the design of appropriate national and regional initiatives.
- Ensure that adequate funding is available for programmes in areas with the greatest problems.

It is also important that national and regional governments raise their own understanding of the benefits of local development and of the practicalities involved so that they may create an appropriate framework and exploit the opportunities available. (OECD 1998).

Until we have pursued our own case studies in the second year of the ESPON project, we are not in a position to add to these insights from OECD. In the meantime, these must form the basis of our first propositions on the institutional aspects of spatial co-ordination of agricultural and rural policy.

Chapter 9

Outline of Next Stages of Project

The remaining 12 months of the project will address the outstanding tasks set out in the work programme. These are as follows:

- further development of TIA method in light of results;
- finalisation of case studies and case study areas to validate hypotheses/ initial findings;
- finalisation of advanced statistical analysis to validate hypotheses/ initial findings.

9.1 Modelling: further development of TIA and advanced statistical analysis

There is considerable scope for further multivariate analysis of the database which we have compiled during the first year of this project's work. The statistical analysis being carried out at present to feed into the TIR is (necessarily) fairly preliminary and there are many opportunities for increasing our understanding of territorial aspects of the CAP by extending the analysis beyond simple regressions and cross-tabulations. We have only just begun to carry out multiple regression analysis, which allows the effects of each variable to be explored while taking other effects into account. Furthermore, at the time of writing only cross-sectional analysis has been undertaken, but many of the variables are available as time series for each individual NUTS 3 region, thus providing potential for panel data analysis.

It would also be possible to undertake more detailed work using existing national datasets like FAS, FADN and other national surveys (taking just 2 or 3 case study countries), to offer a more fine-grained analysis at micro-scale or NUTS 5. This would allow us to explore the role of national expenditures alongside those of the EU.

Finally, we are keen to undertake an analysis of regional differences in farm income mobility within the EU-15. The maintenance and stabilisation of farm incomes remains a key objective for the CAP. In addition, there is a continuing concern about the distribution of farm incomes and, in particular, the extent to which certain farm sizes, types and regions are disadvantaged by the nature of agricultural support. Within this context it would be useful to examine the relative income mobility of farmers in different regions of the EU. Such work would be aimed at identifying the proportion of farmers within each region persistently at the bottom of the income distribution, whether some farmers experience repeated spells of low income, whether particular farm/farmer characteristics influence the probability of a farm moving out of or into the lower end of the income distribution, and the extent to which these characteristics vary by region.

This would replicate a method already developed and applied to Scotland, and to apply this to the EU we would require permission to use the FADN database at the micro-level for a number of other countries (preferably at least three others including both southern and northern member states). Even with this limited number of countries, some interesting and important policy-related findings might emerge, confirming the diversity of the farm sector in the EU and the need for regionally differentiated policies.

9.2 Case Studies

The next major task is to undertake case studies of both selected rural areas and of commodities (thematic). Each of these is discussed in turn.

The choice of case study areas will be made at our October coordination meeting, informed by a short cluster analysis of NUTS 3 regions in terms of their development trajectories.

Variables used in clustering might include: population change, change in GDP/head, other key change variables, sectoral composition, population density, and accessibility. Within the selected case study areas we intend to focus on two principal issues, both highly relevant to policy:

- studies of farm household adaptation to changing policies and associated pluriactivity;
- examples of good practice in territorial rural development.

For the first of these, we wish to enquire into what strategies farm households are pursuing in order to understand better the likely impacts of the CAP, RDP and future reforms. We may also be able to make use of some national datasets for this purpose, and gain more sophisticated insights since these are often far superior to those available for the EU. We are especially interested to discover whether pluriactivity and off-farm sources of income are related to rural development measures, and to labour market variations. It should be remembered, however, that this is only one small part of this project and that resource constraints will limit the depth and extent of this analysis, and for that reason we will seek to make use of existing data or ongoing work where possible.

Under the second issue, we want to look for exemplars of good rural development practice which will lead us to useful propositions on the institutional aspects of spatial coordination as well as to recommendations for more effective rural development policy. An important aspect will be to ask whether there are examples where rural development spending or projects have enabled rural communities to draw down and to make better use of other policies and other budget lines. There is already substantial documentation of LEADER experience, and of regional development agencies, and there may well be national models which add to this source material. Some limited fieldwork may be necessary to augment secondary sources, but again our time will be limited.

In terms of thematic case studies, there are a range of possibilities from which we must prioritise according to the time available. Among the avenues which we might pursue are:

- Commodities: regional studies of soft wheat, sheep or beef, pigs and olive oil.
- Agri-environment measures: can we add a territorial dimension to existing evaluations?
- The territorial impacts of modulation, as agreed in the MTR.
- Who will receive direct payments in the accession countries?

Again, we must emphasise that given the limits of time and financial resources we will have to be selective. The possibilities set out in this chapter should not be taken to indicate that we will be able to undertake full analysis of all of these avenues: indeed, each could be a research project in itself. Nevertheless, we would hope to add depth and rigour to many of the preliminary findings from this Third Interim Report so as to produce an authoritative final report next year.

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