Organic farming and measures of European agricultural policy

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Executive summary

In contrast to other parts of European agriculture, organic farming is a growth sector. Although rapid growth has been observed in absolute terms, the organic farming sector is still quite small, covering only about four percent of total agricultural land area in the EU. Clearly government support, mainly based on organic farming's environmental benefits, has played a significant role in stimulating growth. Support levels have been defined according to yields reductions and required changes in farm organisation due to conversion. Due to differences in support between Member States and regions, large differences in the development stage of the organic sector exist.

The objectives of this study was to investigate the relationship between environmentally friendly farming systems – taking organic farming as a typical model as it is the most established example – and the Common Agricultural Policy (CAP). At the time of contractual agreements this referred to the period of Agenda 2000. During the course of the study the CAP Reform 2003 was evolving and finally decided upon. Thus the scope of the study was extended to cover likely consequences of this reform.

Pre-CAP Reform 2003 regulatory environment

An analysis of FADN data for the year 2000 showed that in ten EU countries analysed, organic farms on average receive approx. 18% fewer **direct payments** per hectare from the **Common Market Organisations** (CMO) than comparable conventional farms.

Organic farms receive considerably fewer area payments for cereals, oilseeds and protein crops. Specifically the eligibility of maize for silage for these payments in many countries favours conventional farming. Total livestock related payments per hectare are higher on organic farms than in the conventional reference group. However, significant differences with respect to the different categories of payments exists. The conventional reference group receives more special premiums for bulls as well as slaughter premiums, as stocking rates are higher and fattening periods shorter. Organic farms profit from the second premium for steers, but these payments only have a very small share in total beef payments. Organic farms also receive a significantly higher amount of suckler cow premiums, reflecting the suitability of this activity in extensive farming systems. Extensification payments are twice as high in organic than in comparable conventional farms, a clear indication that organic farms can more easily comply with the stocking rate limits as required by the respective regulation.

With the exception of horticultural farms, where CMO payments play a less important role, the payments are lower in organic farms for all farm types. The difference is especially high for dairy and permanent crop farm samples, where organic farms get 33% to 38% fewer payments per hectare than the conventional reference farms. This difference can be attributed to the much higher payments received by the conventional farms for olive growing as the sample of permanent crops farms consists mainly of farms in Portugal and Spain. As production aid for olive

growers is paid per tonne of olive oil delivered and is therefore linked to the actual output for all producers, extensive farms with lower yields receive fewer payments than comparable but more intensive farms.

Price support instruments, such as tariffs and export subsidies, play a major role within the Common Market Organisations. In the EU, this indirect support to farms still accounts for the main part (60%) of the Producer Support Estimate by the OECD. First estimates indicate that the benefit for organic farms from price support measures of the Common Agricultural Policy is 20-25% lower than for comparable conventional farms.

The CAP Reform of 1992 as well the subsequent reform, the Agenda 2000, have generally reduced the discrimination of extensive farming systems by reducing the level of price support for a number of products, compensating farms for losses of revenue via direct payments. Especially for arable crops, where the reforms introduced compensatory payments based on regional historical average yields, this has generally favoured extensive farming systems. The CAP Reform of 1992 also reduced price support for livestock products (mainly beef and sheep meat), but as compensatory payments are paid per head, the benefit to extensive systems was small, if any. The Agenda 2000 has continued the trend of decoupling support payments in the livestock sector from production. As payments continue to be made per head, the linkage to production remains close and any extra benefit to extensive farms small.

A range of measures on **exemptions** or specific rules for organic farming systems implemented or discussed in member states have been identified. These included preferential access to quotas for organic producers, specific management requirements/exemptions for set-aside land and rotation of arable area payment eligible land. Furthermore, the development of action plans for organic farming can be seen as an implementation of special measures, although they usually build on the framework provided by the rural development and structural measures. Because examples of special provisions are not widespread, it is difficult to provide an overall assessment of their impacts. Of the examples cited, probably the flexibility with respect to set-aside management on organic farms has had the most impact, initially at the individual country level, then on an EU-wide basis since 2001.

Although the payment levels via the CMOs are on average lower for organic than for conventional farms in the year 2000, organic farms in the EU in total receive 20% more CAP payments per hectare than conventional farms according to FADN data for the year 2000. This results from the fact that, on average, organic farms receive more than 70% higher payments from the agri-environmental and LFA area payments than conventional farms. Organic horticultural and arable farms benefit most from agri-environmental and LFA payments compared the conventional farms, permanent crop and grazing livestock farms least.

Analyses of the specific **Rural Development Programmes** (RDP) in 6 Member States (Austria, France, Germany, the United Kingdom, Italy and Spain) showed that most of the national RDPs have a considerable potential for supporting organic farming. Nevertheless, most of these

priority areas still bear the potential for a more targeted support of organic farming. In all countries organic farming is considered as one possible mechanism to achieve the sustainable development objectives and is addressed specifically in certain measures. Thus, the RDPs can generally be considered a positive environment for organic farming, not necessarily for the variety of specific support measures, but more in general for the emphasis put on the enhancement of product quality and on environmental protection.

In the EU, in 2001 a total of 275 million € was spent on organic farming within the agri-environmental measures of Council Regulations (EC) 2078/92 and 1257/99 with commitments of more than 18,000 holdings farming nearly 3 Mio. hectares. Of 1.7 billion € spent on agri-environmental measures via the agri-environmental measures of Council Regulation (EC) 1257/99 organic farming support makes up approx. 15% of expenditure, covering 7.5% of agri-environmental area, receiving an average of 186 €/ha (compared to 89 €/ha for conventional farms). Compared to average payments made (183 €/ha) under the agri-environmental measures of Council Regulation (EC) 2078/92 average payments have increased slightly. However, in several countries the average hectare payment to organic farms has decreased, i.e. in Denmark, France, Greece Italy, Netherlands and Portugal. In all countries, except Portugal and the UK, average payments per hectare are higher for organic than for the average of other measures.

The **agri-environmental measures** were recognised as the most relevant for organic production because they provided the most significant support for organic farming. In quantitative terms, the overall level of support to organic farming is generally beneficial for organic farms compared to the conventional ones, with a positive relative advantage of most organic crops. For example, in Austria and Spain, organic farming benefits due to the possibility of combining the organic farming measure with other agri-environmental measures, and in Austria the ceiling to payments for farms larger than 100 ha is higher on organic farms.

However, the closest alternative to organic farming, e.g. integrated farming, in most countries may receive nearly as high payments and is thus an interesting alternative for farmers. Furthermore, payments often are not sufficient to cover the income loss of organic compared to conventional production, particularly in horticulture, vine and olive production in Italy.

Investment support specifically targets organic farming only in one of the cases: Marche (Italy). Here maximum support rates are 10% higher for organic farms. In all other countries organic farming may generally benefit from this measure because converting farmers more strongly depend on investments, e.g. for animal husbandry, but organic farming is either mentioned with the same priority as other farming systems or not specifically mentioned at all.

Processing and marketing measures make only minor references to organic farming. If organic products are specifically mentioned measures do not provide for higher support for organic than for other high quality products. In Austria, however, several organic product groups are

specifically addressed with marketing and processing measures (i.e. milk and dairy products, fresh vegetables and potatoes, certain oilseeds and medicinal plants and spices). Thus, by being so specific these measures clearly address and favour these organic products.

Training measures in some case study countries provide some support for organic farmers. In France, organic farming may not be specifically addressed but training for agri-environmental issues is a clear emphasis and thus organic farming may indirectly benefit from this. In Austria and the UK, organic farming is not addressed by specific support measures but specific projects exist that provide for vocational training for organic farmers.

Less Favoured Area (LFA) support, in most countries, does not specifically provide benefits for organic farms but organic farms tend to be located in these areas because there often only minor changes in farm organisation seem to be required for conversion. Thus a large part of LFA payments end up being paid to organic farms. In Germany, eligibility criteria favour organic farms indirectly, e.g. due to the exclusion of payments for intensive crops and a restriction of livestock density. In the UK, organic farmers in LFA can receive specifically targeted supplementary payments provided they are not part of the Organic Farming Scheme. In Wales, organic food processors are being specifically targeted under the Small Processors Grant scheme under the rural economy measure. In Italy, LFA payments are only made to farms not relying on GMOs, which may also present an indirect benefit for organic farms.

However, not just the levels of support through different measures are critical for the development of the sector, but **administrative issues** can have a major impact, e.g. with stop/start schemes potentially causing serious damage. Delay in implementing announced support measures may cause serious concern among organic producer. Farmers are likely to wait for the implementation of a programme before starting conversion. This may lead to a rush of producers starting conversion when the schemes are finally (re)opened, resulting in significant problems marketing the sudden increase in supply.

In summary, in all analysed countries, the **Rural Development Plans still bear considerable potential for a more targeted support of organic farming**.

The CAP Reform 2003

The CAP Reform 2003 is a fundamental reform of agricultural policy. The decoupling of payments from production included in the reform generally favours more extensive farming systems and thus also benefits organic farming. The exemption from the mandatory set-aside obligation for organic farmers is an advantage, as long as mandatory set-aside is applied. Member states that opt for a regional approach to premium calculation will relatively favour organic farmers as compared to the individual farm approach. National envelopes provide a possible further (and potentially more reliable) source for support options similar to the RDPs.

In general cross compliance provisions should be more easy to follow for organic farmers, compared to conventional ones. Whether concerns voiced in the political discussion that cross compliance might make it necessary to phase out some of the grassland support within agri-environmental programmes are valid remains an open question. The abolishment of these programmes would negatively affect organic farming.

The new provision of the rural development policies provide a number of options potentially beneficial to organic farmers. The main concern is whether regions will actually provide sufficient funds for co-financing. There is a potential danger of increasing differences in organic farming support between regions, with negative implications for interregional organic competition.

As organic farms receive less payments under the CMOs it should be less affected by modulation. On the other hand they should benefit from measures financed by modulation which makes modulation a measure beneficial for organic farming.

The market reform of the milk sector is of high importance for organic farming. A decrease of milk prices received by organic farmers is likely as a consequence of the reform. Many organic farmers depend more strongly on ruminants for their farm organisation, which implies a less flexible reaction of organic farms to decreasing milk prices than for their conventional counterparts. In this respect the reform might disadvantage organic farmers. However, the actual effect will depend on the development of the premiums paid at the market for organic milk.

The future reform planned for the olive oil sector would - if the Commission proposals are adopted - be quite beneficial for organic farming.

The overall conclusion on the CAP Reform 2003 is that the positive effects for organic farming seem to clearly outweigh some negative effects. Thus the reform has the potential of supporting a continued positive development of organic farming. However, to what extent this potential can be realised depends on many details (e.g. of the RDPs) not known at the time of this study.

Recommendations

The recommendations carry the lessons learned from the pre-CAP Reform 2003 to the new regulatory environment. In order to maximise the positive effects on organic farming with respect to the **first pillar measures** it is important to

- encourage member states to opt for a regional approach to premium calculation because this will relatively favour organic farmers as compared to the individual farm approach;
- encourage member states to implement the CAP Reform 2003 as quickly as possible;
- point to the potential of national envelopes as a source for support options beneficial for organic farming partly similar to the RDPs;
- regularly monitor the effect of CMOs on organic and other environmentally friendly farming systems, carefully monitor especially the dairy and beef sectors as both the conventional and the organic sector could be hit hard by the CAP Reform 2003, thus provide a basis for reaction if in some grassland regions productive agriculture should vanish;
- explicitly take account of the characteristics of organic and other environmentally friendly farming systems when designing, reforming and implementing CMO directives and regulations;
- quickly eliminate the existing disadvantages as far as not already occurred as part of the CAP Reform 2003 (compare Chapter 6), e.g. in the olive CMO as a step towards completing the process of shifting from commodity support to rural development and payment for public goods and services provided by agriculture;
- discourage any exaggerated use of the non-decoupling options and abstain (in the medium to long-run) from any roll-back policies towards coupling support. Some member states will use the option to decouple as little as possible - which is in parts a reaction to the concern that production might vanish from some landscapes;
- thoroughly analyse how import rules of Council Regulation (EC) 2092/91, currently requiring the substantial use of Member States' and third country exporters' resources, can be adapted to reduce the related transactions costs especially for developing countries while at the same time ensuring that the high standards are maintained.

In drawing up the new RDPs in the second pillar of the CAP lessons learned from the analysis of the case study countries and regions in this study lead to the following recommendations: It is important to

- make sure that the organic premiums within the agri-environmental programs are sufficiently higher than the premiums for integrated production;
- continue the policy of organic maintenance payments; also attention should be given to a sufficient magnitude of these maintenance payments in comparison to the payments during the transitional phase;

- implement a minimum organic farming support in all agri-environmental programs in order to minimize interregional distortion of organic trade;
- include specific investment provisions for organic farmers into the investment programs of the RDPs, with higher support percentages for organic than for conventional investments;
- give more attention to the issues of marketing and processing of organic products, and to the possible link with typical products and rural tourism as additional vehicles for boosting organic products;
- in countries where the domestic market for organic products is still quite small and producers mainly rely on exports, (partially) support specific marketing institutions from the RDPs;
- to review the (environmental and socioeconomic) benefits of an increase of organic farming in Less Favoured Areas LFA and adapt provisions accordingly; most likely this would lead to an abolition of specific provisions for organic support in LFA but in turn to a promotion of organic farming as a preferred management option in regions of high nature value without restricting organic farming to these areas;
- support more effectively specific extension services and technical assistance for organic farming including demonstration activities; in vocational training, standard curricula should include information on organic farming and specific training courses should be offered;
- give increased attention to demand support policies such as a local food initiatives, public procurement and healthier-food education
- explore the potential of integration of the agri-environmental and rural development legislation as project based measures ;
- improve administrative procedures as these can have a major impact, with stop/start schemes potentially causing serious damage.

The final document on the European action plan for organic farming should

- provide a strategic view of the role of organic farming within the context of agricultural policy;
- suggest a comprehensive and coherent set of actions;
- contain proposals for the adaptation of the regulatory framework for supporting organic farming;
- ensure that any large-scale agricultural reforms in the future should jointly cover the area of conventional and organic agriculture; to that effect prospective impact analyses that are performed before any reform is adopted and that go into policy formulation should include organic farming from the outset;
- provide a basis for continued review of the impacts of existing policy measures and tax laws on organic farming to identify and eliminate unintended conflicts;

- give specific consideration to organic farming at all levels of policy formulation;
- encourage risk-sharing approaches with other parts of the supply chain that do not require the full risk of conversion to and continued organic production to be borne by the producer, and to assist the producer in obtaining a fair price;
- stress the importance of the organic food chain, with emphasis being on the improvement of information, education, technology development, research and extension for organic farming and its process chain;
- either set a global target for organic production or develop some consensus on the longer-term potential size of the sector;
- address the issue of certification and control and consider the necessity to build up a "certification system for the certifiers", that assures the necessary competence and independence of the certification bodies;
- relate the European activities to the member states organic action plans;
- stress the fact that the European action plan for organic farming is rather an ongoing process between policy makers and stakeholders than a one-time document.

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Abbreviations

£:	pound
€:	euro
ACP:	Africa, the Caribbean and the Pacific
AE:	Agri-environment
AMAB:	Associazione Mediterranea Agricoltura Biologica
AWU:	Agricultural Work Unit
BSE:	Bovine Spongiform Encephalopathy
C:	cent
CAB:	Conversion à l'agriculture biologique
CAD:	Contrats d'agriculture durable
CAP:	Common Agricultural Policy
CC:	Candidate Countries
CEAS:	Confederation of european aerospace sosieties
CF:	Conventional Farming
CMO:	Common Market Organisation
COP:	Cereals, Oilseeds, Protein crops
CSS:	Countryside Stewardship Scheme
CTE:	Contrats territoriaux d'exploitation
DA:	Disadvantaged area
DEFRA:	Department for Environment, Food & Rural Affairs
DG:	Directorate General
EAGGF:	European Agricultural Guidance and Guarantee Fund
EC:	European Commission
ELWa:	Education and Learning Wales
ERDP:	English Rural Development Plan
ESA:	Environmentally Sensitive Area
ESU:	European Size Units
EU:	European Union
EUR:	euro
FADN:	Farm Accountancy Data Network
FAO:	Food und Agriculture Organization
GM:	Gross margin

GMO:	Genetically Modified Organisms
ha:	hectare
HLCA:	Hill Livestock Compensatory Allowance Scheme in England
IRS:	Institute of Rural Studies
ISO:	International Organisation for Standardisation
IT	Information technology
ITC:	International Trade Centre
LFA:	Less Favoured Areas
LPR:	Landschaftspflegerichtlinie
LU:	Livestock Unit
MEKA:	Marktentlastung und Kulturlandschaftsausgleich
MEPL:	Maßnahmen- und Entwicklungsplan Ländlicher Raum Baden-Württemberg
MPS:	Market price support
NH_4:	Ammonium
NPC:	Net Protection Coefficient
NUTS:	Nomenclature of Statistical Territorial Units
OCIS:	Organic Conversion Information Service
OECD:	Organisation for Economic Co-operation and Development
OF:	Organic Farming
OFCAP:	Organic Farming and the Common Agricultural Policy
OFS:	Organic Farming Scheme
ÖPUL:	Österreichisches Programm zur Förderung einer umweltgerechten, extensiven und den natürlichen Lebensraum schützenden Landwirtschaft
P_2O_5:	Phosphate
PSE:	Producer Support Estimate
RDP:	Rural Development Plan
RSPB:	Royal Society for the Protection of Birds
SDA:	Severely disadvantaged area
SGM:	Standard Gross Margin
t:	tonnes
UAA:	Utilisable Agricultural Area
UWA:	University of Wales, Institute of Rural Studies
VAT:	Value Added Tax

DA: Welsh Development Agency

Country abbreviations[1]

AUT	Austria
BEL	Belgium
BGR	Bulgaria
CYP	Cyprus
CZE	Czech Republic
DEU	Germany
DNK	Denmark
ESP	Spain
EST	Estonia
FIN	Finland
FRA	France
GBR	Great Britain
GRC	Greece
HUN	Hungary
IRL	Ire
ITA	Italy
LTU	Lithuania
LUX	Luxembourg
LVA	Latvia
MLT	Malta
NLD	Netherlands
POL	Poland
PRT	Portugal
ROU	Romania
SVK	Slovakia
SVN	Slovenia
SWE	Sweden
TUR	Turkey
USA	United States of America

[1] ISO Alpha 3 codes

1 Background

Environmentally friendly farming systems can contribute to minimising negative environmental impacts of agricultural production and to providing high-quality food while assuring food supply.

Organic farming is one of the most advanced environmentally friendly farming system and has a long tradition in Europe. Policy support for organic farming has been developed because this farming system addresses the concerns of policy makers about environmental protection and rural development. In the EU, Council Regulation (EC) 2092/91 harmonised the definition of organic farming. Interestingly, 90 percent of post 1985 growth came following the implementation of Council Regulation (EC) 2092/91 in 1993 (Lampkin 2003). Clearly government support, largely made under Council Regulation (EC) 2078/92 (and more recently under Council Regulation (EC) 1257/99) based on the organic farming definition of Council Regulations (EC) 2092/91 and 1804/99, has played a significant role in stimulating growth.

A current intention is to formulate an integrative 'European Action Plan' for the development of organic food and farming, based on the finding of previous research that even the existence of the recommended political institutions themselves does not lead to the expected growth in some countries. As part of the effort in formulating this Action Plan an expert group has been established and the public has been involved via an online-consultation during February and March 2003. Furthermore, in the beginning of 2004, an EU wide hearing with policy makers and experts will be held as further input to the EU Organic Action Plan.

The environmental and rural development problems that organic farming has the potential to address are far from resolved. Thus organic farming may represent a prime opportunity for Europe, as it could account for a 10 per cent share of EU agriculture between 2005 and 2010. Furthermore, the demand for organic products is growing due to increasing concerns of consumers regarding food safety.

Comprehensive proposals exist on how to successfully establish horizontal policy measures to support environmentally sensitive farming systems, i.e. organic farming. The main question is how to best integrate environmental issues and thus further develop agricultural policy with respect to environmentally sensitive farming systems. Various farming systems have been designed to address these issues. Among these are integrated farming and organic farming. Integrated farming systems have been addressed in a previous study (Agra CEAS Consulting 2002), while organic farming will be the focus of this study.

2 Objectives

The aim of the study is to investigate the relationship between environmentally friendly farming systems – taking organic farming as a typical model as it is the most established example – and the Common Agricultural Policy (CAP). At the time of contractual agreements this referred to the period of Agenda 2000. However, the CAP was considered a moving target and a first evaluation of the 2003 CAP Reform was included.

The status quo of support from the CAP (first and second pillar measures) for these systems will be compared to that of standard production and the impact of the CAP on these sectors will be identified. The effects on further development of these sectors on farm structure and prices for produce will also be discussed.

There are two specific objectives in achieving this aim:

1. Overview of the support from the CAP for specific farming and production systems.
2. Assessment of the effects of the CAP on environmentally friendly farming and production systems, in particular organic farming.

Additionally, a brief analysis of the 2003 CAP Reform was added as the CAP evolved although this study has been based in the situation before the 2003 CAP Reform,

The analysis will be based on current literature, statistical data and case studies in selected Member States. Details on data sources and general methodological issues are given in Chapter 10, Annex B. Various difficulties were encountered in the process of compiling this study. For example, FADN farm accounting data was available only for a few countries for the year 2001 and year 2000 data had to be used for certain analyses. However, most importantly, information on the implementation of the Rural Development Regulation in the case study countries was difficult to obtain.

3 The organic farming sector in the EU

This chapter provides a short overview of the structure of the organic farming sectors by Member States, including candidate countries. The most recent data available will be presented on production (organic land area, holdings, main production categories) compared to conventional structural data, regional distribution, markets and processing.

In the EU, around 1.7 billion € is spent on agri-environmental measures via the agri-environmental measures of Council Regulation (EC) 1257/99 (Table 3-1). These are implemented on a total of 19 Mio. hectares receiving an average of 89 €/ha. Organic farming support implemented within the agri-environmental measures makes up approx. 15% of expenditure on agri-environmental measures, covering 7.5% of agri-environmental area, receiving an average of 186 €/ha. In all countries, except Portugal and the UK, average payments per hectare are higher for organic than for the average of other measures.

Additionally, nearly 250 million € is spent on organically cultivated land via contracts still made within the agri-environmental measures of Council Regulation (EC) 2078/92. These have been made with nearly 58,000 farms on an area of approx. 1.4 million hectares (Table 3-2) receiving an average of 183 €/ha. Due to the normally 5-year contract periods made under Council Regulation (EC) 2078/92 these payments will gradually be phased out by 2004.

In comparison to the agri-environmental measures implemented within Council Regulation (EC) 2078/92, hectare payments for organic farms have slightly increased with the implementation of Council Regulation (EC) 1257/99 (Table 3-3). However, in several countries the average hectare payment to organic farms has decreased, i.e. in Denmark, France, Greece Italy, Netherlands and Portugal.

In the year 2001, a total of 275 million € was spent on organic farming within the agri-environmental measures of Council Regulations (EC) 2078/92 and 1257/99 covering more than 18,000 holdings farming nearly 3 million hectare (Table 3-3).

Table 3-1: Agri-environmental and organic farming agreements, area and expenditure via Council Regulation (EC) 1257/99 in the year 2001

Member State		Number of contracts		Number of hectares		Public expenditure ('000 €)		Premium average/ha
		contracts	of which new in 2001	under contract	of which new in 2001	Total	of which EAGGF	
AUT	Total	556,772	556,772	5,277,477	5,277,477	516,095	257,155	98
	OF	19,719	19,719	210,833	210,833	60,274	27,413	286
BEL	Total	12,991	9633	98,096	76,157	18,537	9,235	189
	OF	127	45	3,616	1,096	973	500	269
DNK	Total	6,118	2,682	160,949	95,481	21,422	10,711	133
	OF	1,485	551	78,347	35,126	15,556	7,778	199
DEU	Total	101,403	81,826	2,948,953	2,650,048	236,863	136,150	80
	OF	4,612	3,305	254,715	210,278	41,559	23,897	163
GBR	Total	9,193	6,156	527,724	341,711	48,893	25,431	93
	OF	1,011	876	122,330	72,281	5,471	2,939	45
GRC	Total	7,219	1,542	74,749	16,250	18,413	13,810	246
	OF	2,872	827	10,614	3,497	4,718	3,539	445
ESP	Total	31,995	21,222	679,443	412,015	64,648	44,644	95
	OF	1,405	1,172	112,554	29,983	22,000	15,592	195
FIN	Total	146,130	5,447	3,971,019	113,758	274,359	152,192	69
	OF	3,607	1,285	113,631	41,444	13,251	7,503	117
FRA	Total	30,005	29,277	1,850,088	1,817,036	59,691	29,887	32
	OF	2,948	2,880	82,508	81,137	15,527	7,775	188
IRL	Total	13,333	13,321	498,700	498,300	65,273	48,955	131
	OF	no data	no data	no data	no data	no data	no data	no data
ITA	Total	48,323	39,887	710,784	550,904	146,183	73,029	206
	OF	6,920	6,475	101,134	97,065	32,196	16,158	318
LUX	Total	255	255	2,416	2,416	334	167	138
	OF	17	17	1,224	1,224	212	106	173
NLD	Total	3,891	2,730	70,024	34,159	10,016	4,333	143
	OF	472	472	14,593	14,593	2,279	465	156
PRT	Total	6,795	6,795	61,504	61,504	10,558	7,919	172
	OF	3	3	90	90	10	8	111
SWE	Total	93,599	88,866	2,272,490	2,153,235	218,497	118,406	96
	OF	15,745	11,606	349,562	230,562	56,634	30,480	162
Total	Total	1,068,022	866,411	19,204,417	14,100,451	1,709,781	931,985	89
	OF	60,943	48,687	1,455,751	1,029,209	270,660	144,153	186

OF = organic farming

Source: EC (2004a)

Table 3-2: Organic farming agreements, area and expenditure via Council Regulation (EC) 2078/92 in the year 2001

Member State	Number of contracts	Number of ha	Public expenditure ('000 €)		Average premium/ha
			Total	of which EAGGF	
AUT	2,524	36,193	7,631	3,580	211
BEL	295	13,032	2,443	1,237	187
BGR	1,678	285,633	12,035	6,864	42
DEU	6,833	278,884	42,918	24,751	154
DNK	1,848	79,731	10,906	5,453	137
ESP	6,764	142,591	9,826	7,290	69
FIN	989	23,948	3,380	1,689	141
FRA	1,955	54,727	10,700	5,403	196
GRC	1,358	4,928	1,978	1,971	401
IRL	499	13,691	1,848	1,386	135
ITA	26,164	351,113	126,702	85,574	361
LUX	17	736	116	58	158
NLD	298	8,140	2,167	788	266
PRT	372	26,970	3,689	2,767	137
SWE	6,119	81,067	12,384	6,192	153
Total	57,713	1,401,384	248,725	155,004	183

Source: EC (2004b)

Table 3-3: Organic contracts, land area and expenditure via Council Regulations (EC) 2078/92 and 1257/99 in the year 2001

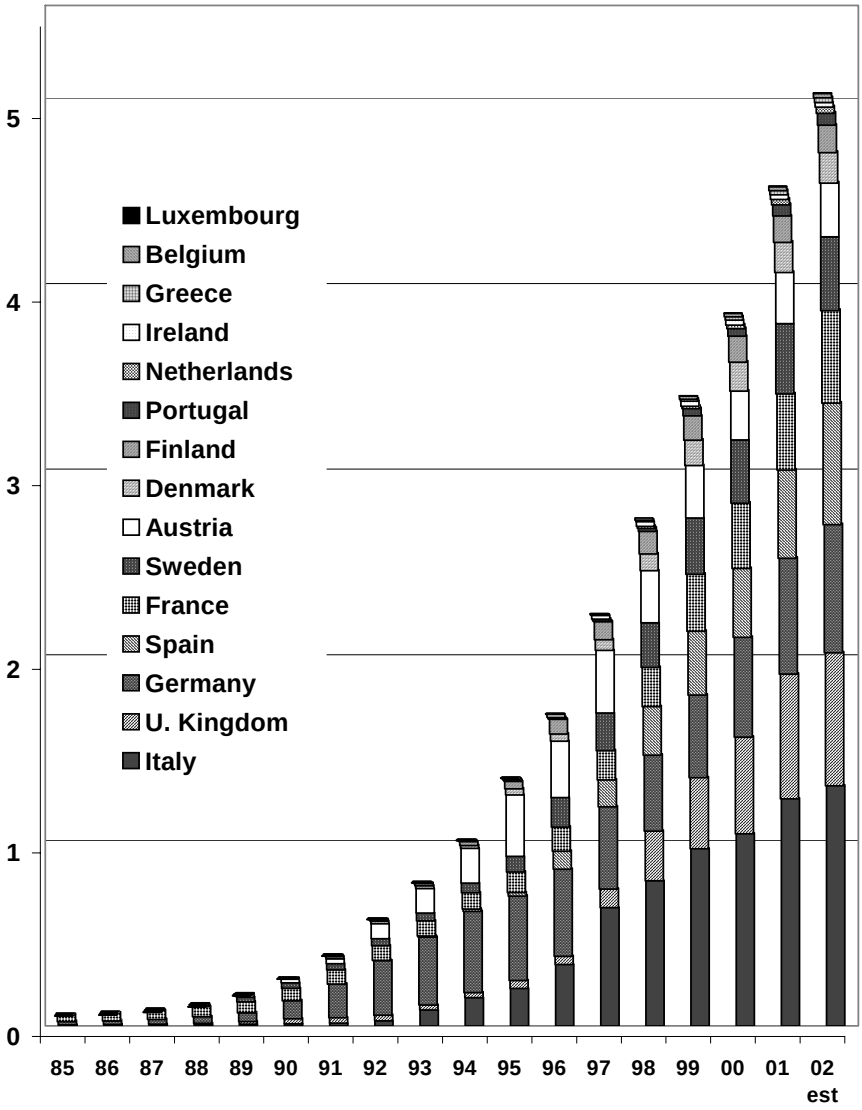
	Number of contracts		Number of ha		Public expenditure ('000 €)		Average premium per ha	
	2078 /92	1257 /99	2078 /92	1257 /99	2078 /92	1257 /99	2078 /92	1257 /99
AUT	2,524	19,719	36,193	210,833	7,631	60,274	211	286
BEL	295	127	13,032	3,616	2,443	973	187	269
BGR	1,678	1,485	285,633	78,347	12,035	15,556	42	199
DEU	6,833	4,612	278,884	254,715	42,918	41,559	154	163
DNK	1,848	1,011	79,731	12,233	10,906	5,471	137	45
ESP	6,764	2,872	142,591	10,614	9,826	4,718	69	445
FIN	989	1,405	23,948	112,554	3,380	22	141	195
FRA	1,955	3,607	54,727	113,631	10,700	13,251	196	117
GRC	1,358	2,948	4,928	82,508	1,978	15,527	401	188
IRL	499	no data	13,691	no data	1,848	no data	135	no data
ITA	26,164	692	351,113	101,134	126,702	32,196	361	318
LUX	17	17	736	1,224	116	212	158	173
NLD	298	472	8,140	14,593	2,167	2,279	266	156
PRT	372	3	26,970	90	3,689	10	137	111
SWE	6,119	15,745	81,067	349,562	12,384	56,634	153	162
Total	57,713	60,943	1,401,384	1,455,751	248,725	27,066	183	186
2078+1257	118,656		2,857,135		275,791			

Source: EC (2004a,b)

3.1 Farms and land area

Certified and policy-supported organic production accounted for over 5 million ha, 4% of the total agricultural area, on nearly 170 thousand holdings in the European Union by the end of 2002. Compared with 1985, when only 100,000 ha on 6,000 holdings were recorded, the difference is remarkable (Figure 3-1).

Figure 3-1: Organic and in-conversion land area (Mio. ha) in the European Union, year ending 1985-2002



Source: Lampkin (2003)

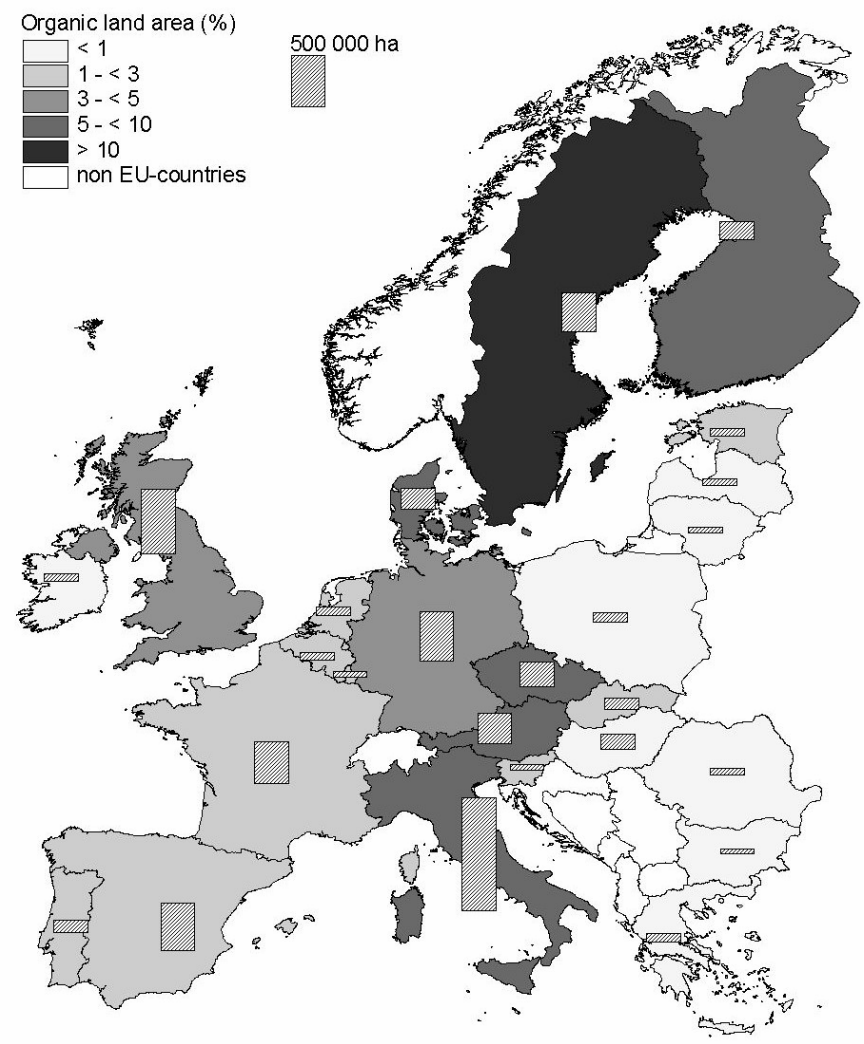
In contrast to other parts of European agriculture, organic farming is a growth sector. The dynamic development observed in the last decade of the twentieth century offers an opportunity to reflect on future trends in organic farming in Europe. Will the organic farming sector continue to grow at a similar rate? Or has its maximum development taken place? Will it now stagnate at the current level?

Currently, many people involved in agriculture would probably answer that the most likely future trend for organic farming is continued growth, eventually levelling off to a state of equilibrium, but the question is at what level and when?

Although rapid growth has been observed in absolute terms, the organic farming sector is still quite small, covering only about four percent of total agricultural land area in the EU. The aggregated figures for the European Union as a whole mask large differences in countries, regions and farm types. In terms of land area, Italy has by far the largest organic sector in Europe, followed by the UK, Germany, Spain and France (Figure 3-2 and Table 3-4). In contrast, the organic farming sector is quite large, in relative terms, in Sweden, Austria, Denmark, Finland and Switzerland although they have substantially less organic land area in absolute terms.

Most of the growth has taken place in the last decade, since 1993 (Figure 3-1 and Table 3-4). Data for 2002 are now becoming available, indicating continued strong growth in countries like Spain (up 37% since 2001 to 665,055 ha) and France (up 21% to 509,000 ha), and more moderate growth in the UK (up 7% to 724,523 ha) and Finland (6% to 156,692 ha). In Italy, as previously in Austria, growth appears to have stagnated (Lampkin 2003).

Figure 3-2: The distribution of the organically farmed area in the EU and accession countries in 2001



Source: Bichler and Schuster (2003), based on Eurostat 2003 complemented by Lampkin (2002)

Similar growth trends are taking place in the accession countries, which together account for an organic land area about 10% the size of that in the existing EU member states. Strongest growth, both in terms of land area and % of total UAA can be seen in the Czech Republic (up 8% to 235,136 ha in 2002), but Slovakia, Hungary, Slovenia and Poland also represent strong growth centres and, despite a later start, have achieved proportions of total UAA similar to existing member states.

Table 3-4: Organic land area in the years ending 1993 and 2001 (ha and %)

Country	2001		1993		x fold increase since 1993
	Organic ha	% total UAA	Organic ha	% total UAA	
AUT	285,500	8.4	135,982	4.0	2.1
BEL	22,410	1.6	2,179	0.2	10.3
DEU	632,165	3.7	246,458	1.4	2.6
DNK	173,497	6.6	20,090	0.8	8.6
ESP	485,079	1.9	11,674	0.0	41.6
FIN	147,943	6.7	20,340	0.9	7.3
FRA	419,750	1.5	87,829	0.3	4.8
GBR	679,631	4.3	30,992	0.2	21.9
GRC	31,118	0.9	591	0.0	52.7
IRL	30,070	0.7	5,460	0.1	5.5
ITA	1,230,000	9.4	88,437	0.7	13.9
LUX	2,141	1.7	497	0.4	4.3
NLD	38,000	1.9	11,150	0.5	3.4
PRT	70,857	1.8	3,060	0.1	23.2
SWE 1	193,611	6.3	36,674	1.2	5.3
SWE 2	188,389	6.1	7,869	0.3	23.9
EU15	4,630,161	3.7	835,667	0.7	5.5
BGR	500	0.0	0	0.0	n/a
CYP	100	0.1	0	0.0	n/a
CZE	218,114	5.1	15,667	0.4	13.9
EST	20,141	2.0	1,600	0.2	12.6
HUN	105,000	1.8	6,400	0.1	16.4
LVA	20,000	0.8	1,250	0.1	16.0
LTU	6,769	0.2	148	0.0	45.7
MLT	nd	nd	nd	nd	nd
POL	44,866	0.2	3,540	0.0	12.7
ROU	18,690	0.1	0	0.0	n/a
SVK	58,706	2.4	14,724	0.6	4.0
SVN	5,280	1.1	100	0.0	52.8
CC12	5,128,327	188,600	879,096	0	5.8
TUR	60,000	0.1	5,216	0.0	11.5
EUCC28	5,188,327	2.3	884,312	0.4	5.9

nd: no data; n/a: not applicable; SWE 1: certified land area; SWE 2: policy supported area

Source: IRS-UWA (2003) based on organic data from national administrations and certification bodies and Eurostat (2002)

Table 3-5: Organic holdings (number and size) in the years 1993 and 2001 (ha and %)

	Holdings in 2001		Holdings in 1993		X fold increase since 1993	Average size per holding ha		
Country	Organic	% of total	Organic	% of total	2001/1993	Organic hold.	All hold.	Relative %
AUT	18,292	9.2	9,713	4.9	1.9	15.6	17.0	92
BEL	694	1.1	160	0.3	4.3	32.3	22.5	144
DEU	14,693	3.1	5,091	1.1	2.9	43.0	36.3	118
DNK	3,525	6.1	640	1.1	5.5	49.2	45.6	108
ESP	15,607	1.2	753	0.1	20.7	31.1	20.3	153
FIN	4,983	6.2	1,599	2.0	3.1	29.7	27.4	108
FRA	10,364	1.6	3,231	0.5	3.2	40.5	42.0	97
GRC	6,680	0.8	165	0.0	40.5	4.7	4.4	106
GBR	3,981	1.7	655	0.3	6.1	170.7	67.8	252
IRL	997	0.7	238	0.2	4.2	30.2	31.3	96
ITA	56,400	2.6	4,656	0.2	12.1	21.8	6.1	359
LUX	48	1.6	12	0.4	4.0	44.6	42.7	105
NLD	1,528	1.5	455	0.4	3.4	24.9	19.9	125
PRT	917	0.2	73	0.0	12.6	77.3	9.3	832
SWE 1	3,589	4.4	1,507	1.9	2.4	53.9	37.9	142
SWE 2	14,111	17.4	390	0.5	36.2	13.4	37.9	35
EU15	156,409	2.3	35,495	0.5	4.4	29.6	18.7	158
BGR	10	nd	nd	nd	n/a	50.0	nd	nd
CYP	15	nd	nd	nd	n/a	6.7	nd	nd
CZE	654	nd	141	nd	4.6	333.5	nd	nd
EST	369	nd	50	nd	7.4	54.6	nd	nd
HUN	1,040	nd	50	nd	20.8	101.0	nd	nd
LVA	250	nd	50	nd	50	80.0	nd	nd
LTU	430	nd	9	nd	47.8	15.7	nd	nd
MLT	nd	nd	nd	nd	n/a	nd	nd	nd
POL	1,787	nd	225	nd	7.9	25.1	nd	nd
ROU	1,200	nd	nd	nd	n/a	15.6	nd	nd
SVK	82	nd	40	nd	2.0	715.9	nd	nd
SVN	883	nd	20	nd	44.1	6.0	nd	nd
CC12	6,720	nd	585	nd	11.5	nd	nd	nd
TUR	18,500	nd	1,780	nd	10.4	3.3	nd	nd
EUCC28	181,129	nd	84,140	nd	2.2	28.6	nd	nd

nd: no data; SWE 1: certified land area; SWE 2: policy supported area

Source: IRS-UWA (2003) based on organic data from national administrations and certification bodies and Eurostat (2002)

Table 3-5 indicates the number of organic holdings, their average size, and contrasts these with data for the whole agricultural sector in each country. In nearly all EU Member states organic farms are larger than conventional farms, the most pronounced examples being Portugal, Italy and the UK. This contrasts with the popular perception of organic farms as small, but again hides significant differences in farm size distribution within each country – most countries have a significant organic horticulture sector, typically characterised by smaller holdings, but also a more traditional agricultural sector, often characterised by larger, more extensive grassland-based farms. This is particularly marked in some regions of Portugal and Italy, as well as regions like Scotland, where large areas of rough grazing have been converted on a limited number of holdings, significantly affecting the UK average farm size figure.

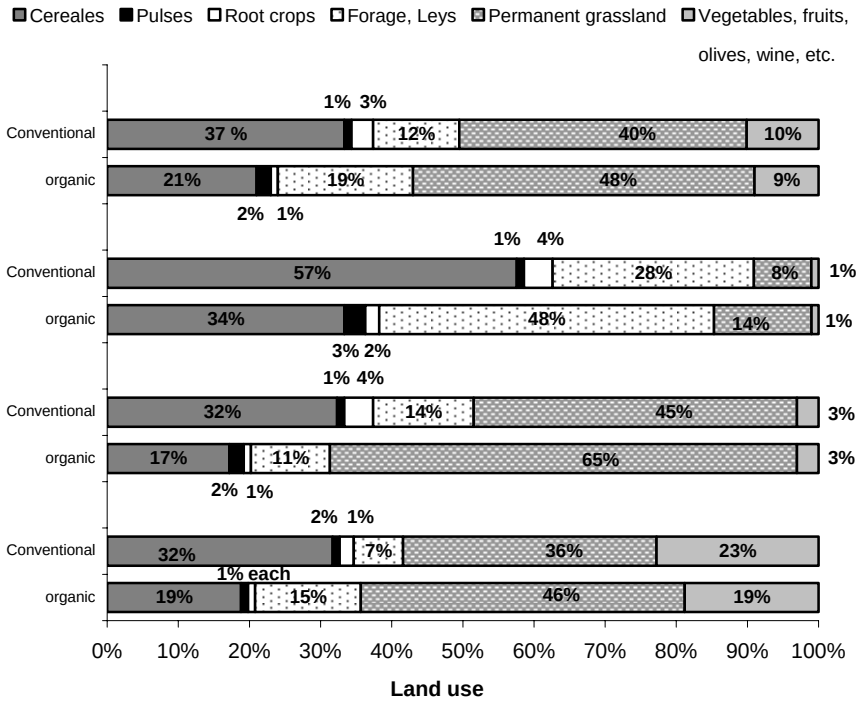
Production structure of organic farming naturally varies considerably between countries and is presented in detail in Annex B (Table 10-4 to Table 10-8). A comparison of the production structure of the organic in comparison to the conventional farming sector based on aggregated farm survey data (Eurostat 2003) for the EU (Figure 3-3) confirms the common assumption that higher shares of extensive land use options are observed in organic farming:

- a lower share of cereals,
- a lower share of root crops,
- a higher share of pulses,
- a higher share forages and leys,
- a higher share of permanent grassland,
- and a lower share of other (intensive) land uses (vegetables, fruits, olives, vine, nurseries, permanent crops under glass and other permanent crops).

These changes in production structure depend mainly on farm organisational changes due to conversion to organic production methods, but may also be caused by different distribution of organic farms across regions.

These trends are observed in all three greater European regions. The strongest increase in arable forage and ley area is observed in Northern and Southern Europe, while surprisingly, in Central Europe the share of arable forage and leys is lower in organic than in conventional farming.

Figure 3-3: Organic production structure in comparison to conventional production structure in the EU



Source: Häring et al. (2003), based on Eurostat (2003)

In the livestock sector, organic farming produces less intensively in terms of livestock density than conventional farming (Figure 3-4). In this figure average livestock density of conventional farming is assumed to be 100% and average livestock density in organic farming is given in relation to conventional farming. For example, total average livestock density across all livestock categories in organic farming is only 70% of average livestock density in conventional farming in the EU.

This is also confirmed by a significantly ($p = 0{,}008$) negative ($r = -0{,}23$, Pearson's correlation coefficient) interrelation between the livestock density (ln[2]) with the share of organically farmed area at the used combined NUTS1 / NUTS2 level (Häring et al. 2003). Thus, the higher the share of organic land is the lower is the encountered livestock density and vice versa.

Differences in organic and conventional livestock density are only minor for ruminants (sheep and goats, cattle and dairy cows). The largest difference in livestock density between organic and conventional farming is expected for monogastric livestock such as pigs and poultry which are often reared quite intensively in conventional farming, i.e. in landless

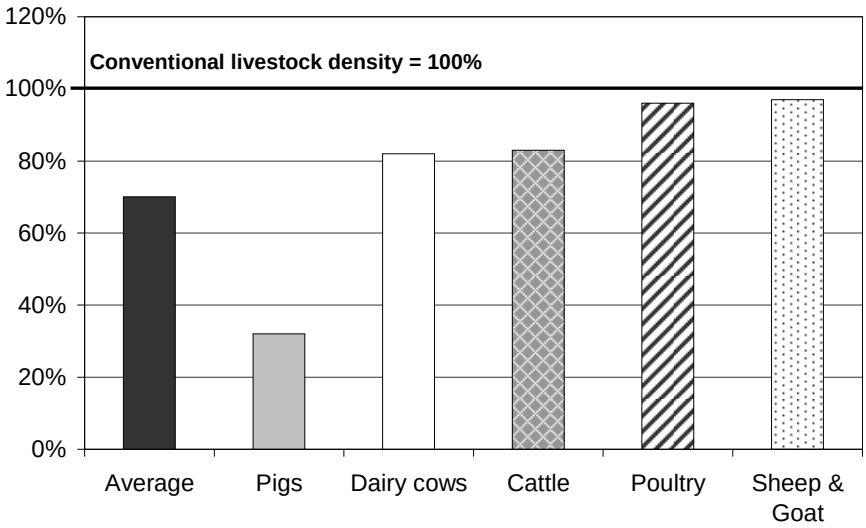
[2] Logarithmus Naturalis

production systems. The case of pigs confirms this assumption, while in poultry rearing, surprisingly, the stocking density in organic farming is not much lower than in conventional poultry rearing. This may be due to the fact that in some countries (e.g Germany) large conventional poultry farms tend to be non-agricultural firms and are thus not covered by these farm survey data.

Regional differences in the composition of total livestock are observed (Figure 3-5, for details see Annex B: Table 10-5). On average (EU 15), the contribution of cattle, dairy, sheep and goat, and poultry to total livestock density is higher in organic farming than in conventional farming, while the contribution of pigs to total livestock pigs is lower in organic farming.

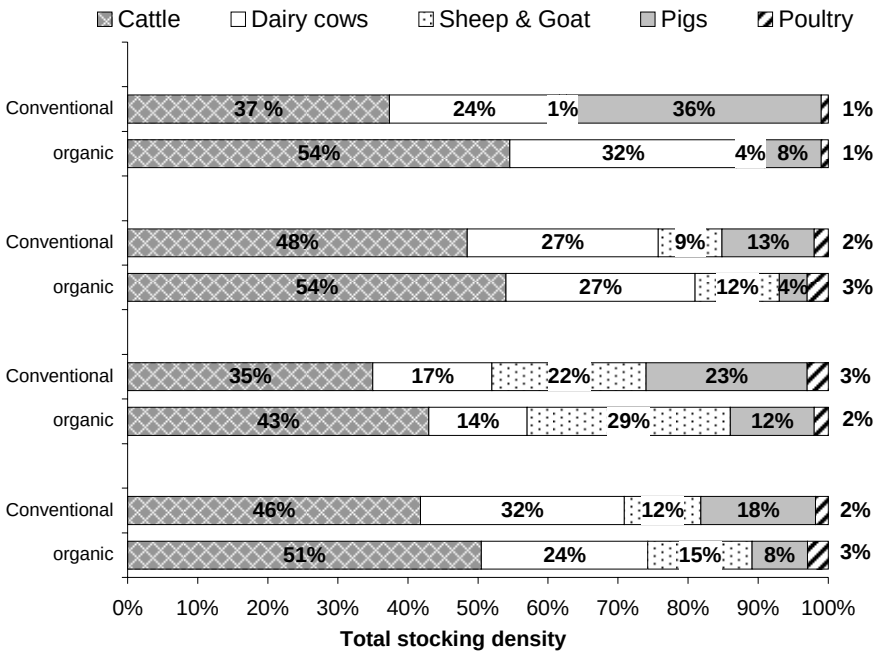
The share of cattle, sheep and goats is higher in organic than in conventional farming in all European regions, while the share of dairy cows is only higher in Northern Europe. The share of poultry is higher in organic than in conventional farming in Central Europe and the same in Northern Europe, while in Southern Europe the share of poultry is lower in organic farming.

Figure 3-4: Livestock density in organic farming in the EU relative to livestock density in conventional farming



Source: Häring et al. (2003), based on Eurostat (2003)

Figure 3-5: Livestock density in organic compared to conventional farming for different livestock categories and regions



Source: (Häring et al. 2003, based on Eurostat 2003)

3.2 Regional distribution[3]

One interesting question to ask is why organic farming is spread so unevenly throughout Europe, something which becomes especially apparent if we look at the regional distribution of organic farming (Figure 3-6). Apart from the quality of soils, the level of intensity and specialisation of agricultural practices and general agriculture policy influence are possible explanations.

The leading countries in the development of organic farming (in terms of the percentage of organic to total land area) have most certainly experienced strong policy support for organic farming. In most cases, this has included special support for the markets for organic foodstuffs. However, if the distribution of organic land within a country or a region with a uniform policy regime is uneven, other reasons must prevail. Two arguments which immediately come to mind are the quality of soils and climate and - given the importance of direct marketing in organic farming compared to conventional farming in the early development stages - the proximity of the farms to cities.

In some countries, e.g. Germany, Austria and Switzerland, organic farming is much more likely to be found in disadvantaged rural areas

3 This section is based on Dabbert et al. (2004), data has been updated and substantial material added.

where extensive agriculture predominates (Dabbert and Braun 1993, Osterburg et al. 1997, Schneeberger et al. 1997, Hartnagel 1998). An attempt to test this argument on a European level has been made by Offermann (2000), who found that within countries or regional clusters with similar conditions, relatively high shares of organic farms are most likely to be found in regions unfavourable to agricultural production.

What is the logic behind this simple observation? In disadvantaged regions, conventional agriculture is usually organised quite differently from conventional agriculture in intensive regions. Grasslands tend to be more important than arable land, and less fertiliser is used on agricultural lands. Extensive forms of animal production such as beef/dairy cattle or sheep tend to play the major role in these regions, whereas intensive animal production systems such as poultry or pig production are rarely found.

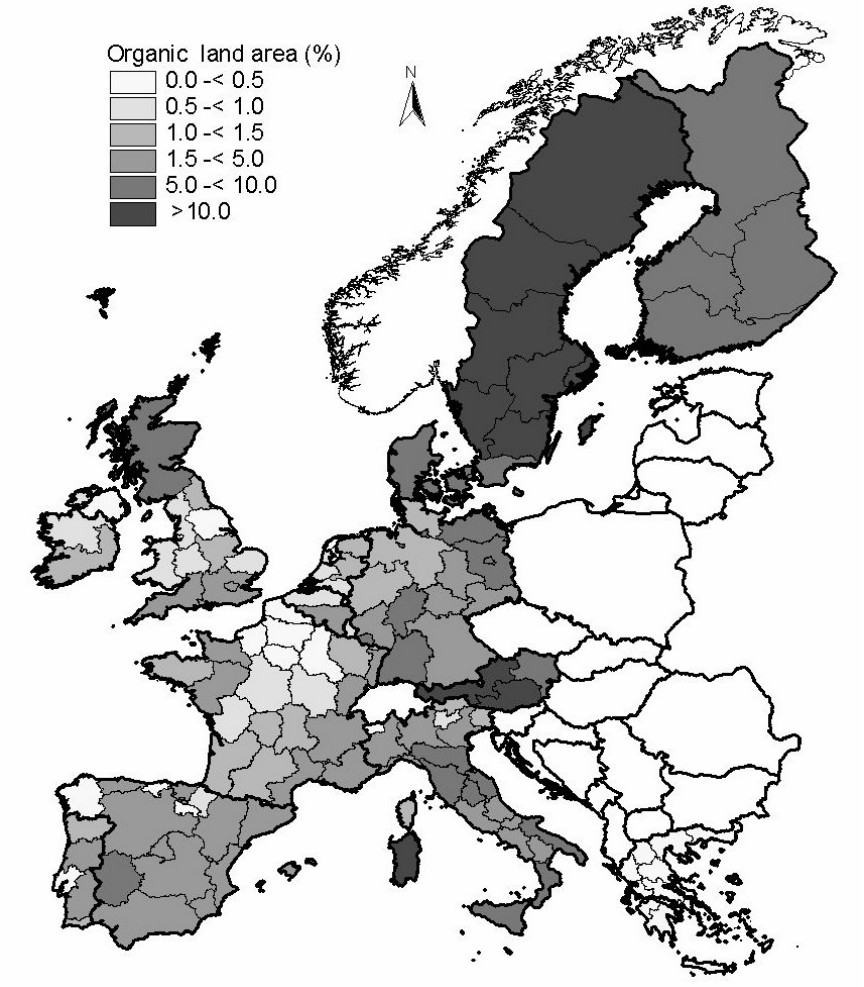
If a conventional farmer relies heavily on feedstuffs, especially roughage, produced on his own farm to feed his animals, and low amounts of pesticides and synthetic fertilisers are used, the changes the farm has to undergo to convert to organic agriculture tend to be small. Even if no additional price premium for organic produce is received and no policy-related payments are made for organic farming, the loss a farmer undergoes when converting to organic agriculture is fairly small. If in such a situation, price premiums can be achieved or agri-environmental payments are made for being organic, organic farming tends to be more profitable than conventional farming. If, on the other hand, a conventional farm relies on highly intensive animal rearing, such as poultry, a conversion to organic farming requires major changes in the organisation of the farm. In that case, the number of animals has to be drastically reduced because the organic production standards do not allow the purchase of large amounts of feedstuffs necessary to sustain the original level of production or the costs of purchased feeds is very high. The method of animal rearing must also be altered radically because some cost-efficient methods, such as battery farming of hens, cannot be used in organic farming.

Specialist conventional arable producers use a large part of their land for production of a few cash crops and would need to introduce fertility building crops in their rotation in order to farm organically. It is obvious that this situation may lead to drastic decreases in income when converting to organic.

Incidental events may also contribute to the development of organic farming in a region or country. Such events may help to overcome high costs of establishment of organic farming, e.g. infrastructure or the provision of information. This and an accumulation of expert knowledge may help to further develop the sector. Again this may result in positive network externalities with respect technologies and exchange of information (Latacz-Lohmann et al. 2001).

In some countries, the horticultural sector is characterised by a high proportion of new entrants, often from urban backgrounds, who chose to farm in less intensive regions either because land values are lower, and therefore easier to afford, or for lifestyle reasons such as an attractive environment.

Figure 3-6: Regional distribution of organic and in-conversion land area in 2000



Source: Bichler and Schuster (2003), based on Eurostat (2003)

Differences within a country can also be strongly related to type of production: The sharp contrast in the UK between dairy farmers reluctance to convert because of poor market conditions and the behaviour of farmers in other sectors is a good example of this, e.g. the (beef) cattle and sheep producers in the UK continue to convert.

Although several factors are suggested, for the time being, we must conclude that the factors determining the regional distribution of organic farming are not yet fully understood.

3.3 Labour and farm diversification

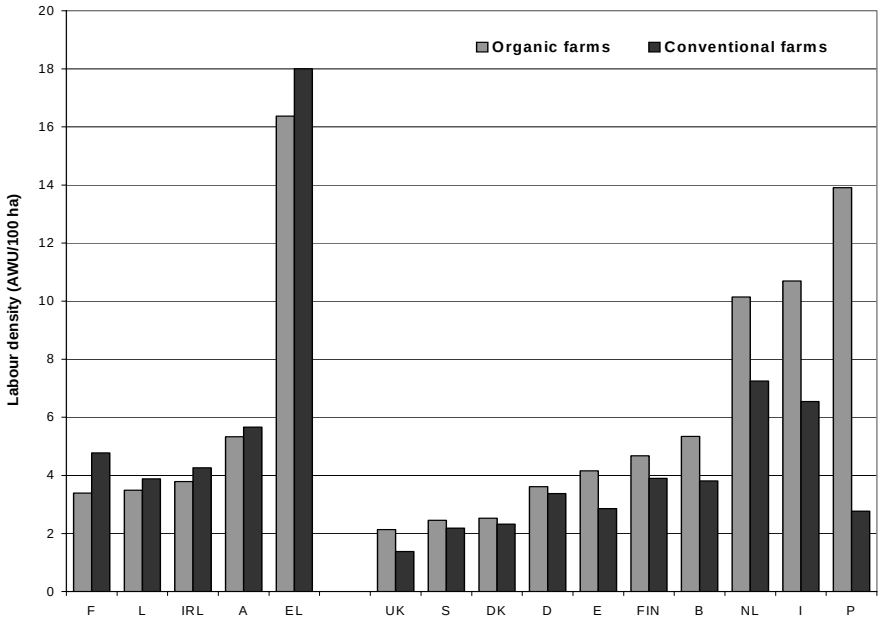
Arguments often brought forward in favour of organic farming is its contribution to conserving farm incomes, rural development and increase in labour employed in agriculture. Organic production methods influence the labour intensity in organic compared to conventional farming (Offermann and Nieberg 2000). Higher labour input may be due to changed pest and weed management strategies, e.g. mechanical or hand weeding and a higher share of labour-intensive crops such as vegetables (Schulze Pals 1994). Additionally, intensive livestock activities such as pigs and poultry tend to be more labour intensive in organic than in conventional systems due to standards on housing, e.g. ban of cages, or bedding is required. However, this may be compensated by lower livestock densities. Furthermore, in nearly all EU Member states farms are larger in organic than in conventional farming (on average 58%, see Table 3-5) which may reduce the required labour per land area.

This is also reflected in data on labour density on organic and conventional farms. Not in all countries average labour density is higher on organic farms than on their conventional counterparts (Figure 3-7). In some countries the opposite is observed.

Apart from the arguments directly related to agricultural production, other factors might influence labour density on farms. For example, in organic farming standards and control are mandatory and provide for labelling of organic products and marketing in a separate market. Thus, organic farms tend to involve more in direct marketing activities than conventional farms. This might be additionally supported by the fact that organic products have only recently been taken up by large retailers.

Furthermore, standards also apply to the processing of organic products. Therefore, organic products must be processed separately from conventional products and organic farms tend to involve more in processing activities (Figure 3-7). A similar trend is observed for other gainful non-farming activities than conventional farms, e.g. tourism, contractual work or other activities.

Figure 3-7: Average density of agricultural labour on organic and conventional farms in the EU



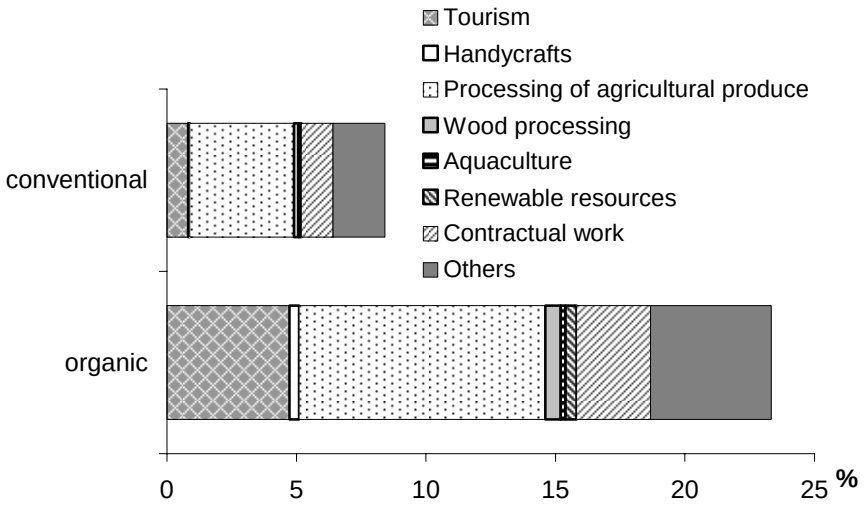
Source: Häring et al.(2003), based on Eurostat (2003)

When interpreting this information it has to be kept in mind that this data only shows if a farm is involved in a certain activity or not (double entries possible). Thus, data neither gives an indication of the extent of involvement in a certain activity nor are different activities weighted in any way. Renting one room to tourists would give the same result as running a saw mill – as long as farming is the main activity of the farming family.

Although organic farms are involved in more diverse gainful activities this is not reflected in an increased density of agricultural labour on farms in all countries. In part this might be because this labour is not accounted for in agricultural labour. Most likely, however, most of this labour would be involved in several activities on farm.

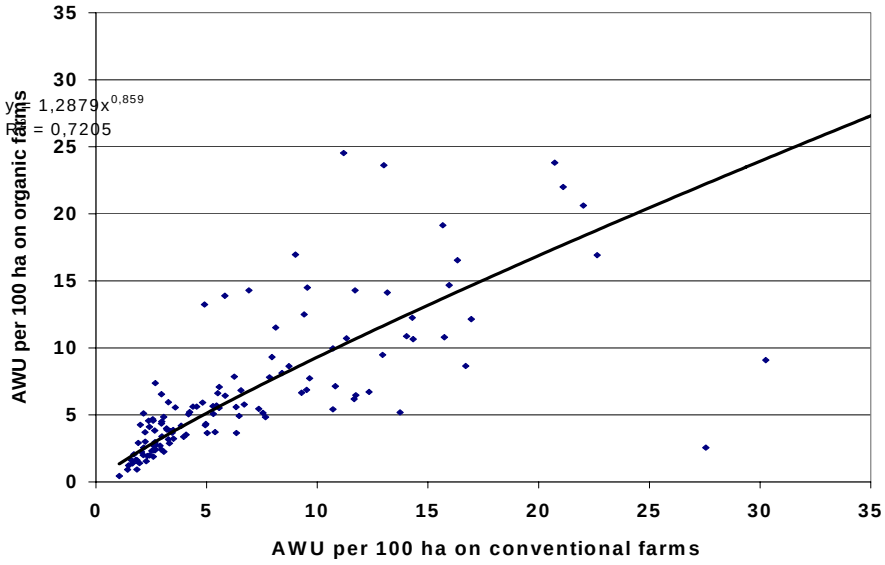
The most important factor in defining labour density on organic farms seem to be structural characteristics in a region (Figure 3-9), not organic or conventional production: Average labour density on organic farms in a region increases with the average labour density of conventional farms in the region.

Figure 3-8: Non-agricultural gainful activities of organic and conventional farms in the EU in the year 2000



Source: Häring et al. (2003), based on Eurostat (2003)

Figure 3-9: Density of agricultural labour on organic in relation to regional conventional labour density on farms in the EU[4]



Source: Häring et al. (2003), based on Eurostat (2003)

[4] Visualisation of trend, logarithmic graph chosen, no statistic significance tested.

3.4 Markets[5]

Recent data compiled by ITC (Table 3-6) provides an overview on the world markets for organic food and beverages on the basis of a forecast for the year 2003. While data are rough estimates they indicate that the total European market of organic food is of about the same size of the US market. These two major regions together account for between 90 and 95 percent of organic markets world wide. Within Europe the combined organic markets of Germany, the UK, Italy and France make up more than two-thirds of the organic market. However, in terms of organic market share of total food consumption by volume Denmark and Austria are the most successful countries, followed by Switzerland, Finland, Sweden and then Germany.

Obviously, the absolute retail sales used in this comparison do not only depend on the size of the country and its population but also on average per capita consumption and spending on organic food (Table 3-6). Danish consumers spend more on organic food than consumers in any other country.

It is also interesting to compare a country's market share and estimated total retail sales of organic food and beverages with its percentage of organically cultivated land area (Figure 3-2). Production area does not always correlate with market share. For example, while Italy has by far the largest organically cultivated land area in Europe, it only ranks fourth in retail sales. Such discrepancies may be due to the fact that even within organic farming the intensity of land use varies widely. Large areas used for sheep production are typical in some Italian regions. Also of importance is the fact that Italy exports a large part of its organic products (Figure 3-10) and had only a small domestic market until 2000. Per capita spending in Italy is far less than in most other European countries, especially Denmark, Switzerland or Sweden (Table 3-6. Other countries do not produce sufficient quantities for their domestic market and import large shares of their organic consumption, the most prominent example being the UK (Figure 3-10), where for example approx. 80% or organic cereals and fruits, and approx. 60% of organic vegetables are imported.

[5] This section is based on Dabbert et al. (2002), data has been updated and substantial material added.

Table 3-6: Overview world markets of organic food and beverages

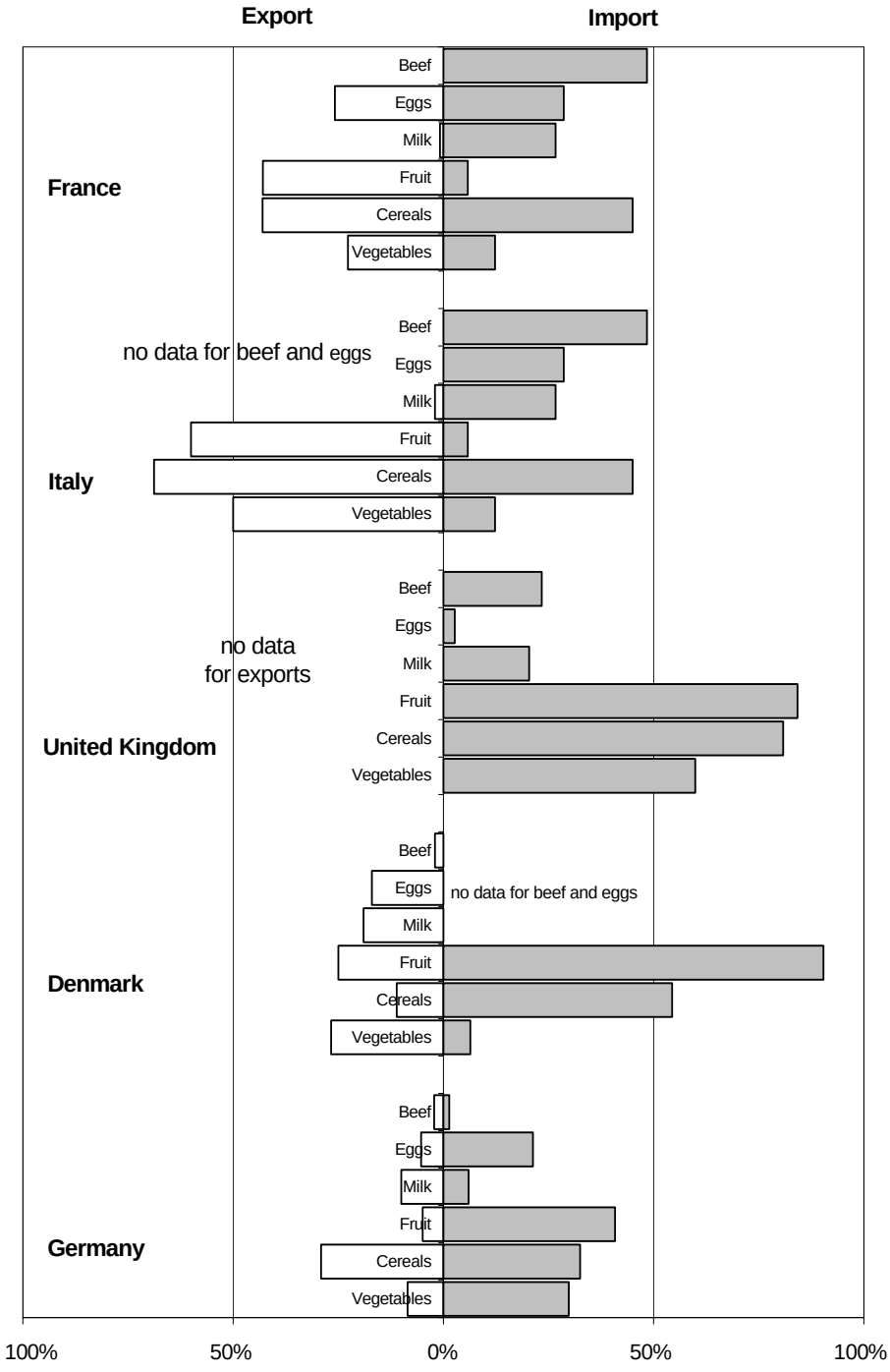
Markets	Retail Sales 2003 (million US$/€)	% of total food sales – ca.	Annual growth (%) 2003 - 2005	Per capita spending (US$/€) 2003
Germany	2,800 - 3,100	1.7 - 2.2	5 - 10	30.4
U.K.	1,550 - 1,750	1.5 - 2.0	10 - 15	15.3
Italy	1,240 - 1,400	1.0 - 1.5	5 - 15	19.2
France	1,200 - 1,300	1.0 - 1.5	5 - 10	21.2
Switzerland	725 – 775	3.2 - 3.7	5 - 15	95.3
Netherlands	425 – 475	1.0 - 1.5	5 - 10	38.1
Sweden	350 – 400	1.5 - 2.0	10 - 15	45.0
Denmark	325 – 375	2.2 - 2.7	0 - 5	113.6
Austria	325 – 375	2.0 - 2.5	5 - 10	48.9
Belgium	200 – 250	1.0 - 1.5	5 - 10	-
Ireland	40 – 50	<0.5	10 - 20	-
Other Europe*	750 – 850	-	-	-
Total (Europe)	10,000-11,000	-	-	-
U.S.A.	11,000-13,000	2.0 - 2.5	15 - 20	-
Canada	850 - 1,000	1.5 - 2.0	10 - 20	-
Japan	350 – 400	<0.5	-	-
Oceania	75 – 100	<0.5	-	-
Total	23,000-25,000	-	-	-
Estimated Retail Sales 2005 (million US$/€)	29,000-31,000			

Note: Official trade statistics are not available. Compilations are based on rough estimates. Sales figures are based on an exchange rate of US$ 1.00 - € 1.00.

* Finland, Greece, Portugal, Spain, Norway, Poland, Hungary, Czech Republic, Estonia, Latvia, Lithuania

Source: ITC 2003; Yussefi (2001)

Figure 3-10: Imports and exports of organic food products: Shares by volume in % of domestic markets for organic products for selected products and countries in 2000 (Hamm et al. 2002)



The major sales channel for organic food also differ widely between countries (Table 3-7). The share of total organic food sales and general food shops tend to be high when the organic market share of total consumption is high. Another important characteristic of the organic market which differs substantially between member states and influences the willingness to buy organic food are consumer price premia.

Table 3-7: Factors explaining the organic market share of total food consumption in different countries in 2000

Country [1]	Organic market share of total food consumption by volume (average of 10 product groups) (in %)	Share of total organic food sales in general food shops (in %)	Average of the consumer price premiums of 10 product groups (in %)	Share of consumers recognising the common label for organic food (in %)
AUT	3.1	72	59.3	10
BEL	0.6	41	75.7	24
CH	2.1	71	66.2	58
DEU	1.4	33	70.5	2
DNK	5.4	86	63.3[2]	100
ESP	0.1	nd	nd	nd
FIN	1.8	78	64.5	80
FRA	0.7[3]	42	50.9	41
GBR	0.9	79	50.8	-
GRC	0.1[6]	22	78.5	-
IRL	0.0[7]	43	nd	-
ITA	0.7[2]	43	62.3[3]	-
LUX	0.6[4]	12	78.9[4]	-
NLD	0.9	41	100.0[2]	nd
PRT	0.4[5]	nd	80.5[7]	-
SWE	1.7	73	44.4	93

[1] No data was available on share of organic consumption for CZ, NO, SL.
[2] Average of 9 product groups; [3] Average of 8 product groups; [4] Average of 7 product groups;
[5] Average of 5 product groups; [6] Average of 6 product groups; [7] Average of 2 product groups.

Source: Hamm et al. 2002

3.5 Summary and conclusions

In the EU, in the year 2001, a total of 275 million € was spent on organic farming within the agri-environmental measures of Council Regulations (EC) 2078/92 and 1257/99 with commitments of more than 18,000 holdings farming nearly 3 million hectares.

Of 1.7 billion euro spent on agri-environmental measures via the agri-environmental measures of Council Regulation (EC) 1257/99 organic farming support makes up approx. 15% of expenditure, covering 7.5% of agri-environmental area, receiving an average of 186 €/ha (compared to 89 €/ha for conventional farms). Compared to average payments made (183 €/ha) under the agri-environmental measures of Council Regulation (EC) 2078/92 average payments have increased slightly. However, in several countries the average hectare payment to organic farms has decreased, i.e. in Denmark, France, Greece Italy, Netherlands and Portugal. In all countries, except Portugal and the UK, average payments per hectare are higher for organic than for the average of other measures.

In contrast to other parts of European agriculture, organic farming is a growth sector. Although rapid growth has been observed in absolute terms, the organic farming sector is still quite small, covering only about four percent of total agricultural land area in the EU. Clearly government support, largely made under Council Regulation (EC) 2078/92 (and more recently under Council Regulation (EC) 1257/99) based on the organic farming definition of Council Regulations (EC) 2092/91 and 1804/99, has played a significant role in stimulating growth. However, large differences in the development stage of the organic sector exist between Member States and regions. This is in part due to differences in the policy environment; different design of subsidies for organic farming greatly influences the actual effect on organic farming development.

Organic production methods influence the labour intensity in organic compared to conventional farming due to changed pest and weed management strategies or intensive livestock activities, which tend to be more labour intensive in organic than in conventional systems, and changes in livestock densities. Furthermore, in nearly all EU Member states farms are larger in organic than in conventional farming which may reduce the required labour per land area. Thus, not in all countries average labour density is higher on organic farms than on their conventional counterparts. Apart from the arguments directly related to agricultural production, the involvement in non-agricultural activities such as more processing or tourism might influence labour density on farms. However, the most important factor in defining labour density on organic farms seem to be structural characteristics in a region, not organic or conventional production.

The EU market accounts for more than 40% of the world markets for organic food. Market shares do not always correspond to production areas due to varying production intensities and the importance of exports. Similarly, the importance of different market channels varies between countries.

4 Financial support within the Common Market Organisation (CMO) and it's impact on organic farming

Agriculture in the EU traditionally receives considerable support via the Common Agricultural Policy. This section will provide the status-quo of direct and indirect support within the Common Market Organisation (CMO) for organic and comparable conventional farms and discuss the impact of recent reforms on the relative competitiveness of organic farming systems.

4.1 Data base and methodological approach

Following a discussion of the different data sources available, it was decided to use the EU Farm Accountancy Data Network (FADN) for the assessment of the importance of CMO payments to farms. The aim of the network is to gather accountancy data from farms for the determination of incomes and business analysis of agricultural holdings. Currently, the annual sample covers approximately 60,000 holdings. They represent a population of about 4,000,000 farms in the 15 Member States, which cover approximately 90% of the total utilised agricultural area (UAA) and account for more than 90% of the total agricultural production of the Union. To ensure that this sample reflects the heterogeneity of farming before the sample of farms is drawn, Liaison Agencies stratify the field of observation according to three criteria: region, economic size and type of farming[6]. Farms are selected in the sample according to a selection plan that guarantees its representativeness[7]. An individual weight is applied to each farm in the sample, this corresponding to the number of farms in the 3-way stratification cell of the field of observations divided by the number of farms in the corresponding cell in the sample. However, while the sample farms of the EU-FADN are selected such as to allow a nearly representative picture of EU agriculture, it is not clear how 'representative' the sub-sample of organic farms is, as data on the distribution of organic farms in the population is still sparse and the farming system (e.g. organic/non-organic farming) is not a stratification criteria in sampling. Therefore, all presented results are based on simple averages rather than on an application of the weighting factors.

This FADN is well suited for the assessment of the importance of CMO payments to farms, as it covers all EU member states and includes very detailed information on CMO payments. As farm accounts provide data on actual payments received, this data source implicitly accounts for farm individual factors influencing eligibility for CMO payments and

[6] Stratification in the FADN is used to increase sampling efficiency (i.e. to minimise the number of farms required to represent the variety of farms in the field of observation). The Commission makes extensive use of this technique and uses three criteria for stratification: region, economic size and type of farming.
[7] The FADN covers the agricultural holdings having an economic size equal to, or greater than, a threshold expressed in European size units (ESU). This threshold is not the same in all Member States. However, at least 90 % of agricultural production should be included in the FADN field of survey.

payment levels. The use of the FADN also enables a stratification of results by farm type as well as the selection of comparable conventional farms.

The most recent data accessible refers to the accounting year 2000[8]. However, the code that allows the identification of organic farms in the sample was not added until the year 2000. Since the accounting year had started in almost all member states when the respective Commission Regulation 1122/2000 entered into force, this code is not yet available for all member states. Table 4-1 provides an overview on the availability of the organic farming identification code:

Table 4-1: Identification of organic farms in the FADN accounting year 2000

AUT	BEL	DEU	DNK	ESP	FIN	FRA	GBR	GRC	IRL	ITA	LUX	NLD	PRT	SWE
x	x	x	x	x	x		x				x	x	x	

Source: Offermann (2003a) bases on FADN-EU-GD AGRI/A.3.

For confidentiality reasons, results may be published only for farm samples containing at least 15 farms. Table 4-2 provides an overview of the respective sub-samples available in the FADN accounting year 2000. On an 'EU'-level[9], the samples are large enough to allow an analysis for most farm types[10].

[8] The actual time period covered differs by member state, as accounting years are defined according to national standards. See European Communities (2003a) for details.

[9] Here and in the following paragraphs, 'EU'-results are referring to the results based on the ten countries where organic farms can be identified in the accounting year 2000.

[10] Types of farming are defined in terms of the relative importance of the different enterprises on the farm. Specialisation is determined on the basis of the contributions of the different lines of production to the total standard gross margin (SGM). To determine the total standard gross margin, coefficients established at the level of the different regions of the Union for the different lines of productions are taken as a basis: e.g. standard gross margin for one hectare of wheat or for one dairy cow. For each holding, the number of hectares of wheat or dairy cows is multiplied by the corresponding coefficients and the total SGM is calculated. The standard gross margin coefficients are calculated at regular intervals and correspond to three-year averages. The coefficients used for SGM calculations are based on conventional farming practices, which obviously limits their usefulness for the classification of organic farms. However, as separate SGM's for organic farming are not yet available, the farm type classification of the EU FADN has been used in this study as an approximation of the farm type of organic farms (see Annex 10.1.3 for more information on farm typology).

Table 4-2: Number of organic farms in the FADN accounting year 2000

Farm types	EU15	AUT	BEL	DEU	DNK	ESP	FIN	GBR	LUX	NLD	PRT
All	645	316	11	127	75	25	58	9	1	7	16
Arable	110	29		30	15	11	17			5	3
Horti-cultural	18	-	-	6	9	2	1	-	-	-	-
Wine	-	5	-	2	-	-	-	-	-	-	1
Permanent crops	22	3	-	2	1	10	-	-	-	-	6
Dairy	316	200	4	41	42	-	19	6	1	1	2
Grazing livestock	80	51	6	7	2	-	8	3	-	1	2
Pigs / Poultry	-	2	-	-	1	-	3	-	-	-	-
Mixed	85	26	1	39	5	2	10	-	-	-	2

Samples with at least 15 farms are highlighted by bold figures.

Source: Offermann (2003a) bases on FADN-EU-GD AGRI/A.3.

The use of the accountancy year 2000 implies that only the Agenda 2000 reforms to the CMO payments which were already in effect at that time are included in the analysis, i.e.

- the first of the three steps of the increase of the special premium for bulls and suckler cows
- the first of the three steps of the introduction of the slaughter premium
- the first of two steps of the increase in COP area payments
- the first of two steps of the harmonisation of the oilseed and cereal area payments
- an obligatory set-aside rate of 10%

To enable a meaningful evaluation of the CMO payments to organic farms, all figures are compared to the payments received by a reference group of comparable conventional farms. For the establishment of a suitable reference group, conventional farms with a similar 'production potential', i.e., a similar endowment with production factors had to be selected. Based on the FADN sample, for each organic farm conventional farms were drawn from the sample which fulfilled the following criteria:

- located in the same region (NUTS1)
- located in the same altitude zone
- has the same (not) less favoured (mountain) area status
- has the same farm type

- is of approximately the same size in hectare UAA (+/- 15%)
- uses approximately the same milk quota (milk production +/- 15%)

as the respective organic farm.

4.2 Direct payments within the CMOs

This section will provide the status-quo of financial support within the Common Market Organisation (CMO, in the following also referred to as CMO payments) for organic and comparable conventional farms. It will take into account the following direct CMO payments:

Payments based on the area planted with specific crops:

- compensatory payments for cereals, oilseeds, pulses (COP area payments)
- set-aside payments (obligatory and voluntary)
- olive support payments.

The number of animals held or slaughtered (headage payments)

- special premium for bulls and steers
- special premium for suckler cows
- extensification premium for bulls and suckler cows
- sheep and goat premium
- slaughter premium for adult cattle and calves.

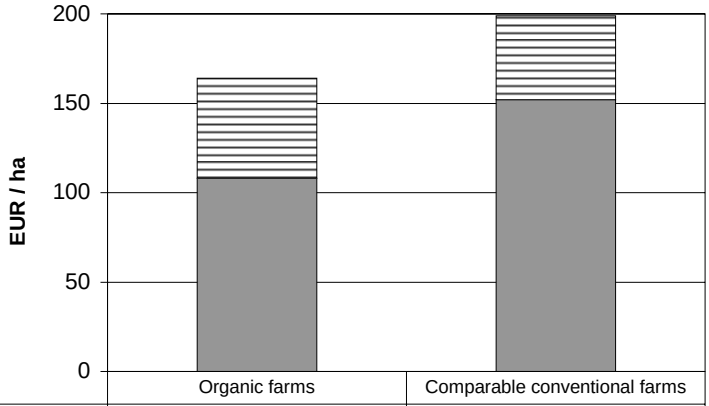
4.2.1 EU results

4.2.1.1 Average results

In the following, it should be remembered by the reader that not all member states are included in the analysis, and 'EU'-results are referring to the results based on the ten countries where organic farms can be identified in the accounting year 2000.

CMO payments total 163 €/ha UAA in organic farms, while they amount to 199 €/ha UAA in the group of comparable conventional farms (Figure 4-1). Thus, on average organic farms receive 18% fewer payments per hectare from the CMOs than comparable conventional farms.

Figure 4-1: CMO payments to organic and comparable conventional farms in the EU-FADN in 2000



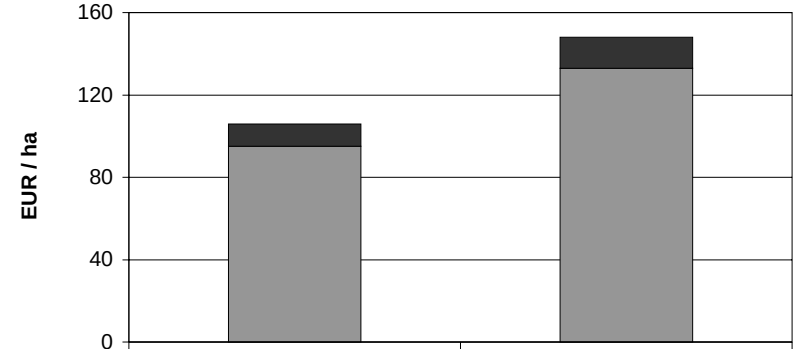
	Organic farms	Comparable conventional farms
CMO payments for livestock	56	47
CMO payments for crops	108	152

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

The differentiation of the payments by CMO help explain the reasons for this difference. Figure 4-2 provides an overview of the direct payments made for COP (compensatory area payments for cereals, oilseeds and protein crops) and set-aside. Organic farms receive significantly fewer COP area payments, as these are made for certain crops only of which organic farms often grow less due to the need for a broader crop rotation and the use of leys for fertility building. Specifically the eligibility of maize for silage for these payments in many countries favours conventional farming, as this crop is often not well suited for organic farming systems and is substituted by (arable) grass silage, which is eligible for COP payments only in Sweden and Finland.

The introduction in 2001 of an EU-wide permission for organic farmers to use forage produced on set-aside land for livestock feed has made a considerable contribution to increasing the flexibility with which set-aside is utilised. This flexibility to use set-aside to support the fertility building (grass/clover) phase of the rotation on organic farms could lead to producers being able to maintain their arable CMO payments (Lampkin 2003).

Figure 4-2: COP and set-aside payments to organic and comparable conventional farms in the EU-FADN in 2000

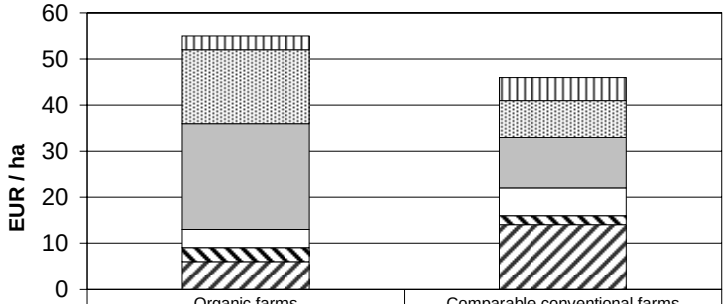


	Organic farms	Comparable conventional farms
Set-aside premium	11	15
COP area payments	95	133

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

Total livestock related payments per hectare are higher on organic farms than in the conventional reference group (Figure 4-3). However, significant differences with respect to the different categories of payments exists. Per hectare UAA, the conventional reference group receives more special premiums for bulls as well as slaughter premiums, as stocking rates are higher and fattening periods shorter.

Figure 4-3: Livestock payments to organic and comparable conventional farms in the EU-FADN in 2000



	Organic farms	Comparable conventional farms
Sheep + goat payments	3	5
Extensification premium	16	8
Suckler cow premium	23	11
Slaughter premium	4	6
Special premium for steers	3	2
Special premium for bulls	6	14

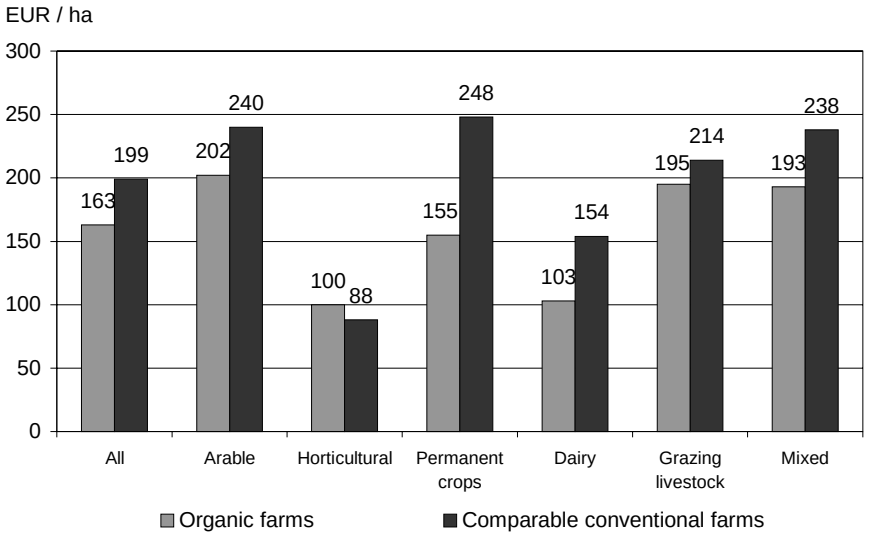
Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

Organic farms profit from the second premium for steers, but these payments only have a very small share in total beef payments. Organic farms also receive a significantly higher amount of suckler cow premiums, reflecting the suitability of this activity for extensive farming systems. Extensification payments are twice as high in organic than in comparable conventional farms, a clear indication that organic farms can more easily comply with the stocking rate limits as required by the respective regulation.

4.2.1.2 Results by farm type

Figure 4-4 provides an overview of the level of CMO payments per hectare received by organic and comparable conventional farms by farm type. With the exception of horticultural farms, where CMO payments play a less important role, the payments are lower in organic farms for all farm types. The difference is especially high for dairy and permanent crop farm samples, where organic farms get 33% to 38% fewer payments per hectare than the conventional reference farms.

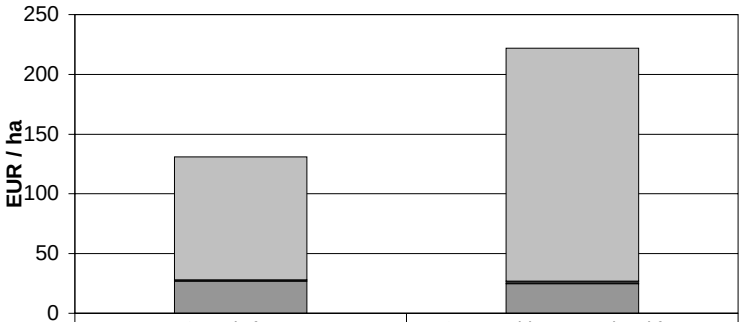
Figure 4-4: CMO payments to organic and comparable conventional farms in the EU-FADN in 2000 by farm type



Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

The sample of organic permanent crop farms includes only 22 farms mainly from Spain and Portugal, and the results are therefore only indicative. For the sample analysed, the difference in payments can be attributed to the much higher payments received by the conventional farms for olive growing (Figure 4-5). As production aid for olive growers is paid per tonne of olive oil delivered and is therefore linked to the actual output for all producers, extensive farms with lower yields such as organic farms receive fewer payments than comparable but more intensive farms.

Figure 4-5: CMO payments for crops received by organic and comparable conventional permanent crop farms in the EU-FADN in 2000

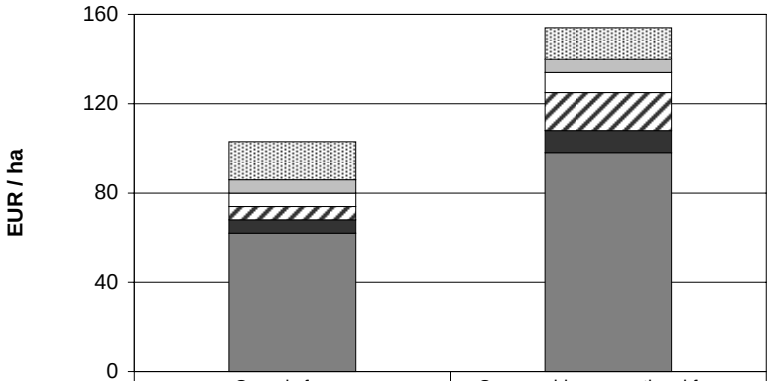


	Organic farms	Comperable conventional farms
Payments for olives	103	195
Set-aside premium	1	2
COP area payments	27	25

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

In dairy farming, conventional farms obtain higher payments with respect to almost all categories (Figure 4-6). COP payments are significantly higher in the conventional reference group, as organic farms have a higher share of forage in the feeding rations, most of which is not eligible for payments under the current agricultural policy regime. Higher amounts for the special premium for bulls and the slaughter premiums reflect the higher stocking rates of the conventional farming systems. This aspect also explains why, in contrast to the results for the total sample, the extensification premium is nearly equal in organic and comparable conventional dairy farms: With the exception of Austria and Finland, the extensification premium is only awarded for suckler cows and bulls, and not for dairy cows.

Figure 4-6: CMO payments to organic and comparable conventional dairy farms in the EU-FADN in 2000

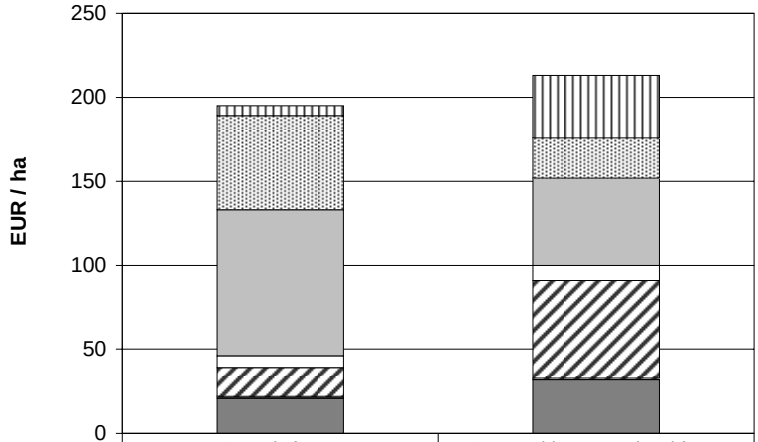


	Organic farms	Comparable conventional farms
Extensification premium	17	14
Suckler cow premium	6	6
Slaughter premium	6	9
Prem. for bulls + steers	6	17
Set-aside premium	6	10
COP area payments	62	98

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

Figure 4-7 illustrates the importance of different CMO payments to organic and comparable conventional grazing livestock farms. Conventional farms get significantly higher payments for bulls as well as for sheep and goats. However, organic farms benefit from the payments for suckler cows and the extensification payments, and thus the difference in total CMO payments between the two farming systems is comparably small for this farm type.

Figure 4-7: CMO payments to organic and comparable conventional grazing livestock farms in the EU-FADN in 2000

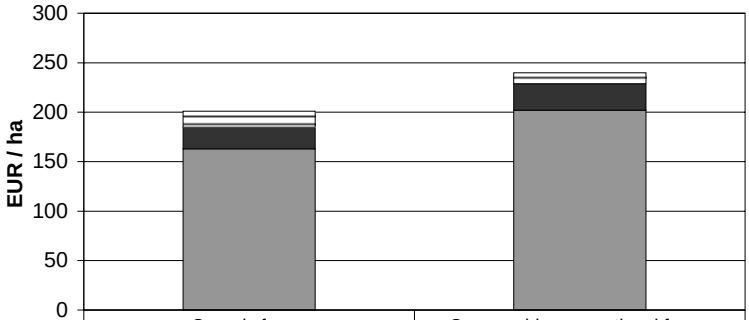


	Organic farms	Comparable conventional farms
Sheep + goat payments	6	37
Extensification premium	56	24
Suckler cow premium	87	52
Slaughter premium	7	9
Prem. for bulls + steers	17	58
Set-aside premium	1	1
COP area payments	21	32

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

Organic arable farms receive somewhat higher livestock payments (Figure 4-8), reflecting a lesser degree of specialisation due to the distinctive benefits of integrating crops and livestock in this farming system. However, overall CMO payments are lower on organic arable farms, as they obtain fewer COP area payments, as these are made for certain crops only of which organic farms often grow less due to the need for a broader crop rotation and the use of leys for fertility building.

Figure 4-8: CMO payments to organic and comparable conventional arable farms in the EU-FADN in 2000

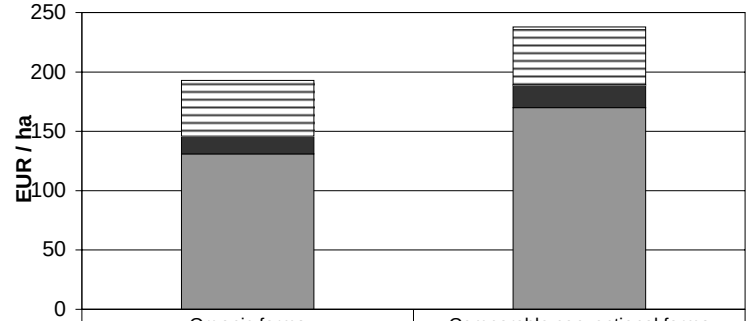


	Organic farms	Comparable conventional farms
Livestock payments	16	11
Set-aside premium	22	27
COP area payments	163	202

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

Organic mixed farms receive fewer CMO payments for both livestock and crops (Figure 4-9), reflecting lower stocking rates as well as the need for leys for fertility building and a higher share of forage in the feeding rations, most of which is not eligible for payments under the current agricultural policy regime.

Figure 4-9: CMO payments to organic and comparable conventional mixed farms in the EU-FADN in 2000



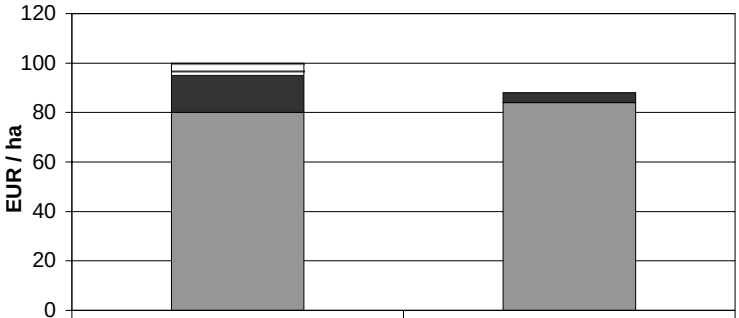
	Organic farms	Comparable conventional farms
Livestock payments	47	49
Set-aside premium	15	19
COP area payments	131	170

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

The sample of organic horticultural farms only includes 18 farms mostly from Germany and Denmark, and results are therefore only indicative.

In the sample analysed, organic farms receive more payments for livestock and for set-aside (Figure 4-10), which reflects the need of the organic farms to maintain fertility by growing legume crops and implementing an efficient nutrient management by use of forage and manure, while the conventional farms have a stronger specialisation in horticultural crops which are not eligible for CMO payments.

Figure 4-10: CMO payments to organic and comparable conventional horticultural farms in the EU-FADN in 2000



	Organic farms	Comparable conventional farms
Livestock payments	5	0
Set-aside premium	15	4
COP area payments	80	84

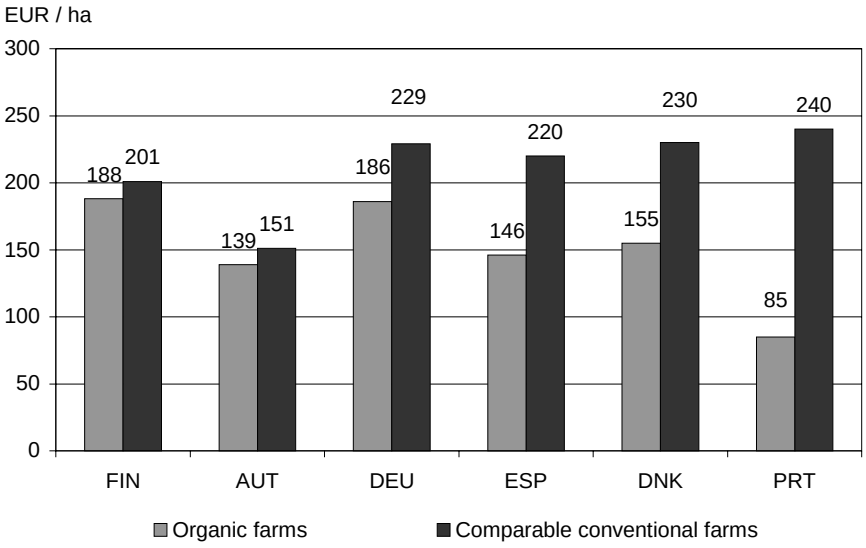
Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

4.2.2 Country results

4.2.2.1 Average results

Figure 4-11 provides an overview of the level of CMO payments in organic and comparable conventional farms in different countries. In all countries analysed, the organic farms receive fewer payments within the CMOs than the conventional reference farms. The difference is least pronounced in Austria and Finland (6-8% fewer payments), and highest for the samples in Spain (-33%), Denmark (-33%) and Portugal (where organic farms receive only a third of the payments of the conventional reference group).

Figure 4-11: CMO payments to organic and comparable conventional farms in different countries in 2000



Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

Differentiating the payments by category reveals that the difference in total payments is to a large extent due to the fact that organic farms in all countries receive significantly fewer COP area payments (Table 4-3). The extreme difference in total payments for the Portuguese farms samples can be attributed to the much higher benefits the conventional reference farms get from support payments for olive growing, which is also reflected in the data from Spain.

In all countries, the conventional farms receive a higher amount of special premiums for bulls, as well as slaughter payments. On the other hand, organic farms receive higher transfers from suckler cow premiums and extensification payments in all countries with the exception of Portugal. Sheep and goat payments are of importance only in the Spanish and Portuguese farm samples: no clear result with respect to the importance of these payments with respect to the farming system can be drawn: in Portugal, payments are the same in organic and conventional farms, while in the Spanish case, the conventional reference group receives much higher payments.

Table 4-3: CMO payments to organic and comparable conventional farms in different countries in €/ha UAA in 2000

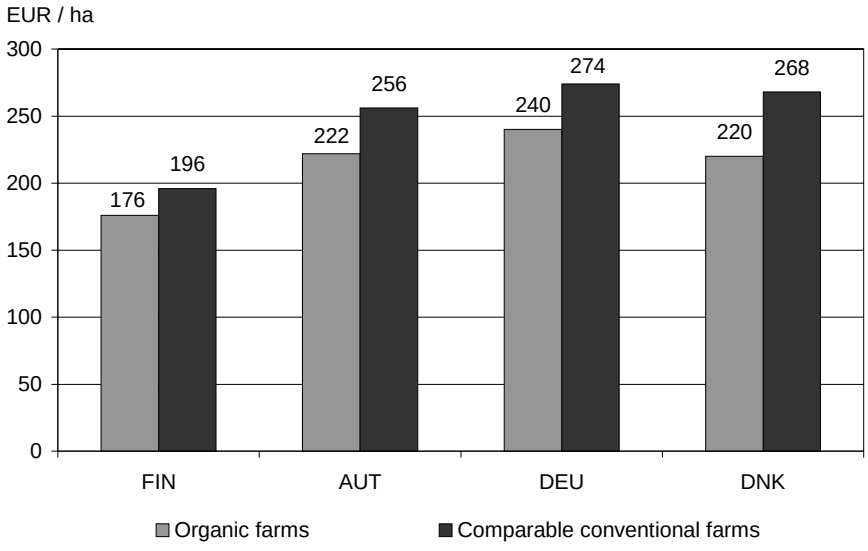
	FIN		PRT		AUT		ESP		DEU		DNK	
	OF	CV	OF	CV	OF	CV	OF	CV	OF	CV	OF	CV
COP area payments	113	148	15	58	62	81	92	103	110	181	122	182
Olives	0	0	41	132	0	0	38	67	0	0	0	0
Set-aside premium	17	15	0	9	5	7	13	17	13	22	15	23
Prem. for bulls and steers	23	24	2	6	9	18	0	7	6	11	6	13
Slaughter premium	5	5	0	1	5	6	0	2	3	3	7	10
Suckler cow premium	15	2	5	10	24	14	0	0	34	11	3	1
Extensification premium	13	7	4	7	34	25	0	0	15	0	2	0
Sheep and goat payment	3	0	18	18	0	0	4	23	4	0	1	0
Total	188	201	85	240	139	151	146	220	186	229	155	230

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

4.2.2.2 Selected results by country and farm type

The farm samples allow a differentiation of the results for arable and dairy farms in four countries (Finland, Austria, Germany and Denmark). Organic arable farms in these countries receive 10-18% lower payments per hectare than the respective conventional reference farms (Figure 4-12).

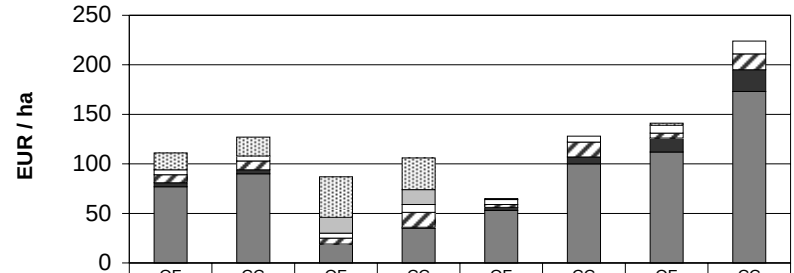
Figure 4-12: CMO payments to organic and comparable conventional arable farms in different countries in 2000



Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

Dairy farms in all countries analysed receive fewer transfers from the CMOs, too, however the difference between the farming systems is relatively low in Finland and Austria (Figure 4-13). In Austria, the eligibility of dairy cows for the extensification premium contributes to diminishing the gap in CMO payments. In contrast, in Denmark and Germany the payments to the conventional reference farms are 60 to 100% higher than the payments received by the organic farms, due to higher transfers within the COP and set-aside schemes as well as the beef market organisations.

Figure 4-13: CMO payments to organic and comparable conventional dairy farms in different countries in 2000



Country	Finland	Finland	Austria	Austria	Germany	Germany	Denmark	Denmark
Extensification premium	17	19	41	32	0	0	2	0
Suckler cow premium	0	0	16	15	1	0	0	0
Slaughter premium	5	5	5	8	5	6	8	13
Prem. for bulls + steers	8	9	6	15	3	15	5	16
Set-aside premium	4	4	0	1	3	7	14	22
COP area payments	77	90	19	35	53	100	112	173

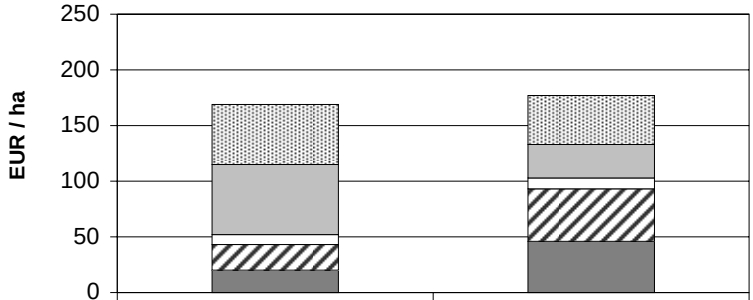
OF: Organic farms, CC: Comparable conventional farms

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

The results for grazing livestock farms could be separately evaluated only for Austria, as this was the only country where the respective farm sample in the data base was large enough to ensure confidentiality. Great differences exist between organic and comparable conventional farms with respect to the different payments received (Figure 4-14). The conventional farm sample receives approximately twice as much transfers from COP area payments, bulls special premiums and slaughter premiums. Organic farms however take considerable advantage of the payments for suckler cows and the extensification payments. Total payments are thus almost equal in the two farming systems.

Payments to mixed farms are illustrated in Figure 4-15 for farm samples in Austria and Germany, as these were the only countries where the respective farm samples in the data base were large enough to ensure confidentiality. No clear picture emerges, as organic and comparable conventional farms receive similar amounts of transfers from the CMOs in Austria, while in Germany organic farms receive significantly fewer transfers than the reference farms.

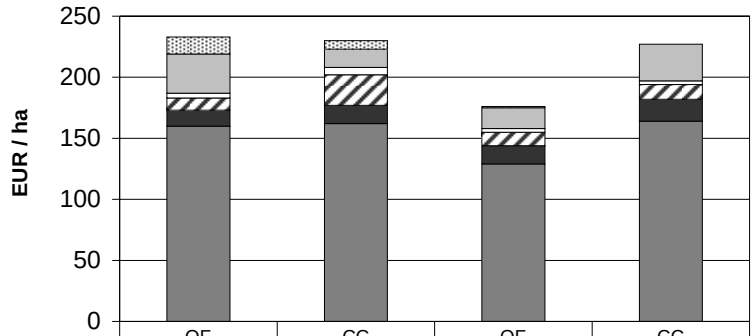
Figure 4-14: CMO payments to organic and comparable conventional grazing livestock farms in Austria in 2000



	Organic farms	Comperable conventional farms
Extensification premium	54	44
Suckler cow premium	63	30
Slaughter premium	9	10
Prem. for bulls + steers	23	47
COP area payments	20	46

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

Figure 4-15: CMO payments to organic and comparable conventional mixed farms in Austria and Germany in 2000



	OF	CC	OF	CC
Country	Austria	Austria	Germany	Germany
Extensification premium	14	7	1	0
Suckler cow premium	32	15	17	30
Slaughter premium	4	6	3	3
Prem. for bulls + steers	10	25	11	12
Set-aside premium	13	15	15	18
COP area payments	160	162	129	164

OF: Organic farms, CC: Comperable conventional farms

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

4.3 Effects of Common Market Organisations price support measures

Price support instruments, such as tariffs and export subsidies, play a major role within the CMOs. In the EU, this indirect support to farms still accounts for the main part (60%) of the Producer Support Estimate (PSE) by the OECD. This section will provide an assessment of the importance of the price support for organic and comparable conventional farms.

The OECD (2002) calculates the market price support (MPS) for a range of different products based on an commonly accepted methodology. In this study, this approach is applied to the data available from the European FADN. For the European Union, the commodities for which market price support is explicitly calculated by the OECD are wheat, maize, other grains, rice, oilseeds, sugar, milk, beef and veal, sheep meat, pork, poultry, eggs and potatoes. The producer NPC (Net Protection Coefficient) by commodities as calculated by the OECD is used in this study in combination with output quantities and prices taken from the FADN to assess the importance of the price support on farm level.[11]

For conventional farms, revenues due to price support are calculated as

$$R_{MPS} = \sum_i (R_i - \frac{R_i}{NPC_i}) = \sum_i (Q_i \bullet P_i - \frac{Q_i \bullet P_i}{NPC_i})$$

R = revenue

R_{MPS} = revenues due to price support

NPC = Producer Net Protection Coefficient

Q = quantities sold

P = farm gate price

i = index of products included in MPS calculation

For organically produced products, a separate market exists, and organic produce is generally sold at premium prices. However, it is difficult to assess the impact of the general EU market price support mechanisms on the prices for organic products. International trade of organic products is comparatively limited, with non-tariff barriers possibly being of a higher importance than classical market price support instruments (see also Annex 10.4 for a discussion of EU market access for organic products), and currently no 'world market price' for organic products exists. In this study, an attempt is made to estimate market price support for organic products based on the market price support for conventional products, even though it has to be noted that little information exists on the exact relationship between organic and conventional farm gate prices. Looking

[11] The Producer Nominal Protection Coefficient is the ratio between the average price received by producers (at farm gate), including payments per tonne of current output, and the border price (measured at farm gate) (OECD 2002). As payments per tonne of current output only play a minor role in today's CAP, this coefficient is here used as an approximation of relative market price support.

at a few stylised relationships between organic and conventional farm gate prices provides an insight in the general mechanisms:

Case a) Organic and conventional prices are independent from each other.

In this case, the price support mechanisms of the CAP are of no benefit to organic producers ($R_{MPS} = 0$).

Case b) The premium paid for organic products is constant in absolute terms.[12]

Organic farms' revenues are increased by the price support mechanisms of the CAP. However, as yields are in general lower than in conventional farming, the benefit will be lower for organic farms. Revenues due to price support are calculated as

$$R_{MPS} = \sum_i Q_i \bullet (P_{i,org} - (P_{i,conv} - \frac{P_{i,conv}}{NPC_i}))$$

Case c) Organic products receive a constant premium relative to conventional products.

If the relative price decrease for the organic product is similar to the relative price decrease for the conventional product, then revenue reductions may be either higher or lower than in conventional farms, depending on the revenue in the base situation: If base revenues per hectare are lower under organic than under conventional management, then this change in policy regime will increase the relative competitiveness of organic farming, and vice versa.[13] The calculation of R_{MPS} is done in the same way as for conventional farms.

An example shall illustrate these three cases (Table 4-4): Assume that a conventional farm produces 50 t of cereals, selling it at 200 €/t to receive revenues of 10,000 €. In this example, assume that without market price support measures, the price would be only 150 €/t. Market price support for the conventional farm therefore totals 2,500 €. Now take an organic farm which due to lower yields sells only 30 t of cereals. Since it receives a premium for organic products the farm gate price is 400 €/ t, resulting in revenues of 12,000 €.

[12] This case also applies if an organically produced product is sold at conventional prices.

[13] Using typical figures for cereals, with yields in organic farms being lower by 40% and prices higher by 100%, revenues per hectare are higher by 20% in organic than conventional farming. In this case, if prices of organic cereals are defined relative to conventional prices, relative competitiveness of organic farming would decrease.

Case a) If the price for organic products is independent of conventional prices and the market price support measures of the CAP only influence conventional prices then the reference price for organic cereals is identical to the farm gate price and the MPS for organic farms is zero.

Case b) In the example, the premium for organic cereals equals 200 €/t (the difference between organic and the conventional farm gate price). If this premium is constant, then if the conventional price fell by 50 €/t without market price support measures the organic price would also fall by 50 €/t. In this case, the organic reference price for the calculation of price support is therefore 350 €/t, and market price support for the organic farm is 1,500 € (which is lower than the market price support for the conventional farm because in the discussed example the production is smaller on the organic farm).

Case c) In the example, the premium for organic cereals is 100% (i.e. the organic farm gate price is twice the conventional farm gate price). If this relation of prices is constant, then if the conventional price fell 25% (i.e. -50 €/t) without market price support measures, the organic price would also fall by 25% (i.e. -100 €/t). In this case, the organic reference price for the calculation of price support is therefore 300 €/t, and market price support for the organic farm is 3,000 €.

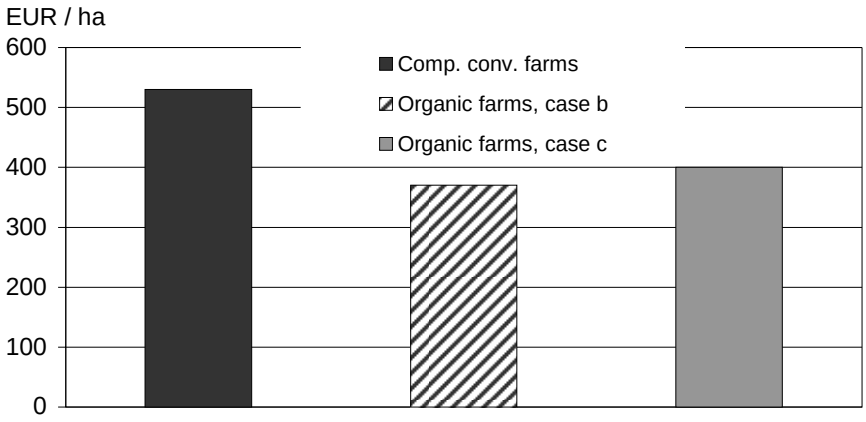
Table 4-4: The effect of different cases of price relationships between organic and conventional prices on the calculation of market price support for organic products: an example

	Farm gate price € / t	Output in t	Reference Price	Unit MPS	Total MPS
Conventional	200	50	150	50	2500
Organic, case a	400	30	400	0	0
Organic, case b	400	30	350	50	1500
Organic, case c	400	30	300	100	3000

Figure 4-16 provides an overview of the results of the calculation of the importance of price support for organic and comparable conventional farms in the EU.[14] For the sample of conventional farms, market price support for MPS commodities is estimated to amount to approximately 530 €/ha UAA. The respective figures for organic farms are significantly lower for all analysed scenarios. For the two scenarios where organic and conventional farm prices are linked (cases b and c), the benefit for organic farms from price support measures of the CAP is 20-25% lower than for comparable conventional farms.

[14] Obviously, market price support for organic farms is zero in case a) by definition, and is not shown in the figure.

Figure 4-16: Estimated market price support to organic and comparable conventional farms in the EU in 2000

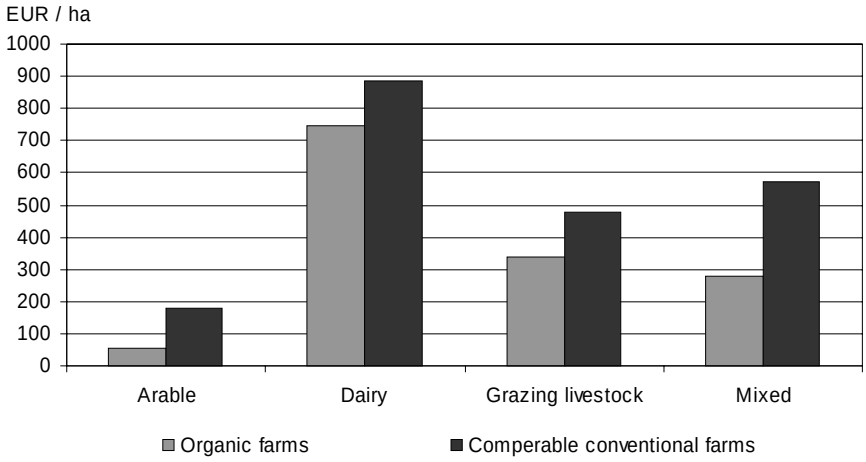


Case b: The premium paid for organic products is constant in absolute terms
Case c: Organic products receive a constant premium relative to conventional products.

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

In Figure 4-17, the market price support for constant price premiums for organic products (case b) is differentiated for important farm types. Organic farms benefit less than the respective samples of comparable conventional farms for all farm types analysed. The level of market price support per hectare differs significantly for the different farm types.

Figure 4-17: Estimated market price support to organic and comparable conventional farms in the EU in 2000 by farm type



Calculation refer to case b: The premium paid for organic products is constant in absolute terms

Source: Offermann (2003a) based on FADN-EU-GD AGRI/A.3.

4.4 Impact of the Common Market Organisations on the relative competitiveness of organic farming systems

The rationale and basic principle of the 1992 and 1999 reforms of the CMO schemes – the reduction of price support for agricultural products and compensation of farmers by direct payments – was introduced by the CAP Reform of 1992. The Agenda 2000 has further extended these schemes. Based on the results of the two previous chapters, the following paragraphs will look at the impact these reforms had and will have on the relative competitiveness of organic farming systems (i.e. the incentive to convert).

4.4.1 COP area payments

While the farm accountancy data analysed in this study demonstrates that organic farms receive less COP (Cereales, Oilseeds, Protein crops) area payments per hectare from the respective CMO schemes introduced as part of the reforms than comparable conventional farms, it would be rash to denounce the reforms as having disadvantaged organic farming systems. Actually, the CAP Reform of 1992 as well the subsequent reform, the Agenda 2000, have generally reduced the discrimination of extensive farming systems by reducing the level of price support for a number of products, compensating farms for losses of revenue via direct payments. For arable area crops, payments are made depending on the area cropped, with the per hectare level of the compensatory payments based on regional historical average yields. This has generally favoured extensive farming systems, since farms with lower yields were less affected by price reductions but get the same level of compensatory payments. Since organic produce is generally sold at premium prices, the impact of the shift in the support system on organic farms is more difficult to assess and depends on the effects of the change in the EU market price support mechanisms on the prices for organic products. The quantitative results of section 4.2 suggest that organic farms benefit less from price support than comparable conventional farms even if prices for organic products are directly affected by the general CMO price support instruments.

Impressive empirical evidence of the positive impact of the decoupling of agricultural support is provided by the development of organic farming in the Scandinavian countries following the EU accession in 1995. In Finland, for example, conventional producer prices fell by up to 40% 'overnight' with the adoption of EU agricultural policy (Koikkalainen and Vehkasalo 1997), which significantly increased the relative competitiveness of organic farming systems, and in turn, was one of the main reasons for the doubling of the organically managed area within a single year.

The Agenda 2000 has continued the trend of decoupling COP support from production. Intervention prices for cereals are lowered by 15%, and area related compensation payments increased. Based on the FADN calculations, which include the first of two steps of the Agenda 2000 reforms in the COP sector, the total effect of the final implementation of

the related changes is expected to be positive for organic farming systems.

The premium for maize for silage was also introduced with the CAP Reform of 1992. As discussed above, organic farms are relatively disadvantaged by this premium. With the Agenda 2000, the premium was raised even further, aggravating this bias.

4.4.2 Olive oil regime

The basic mechanisms of the olive oil regime instituted by Council Regulation (EC) 136/66, although frequently refined as regards implementation, basically remained unchanged until 1998. In 1998, the reform of the 1966 regulation reduced the number of policy instruments, leaving production aid as the principal measure of assistance Council Regulation (EC) 1638/98. Production aid is since then granted to all producers on the basis of the quantity of olive oil they actually produce, rather than on the basis of the number of trees and a fixed yield (as provided for in the regime for small producers, abrogated in 1998). Production aid is therefore coupled to output, which is generally favouring intensive production systems with high yields and, depending on yield levels, may constitute a significant disincentive for conversion to organic farming.

A further reform of the olive growing sector has been contemplated for some time. The transition period, originally from 1998 until the end of the 2000/01 marketing year, was extended in 2001 until the end of the 2003/04 marketing year (Council Regulation (EC) 1513/2001). The main recommendation of a study commissioned by the European Commission (ADE 2002) include

- "...a change [...] from production-related to per-hectare aid. The prime benefit of this move would be to make market price the sole determinant of farmers' decisions on production, in line with the principle expounded in Agenda 2000 and reprised in the mid-term review of the CAP that direct income payments should not steer the production decisions of farmers" (ADE 2002), and
- "[to make] payment of the aid conditional on compliance with sound farming practices. The environmental threat posed by olive-oil production can be considerably reduced if farmers adopt sound farming practices, standards for which could be built into the Codes of Practice for Olive Cultivation, with allowances made for the specific situation in different regions where appropriate." (ADE 2002)

These recommendations are reflected and extended in the proposal for reforming the olive oil CMO the Commission has submitted on 23rd Sept. 2003 (see chapter 6 on the impacts of the 2003 CAP Reform). Organic farming would benefit from these proposals as payments would not be related to productivity and organic farming generally has lower yields. Furthermore, organic farmers most likely comply more easily with the proposed Codes of Practice.

4.4.3 Set-aside

To limit the excess production of certain arable crops, the CAP Reform of 1992 has introduced the instrument of obligatory set-aside, with set-aside land being eligible for a payment. In addition, voluntary set-aside land was also made eligible for direct payments. The Agenda 2000 confirmed these set-aside schemes. Organic farms are subject to the same obligatory set-aside rate as conventional farms, even though they already contribute to a reduction of surplus products through reduced yields and a different cropping pattern. Still, the impact of the set-aside schemes on organic farming is generally assessed to have been neutral or positive (Offermann and Nieberg 2000), as organic farms can often use the set-aside for fertility building by including legumes in set-aside-mixtures.

In some countries, organic farmers have been given specific derogations with respect to the management of set-aside land. For example, in the UK organic or converting farmers may exceed the maximum allowance of 5% legume content for set-aside mixtures imposed on conventional farmers, allowing organic farmers to utilise set-aside payments to support the fertility building phase of the rotation. Similar provisions existed in Sweden, where organic farmers were originally allowed to have 30% clover in set aside mixtures instead of 20% or less for conventional farmers, although now all farmers are allowed up to 30%. In many other European countries, this is possible without special provisions as the restrictions on the use of legumes in set-aside land are less severe.

In the UK, organic farmers may also cut or cultivate set-aside land in spring for weed control when conventional producers with access to herbicides are not permitted to do so. This recognises that organic farmers can not use herbicides for weed control, although it is at the expense of a measure designed to protect ground nesting birds and has subsequently been a point of criticism towards organic farming – however, studies by English Nature now indicate that while harrowing for weed control may damage ground nesting birds, if done earlier enough and in a short time period, the birds will establish a second brood. The survival of these birds hatched later the spring is actually greater, leading to increased breeding success. This illustrates some of the complex issues around the design of detailed management and implementation prescriptions and the need for expert input from a technical and scientific perspective into the process.

The introduction in 2001 of an EU-wide permission for organic farmers to use forage produced on set-aside land for livestock feed has made a considerable contribution to increasing the flexibility with which set-aside is utilised. While previously set-aside could be used to support the fertility-building phase of the rotation in organic systems, particularly in stockless arable systems where there was no or little return from livestock, set-aside could now also be used to support financially the re-establishment of grass leys.

Consequently, the introduction of voluntary set-aside schemes obviously had a positive impact on organic farming systems. Especially farms in

countries that allow a cumulation of set-aside payments and payments for organic farming have benefited from the set-aside schemes.

With the CAP Reform 2003 agreement exempting wholly organic holdings from set-aside from 2005, most of these provisions are of historic interest as there will be no financial advantage to using set-aside to support fertility building or grassland re-establishment. But there may still be a need for specific set-aside management provisions for organic land on holdings which are not fully organic and still need to set land aside.

The overall positive effect of the set-aside schemes on organic farming is likely to be maintained or to even increase in the future: Several countries have already made changes to the set-aside schemes to accommodate specific needs of organic farming systems, and the CAP Reform 2003 even foresees an exemption of organic farming from obligatory set-aside.

4.4.4 Livestock headage payments

The CAP Reform of 1992 also reduced price support for livestock products (mainly beef and sheep meat), but as compensatory payments are paid per head, the benefit to extensive systems (which differ from intensive systems mainly by lower stocking rates and longer fattening periods) was small, if any. In addition, at least in the 1990ies, often a significant share of organically produced livestock products had to be sold conventionally, and thus the decreased price level did directly affect organic farms as well.

The Agenda 2000 has continued the trend of decoupling support payments in the livestock sector from production. Beef support prices will decrease in three steps by a total of 20%. As a compensation, special premiums for bulls and suckler cows will rise significantly, and slaughter premiums are introduced. As payments continue to be made per head, the linkage to production will remain close and any extra benefit to extensive farms small.

In the dairy sector, the Agenda 2000 will decrease intervention prices for butter and skimmed milk powder from 2005/06 onwards. Lower farm gate prices for milk are compensated for by direct payments, which are paid per kg quota. Again, the linkage to production will remain close and any extra positive impact on organic farms is small. However, national top-ups of the direct payments can be tied to the area of permanent pasture, which provides an opportunity of diverting a share of the payments to more extensive production systems.

4.4.5 Extensification payments

The extensification premium scheme was introduced by the 1992 CAP Reform, with the aim of compensating specialised beef farmers for the competitive advantage enjoyed by intensive and semi-intensive beef producers as a result of the drop in cereals prices (Court of Auditors 2002). The analysis of the FADN shows, that organic farms have clearly

benefited from these payments, which are twice as high in organic than in comparable conventional farms.

The Agenda 2000 has tightened the rules for the extensification payments. All cattle on the farm are now taken account of for the calculation of stocking rates, and at least 50% of the area declared as forage area has to be pastures. In general, these stricter rules should favour organic farming systems, where grazing is the norm and stocking rates are low.

The new regulation (Council Regulation (EC) 1254/1999) on extensification payments gives members states the possibility to either apply a single low stocking density threshold (1.4 LU / ha forage area) for extensification payments eligibility, or a two-tier system with different amounts being paid for each stocking density threshold (1.8 to 1.4; and less than 1.4). Six Member States (Germany, Greece, Spain, Austria, Portugal and Sweden) opted to apply only one threshold, and to pay a higher extensification payment subsidy to those producers that have a lower stocking density.

The other Member States opted for a two-tier system with lower extensification payments (Court of Auditors 2002). Overall, the two-tier system is likely to be of less benefit to organic farms than the application of the stricter single low stocking density threshold, as payment levels are lower, and money is diverted to farms with higher stocking rates.

4.5 Measures on exemptions from CMOs or specific rules for environmentally friendly farming systems

The aim of this section is to provide an overview of measures currently in place in Member States on exemptions or specific rules for the organic farming sector, such as specific market access, allocation of quotas, exemption from production rules, and the experience and results so far obtained with such measures, including an assessment of experiences and effects of environmental protection measures.

Previous work in the OFCAP project (Lampkin et al. 1999) has identified a range of measures which have been implemented or discussed in member states. These included preferential access to quotas for organic producers, specific management requirements/exemptions for set-aside land, rotation of arable area payment eligible land as well as the potential for levies/tax credits to support the development of organic farming.

They also included higher support rates for organic farmers under measures that have since been integrated into the rural development programme, such as Less Favoured Areas, investment aids, marketing and processing grants and Article 33 rural development measures, current examples of which are given in the case studies in this report and are therefore not reported in detail here.

Although specific examples of such measures were identified, they do not appear to be widespread, and it has been difficult to obtain information on whether current provisions differ significantly. This may suggest that only in member states where there has been active lobbying, focusing on

detailed implementation rules for measures has there been specific attention paid to this issue.

In a wider context, the development of action plans for organic farming can be seen as an implementation of special measures, although they usually build on the framework provided by the rural development and structural measures.

The exemption of organic farming from set-aside has been discussed in section 4.3.3. In the following only those exemptions are discussed which have not been discussed in previously.

4.5.1 Quota allocations from national reserves

Some countries have made organic farmers a priority case for allocation of milk quotas and beef and sheep premium quotas from national reserves. This is a recognition of the restructuring needs of specialist holdings, and provides a potential route to encouraging, for example, more cattle production on sheep or arable dominated farms, with potential benefits in husbandry, animal health and environmental terms.

For example, in the UK it has been possible for farmers participating in the Organic Farming Scheme to obtain free allocation of suckler cow and sheep annual premium quota from the national reserve, but the priority given to organic farmers was relatively low, so that reserves have not always been available to permit organic farmers to take up this option. In Sweden and Denmark, additional milk quotas have been made available to dairy farmers converting, and there has been some flexibility in setting the base years for establishing quota entitlement.

There are some important lessons from these experiences for the implementation of the CAP Reform agreement, in particular flexibility with respect to setting of baseline years for organic producers converting in the last five years, as provided for under the hardship provisions in the horizontal regulation. But there is also the issue of whether the national reserves might help to address the situation of longer-term organic farmers who will not be otherwise covered by hardship provisions for participants in agri-environment schemes and will be disadvantaged relative to more recent converters.

4.5.2 Rotation of arable area payment eligible land

Several countries, including the UK and Ireland, permit the rotation of land eligible for arable area payments around the farm, recognising that organic farmers operating a rotational system might have had some land in grass leys more than five years old at the time that the arable areas were originally defined. The total area of eligible arable land on the farm remains the same. While there is a conceivable risk that permanent pastures of biodiversity value might be damaged in this process, both organic standards and recent implementation of legislation requiring environmental impact assessments to be carried out before cultivating permanent grassland have mitigated this risk.

4.5.3 Levies and tax credits

This is an area of policy that has been under discussion, but with no examples yet of successful implementation (Bellegem et al. 2002). The potential for lower rates of VAT to be applied to organic food has been raised, as a way of reducing consumer prices and stimulating demand, particularly in the Netherlands and Sweden, but attempts to introduce this change in Sweden are reported to have failed due to conflicts with EU tax laws. Given that in other areas, for example food and energy in the UK, items may be reduced or zero rated for VAT for reasons of social or environmental policy, there may still be scope to explore this issue further. It has also been suggested that tax credits could be applied to investments in organic farming businesses to encourage more capital into the sector.

4.5.4 Other environmental measures

Specific examples of environmental measures relating to water catchment areas and Natura 2000 are covered in the case studies in this report and have not been the focus of more detailed attention here. However, particularly the initiatives by water companies/authorities to encourage organic farming in water catchment of areas are of note and to some extent an indication of the role of the private sector and non-governmental organizations in stimulating organic farming in a complementary way to government support.

Not covered in the case studies is the situation in the Netherlands, where special provisions for organic farmers exist with respect to the manure law. These provisions imply that, if organic farms have trouble meeting the standards for NH_4 emissions, especially in poultry and pig-keeping, they will not have to farm within these norms. This exemption has to do with the fact that certain animal housing systems in organic farming (which do have advantages concerning animal health and well-being), may lead to higher NH_4 emissions than certain housing systems in conventional farming.

4.5.5 Action Plans[15]

The organic farming action plans developed by several countries (e.g. Austria, Denmark, Finland, France, Germany, Netherlands, Norway, Sweden and parts of the United Kingdom) provide the widest range of examples of national and regional initiatives to support organic farming. Although not always involving cases of special exemptions, as many of the actions are conducted within the scope of rural development and structural regulations, action plans represent a significant attempt to achieve a better balance of supply (agri-environmental and CMO) and demand (market) focused policies. The range of approaches adopted, however, illustrates the problems, and the political pressures, inherent in achieving this.

[15] This section is largely based on Lampkin and Dabbert (2003).

The organic farming action plans normally include targets for adoption (typically 5-10% by 2000/2005 or 10-20% by 2010) and a combination of specific measures such as: direct support through the agri-environment/rural development programmes; marketing and processing support; producer information initiatives; consumer education and infrastructure support. The more detailed plans contain evaluations of the current situation and specific recommendations to address issues identified, including measures to ameliorate conflicts between different policy measures. Some examples are illustrated in more detail below.

Denmark has the longest history of policy support for organic farming, with the first measures introduced in 1987. The first Danish Action Plan of 1995 covered the period until 1999. Its 7% by 2000 target was almost achieved, with 6% of agricultural land in Denmark certified in 2000. Action Plan II (Danish Ministry of Food, Agriculture and Fisheries 1999) aimed for an increase of 150,000 ha, to ca. 12% of agricultural land, by 2003. The plan was drawn up by the Danish Council for Organic Agriculture, a partnership between government, organic producer organisations, conventional farming groups, trade unions, consumer and environmental groups. It is characterised by an in-depth analysis of the situation in Denmark and represents the best developed example of the action plan approach, containing 85 recommendations targeting demand and supply, consumption and sales, primary production, quality and health, export opportunities as well as institutional and commercial catering. The plan has a specific focus on public goods and policy issues, with recommendations aimed at further improving the performance of organic agriculture with respect to environmental and animal health and welfare goals, including research and development initiatives, administrative streamlining and policy development.

The situation in Germany has a more overtly political basis. The fall-out from the BSE crisis in Germany in 2000 led to a goal of 20% organic farming by 2010 being set. This was heavily criticised by farming unions and agricultural economists, in part because of the absence of specific measures to achieve the goal. However, the rates of payment for the federal German organic farming scheme were increased and a unified symbol for organic products introduced (following the failure of private sector initiatives to achieve a similar goal). Marketing and processing support initiatives continue through the rural development plan. The German 'Federal Programme for Organic Agriculture' (Isermeyer et al. 2001) is not strictly an action plan as it does not aim to integrate or modify policy measures that are already in place, but seeks instead to create a new information programme targeting all elements of the supply chain, from the input suppliers through producers, distributors, processors and retailers to consumers. Substantial funding (70 million euro in 2002/2003) is directed at the key elements, including web-based information resources, research, training and demonstration activities, with a significant share of funding targeted at consumer information campaigns.

In contrast to the mixed approach in Denmark with an emphasis on both market development and the delivery of public goods and the dominant information focus of the German programme, the most recent action plan in the Netherlands, 'An organic market to conquer' (Ministerie van

Landbouw 2002), reflects the very strong demand/supply chain focus of Dutch policy, which targets a 10% organic share of production by 2010. The plan aims to improve the functioning and efficiency of the supply chain, to reach new, less ideological consumers, and to retain consumer confidence through effective certification procedures, but it also recognises the need for continuing research and information dissemination initiatives. In contrast to other countries, the policy includes the phasing out of supply measures including direct payments, with support for conversion available for the last time in 2002.

In the United Kingdom, action plans have been produced in Wales, England and more recently in Scotland. The Welsh action plan, published in 1999, aims for 10% of Welsh agriculture to be organic by 2005. An integrated approach combining three main types of activities was envisaged: effective utilisation of existing measures and development of new policy initiatives; marketing measures (including market analysis and development, marketing and processing/RDP grants, and related training and business advice); and information measures, involving a co-ordinated information strategy and the establishment of an organic centre for excellence. The more recent English action plan (DEFRA 2002) does not include targets for production, focusing instead on market share of domestic organic products, but does for the first time introduce the concept of maintenance payments for organic producers (as available elsewhere in Europe). It also includes a series of supply chain initiatives, including reform of the certification system and improved statistical and bench-marking data, as well as increased funding for research, the establishment of an institute to support the accreditation and information needs of advisors, and a range of other training and extension initiatives linked to existing programmes for conventional producers.

At the European Union level, a strategic focus for policy support for organic agriculture is needed, given its potential significance in coming years. Although the implementation of measures to support organic farming is primarily a matter for member states, it is important that the enabling regulatory framework is adequate to provide the right policy mix, including the minimisation of conflicts between individual initiatives. As organic farming grows, the size of the sector will begin to impact on the overall supply and market situations for agricultural products in the EU. Therefore, while the EU may hold back from setting a global target for organic production, some consensus on the longer-term potential of the sector is still desirable. In addition, there is a need for certain actions at an EU-wide level, for example a common, non-discriminatory identification symbol also applicable to non EU-products.

The development of a European action plan was initiated by the European conference on organic farming held in Copenhagen in May 2001(Danish Ministry of Food, Agriculture and Fisheries 2001), and subsequently supported by the Council of Agricultural Ministers in June 2001. A working document from the EU Commission was presented to the Council of Ministers in December 2002 (EC 2002) and submitted to public consultation in March 2003. This process is expected to lead to detailed proposals for a European Action Plan in 2004. The consultation

document issued by the Commission includes a description of the development of organic farming as well as an attempt to analyse the strengths and weaknesses of the current situation. It does not yet suggest a comprehensive and coherent set of actions, but recommends reflection on a number of broader issues connected to organic farming that could possibly become part of a European action plan.

The evaluation of the national/regional action plans is a more complex issue – some plans have entered or are now entering a second phase, based on the evaluation of outcomes of the first phase, which usually involves assessing whether the specific individual actions have been implemented or not. But if the idea of an action plan is to achieve better integration of policies, then the success or failure of this integration (i.e. specifically the results and impacts of the policies and the interactions between them) also need to be evaluated and this has not taken place to any significant extent. Within the EU-CEE-OFP project (2003), it is hoped that the application of the MEANS evaluation procedure (developed for assessing rural development and structural measures) to the problem will allow a more integrative assessment. The need for an evaluation framework is also addressed specifically in the latest framework call for scientific support for policy projects with respect to the European Organic Farming Action Plan.

4.6 Conclusions and recommendations

4.6.1 Conclusions

Agriculture in the EU traditionally receives considerable support via the Common Agricultural Policy. In this study, direct payments and price support from the Common Market Organisations (CMOs) for organic and comparable conventional farms are analysed based on the European Farm Accountancy Data Network (FADN).

The most recent data accessible refers to the accounting year 2000. However, identification of organic farms was possible only for ten of the EU member states (Austria, Belgium, Denmark, Finland, Germany , Great Britain, Luxembourg, the Netherlands, Portugal and Spain).

The data indicates that in the ten EU countries analysed, organic farms on average receive approx. 18% fewer direct payments per hectare from the Common Market Organisations than comparable conventional farms.

Organic farms receive considerably fewer area payments for cereals, oilseeds and protein crops. Specifically the eligibility of maize for silage for these payments in many countries favours conventional farming. Total livestock related payments per hectare are higher on organic farms than in the conventional reference group. However, significant differences with respect to the different categories of payments exists. The conventional reference group receives more special premiums for bulls as well as slaughter premiums, as stocking rates are higher and fattening periods shorter. Organic farms profit from the second premium for steers, but these payments only have a very small share in total beef payments. Organic farms also receive a significantly higher amount of

suckler cow premiums, reflecting the suitability of this activity in extensive farming systems. Extensification payments are twice as high in organic than in comparable conventional farms, a clear indication that organic farms can more easily comply with the stocking rate limits as required by the respective regulation.

With the exception of horticultural farms, where CMO payments play a less important role, the payments are lower in organic farms for all farm types. The difference is especially high for dairy and permanent crop farm samples, where organic farms get 33% to 38% fewer payments per hectare than the conventional reference farms. The sample of permanent crops farms consists mainly of farms in Portugal and Spain and the difference can be attributed to the much higher payments received by the conventional farms for olive growing. As production aid for olive growers is paid per tonne of olive oil delivered and is therefore linked to the actual output for all producers, extensive farms with lower yields receive fewer payments than comparable but more intensive farms.

Price support instruments, such as tariffs and export subsidies, play a major role within the Common Market Organisations. In the EU, this indirect support to farms still accounts for the main part (60%) of the Producer Support Estimate by the OECD. First estimates indicate that the benefit for organic farms from price support measures of the Common Agricultural Policy is 20-25% lower than for comparable conventional farms.

The CAP Reform of 1992 as well the subsequent reform, the Agenda 2000, have generally reduced the discrimination of extensive farming systems by reducing the level of price support for a number of products, compensating farms for losses of revenue via direct payments. Especially for arable crops, where the reforms introduced compensatory payments based on regional historical average yields, this has generally favoured extensive farming systems. The CAP Reform of 1992 also reduced price support for livestock products (mainly beef and sheep meat), but as compensatory payments are paid per head, the benefit to extensive systems was small, if any. The Agenda 2000 has continued the trend of decoupling support payments in the livestock sector from production. As payments continue to be made per head, the linkage to production remains close and any extra benefit to extensive farms small.

A range of measures on exemptions or specific rules for organic farming systems implemented or discussed in member states have been identified. These included preferential access to quotas for organic producers, specific management requirements/exemptions for set-aside land and rotation of arable area payment eligible land. Furthermore, the development of action plans for organic farming can be seen as an implementation of special measures, although they usually build on the framework provided by the rural development and structural measures. Because examples of special provisions are not widespread, it is difficult to provide an overall assessment of their impacts. Of the examples cited, probably the flexibility with respect to set-aside management on organic farms has had the most impact, initially at the individual country level, then on an EU-wide basis since 2001. The exemption for organic farmers

from set-aside requirements under the CAP Reform agreement is an important concession.

4.6.2 Recommendations

CMO payments and price support contribute to a considerable share of farm incomes in the EU and have a substantial influence on the development of agriculture in the EU. Currently, the design of the CMOs can pose a disadvantage to organic farming systems. It is therefore important to

- regularly monitor the effect of CMOs on organic and other environmentally friendly farming systems,
- explicitly take account of the characteristics of organic and other environmentally friendly farming systems when designing, reforming and implementing CMO directives and regulations, and
- quickly eliminate the existing disadvantages as far as not already occurred as part of the CAP Reform 2003 (compare Chapter 7), e.g. in the olive CMO.

The import rules of Council Regulation (EC) 2092/91 currently require the substantial use of Member States' and third country exporters' resources. There is a great need to

- thoroughly analyse how these import rules can be adapted to reduce the related transactions costs especially for developing countries while at the same time ensuring that the high standards are maintained.

5 Financial support under the Rural Development Regulations (Council Reg. 1257/1999 and 1750/1999) for environmentally friendly farming and production systems, in particular organic farming

This chapter analyses the support via Rural Development Measures for farms with organic production compared to farms with conventional production. The design of the Rural Development Measures significantly influences their uptake. A detailed analysis of relevant provisions (e.g. eligibility criteria, restrictions etc.) will be carried out to identify factors promoting or hampering the uptake.

Thus, the attractiveness of the different measures for the specific systems will be analysed on the basis of a comparison between selected Rural Development Programmes in 6 different Member States (Austria, France, Germany, Italy, Spain and the United Kingdom). Depending on the country specific implementation of the RDP either the whole country is analysed as a case study, or – if RDP are implemented on a regional basis – a case study region is chosen for each Member State.

This section will discuss all nine measures (agri-environmental programmes, investment support, less favoured area payments, support for processing and marketing, and training), but will focus on the measures

- 'Agri-environment',
- 'Processing and marketing',
- 'Investments into agricultural holdings' and
- 'Training'.

Each case study will provide i) an overview of the measures in place, ii) a description of key aspects, and iii) analyses of their attractiveness for organic farms compared to conventional farms and. This shall result in a list of suggestions for improvements to the schemes.

5.1 Information sources

Apart from the national Rural Development Plans, these analyses are based on EU, national and regional legislation, relevant literature, and financial data (budget expenditure, budget forecasts) relating total support to respective farm numbers and area.

The EU farm accountancy data network (FADN) was used for the assessment of the importance of different payments to farms where available. This data base is well suited for this task, as it covers all EU member states and includes information on actual payments. As farm accounts provide data on actual payments received, this data source implicitly accounts for farm individual factors influencing eligibility for payments and payment levels. The use of the FADN also enables a stratification of results by farm type.

In contrast to Chapter 4, where a full data set was available for the year 2000 and comparative farms were selected and compared, in this chapter year 2001 farm type classified data (FADN 2003) was used. Although data was only available for a few countries at the time of this study, the use of year 2001 data was preferable as it better depicts changes introduced by Agenda 2000 and the implementation of the RDP. However, the reader must keep this difference in reference years in mind when comparing the information presented in Chapters 4 and 5. Further attention deserves the difference in data aggregation level of the two described approaches. While in Chapter 4 comparative farms were selected, data for this chapter was provided aggregated according to the FADN farm type classification depending on the availability of farms in each sample.

In summary, Chapter 4 and the introductory section of this Chapter rely on comparative farm data for the year 2000, while the country case studies rely on farm type classified data for the year 2001- as far as this was available for the respective country.

Additionally, comparative model calculations based on average regional/national organic and conventional farms based on data provided by Eurostat (2003) and the theoretical potential uptake of applicable measures are presented where no other information was available.

Although uniformity of the information presented for each case study country was envisaged this was not fully achieved. The information available in the different countries differed significantly with regard to reference years, availability of FADN data or data for model calculations, payment rates and expenditure. Nevertheless, valuable qualitative interpretations could be made and conclusions drawn.

5.2 Support by the RDP in the EU in the year 2000

In the year 2000, on average organic farms in the EU receive higher total CAP (First Pillar/ CMO and Second Pillar/RDP) payments per hectare than conventional farms, although the payment levels via the CMOs are lower for organic than for conventional farms (Table 5-1, for details on CMOs see Chapter 4). These differences are also observed for all farm types except for permanent crop farms. However, payments received through the agri-environmental measures are significantly higher on organic farms and slightly higher through payments for Less Favoured Areas.

Results presented in Table 5-1 refer to the accounting year 2000 as defined in Chapter 4 and, therefore, do completely refer to the Agenda 2000 period, while data presented in Table 5-1 refers to the year 2001. However, both Tables reveal a similar picture.

Table 5-1: Support to organic and comparable conventional farms: average of all countries covered by FADN in the year 2000 (€/ha)

	Arable		Horticult.		Permanent crops		Dairy		Grazing livestock		Mixed		All farms	
	OF	CF	OF	CF	OF	CF	OF	CF	OF	CF	OF	CF	OF	CF
CMO	202	240	100	88	155	248	103	154	195	214	193	238	163	199
AEP	156	48	164	12	87	58	225	115	168	109	171	71	185	86
LFA	32	32	9	3	4	6	79	76	113	101	51	53	66	59
AEP + LFA	188	80	173	15	91	64	304	191	281	210	222	124	251	145
Total	390	320	272	103	246	313	407	345	476	423	414	362	414	344

OF = organic farming, CF = conventional farming, CMO = Common Market Organisation payments; AEP = Agri-environmental payments; LFA = Less Favoured Area payments.

Source: Offermann (2003a) based on FADN (2003)

5.3 Austria

In Austria the Rural Development Regulation is implemented through the „Österreichisches Programm für die Entwicklung des Ländlichen Raumes“ (ÖPUL). This programme refers to the whole Republic of Austria (for Burgenland certain exemptions apply according to Objective-1-Measures, however, these do not refer to the agri-environmental measures.) Thus this framework is applicable to all Austrian farmers.

The objective of the “Rural Development Programme“ (RDP 2000-2006) is to introduce a sustainable and integrated rural development policy governed by a single legal instrument to ensure better coherence between rural development and the prices and market policy of the Common Agricultural Policy (CAP) and to promote all aspects of rural development by encouraging the participation of local actors. This shall

be achieved by developing a multifunctional, sustainable and competitive agricultural production by:

- Compensation payments (Less Favoured Areas, forestry)
- Conservation payments (Conservation of natural resources, vocational training, structural measures)
- Improve competitiveness (Structural measures, diversification, support of processing and marketing)

The objectives of the RDP are supported via seven priority areas (Table 5-2) with several measures. In budgetary terms the Agri-environmental measures and the support of Less Favoured Areas are the most important. In total more than 2,028 million euro per year is spent for the Rural Development Programme, of which 55% are from EU sources, 21% from national sources and 24% form regional funds.

Table 5-2: Priorities of the Austrian Rural Development Programme (in 2002)

Priority	Budget share
Vocational Training	1%
Processing and Marketing	2%
Forestry	2%
Adaptation and Development of Rural Areas	4%
Modernisation of Agriculture	6%
Less Favoured Areas and Areas with Specific Environmental Disadvantages	26%
Agri-Environmental Measures	59%

Source: BMLFUW (2003)

In the following each of the seven priorities will be described briefly. Where applicable the relative advantage of these measures for organic or conventional farming is discussed.

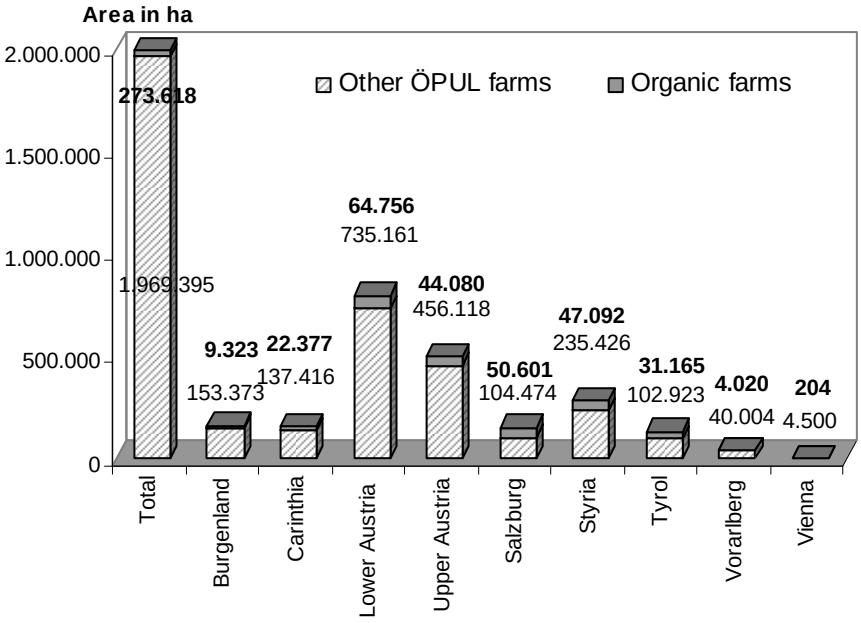
5.3.1 Descriptive and qualitative evaluation

5.3.1.1 Agri-environmental measures

5.3.1.1.1 Descriptive and qualitative evaluation

The agri-environmental measures of ÖPUL are implemented with the objective of supporting an environmental just, extensive and natural resource conserving agriculture. Approximately 91% of all agricultural holdings participate in ÖPUL (Eurostat 2003), covering 88% or 2.25 million hectare of total UAA in Austria. This represents the highest participation in an agri-environmental programme of all EU member states (Grüner Bericht 2002). An overview of the number of participating farms in ÖPUL and the organic farming measure is given in Figure 5-1.

Figure 5-1: Regional uptake of ÖPUL measures in 2002 (ha) (ÖPUL 2003)



The most important measures are – apart from good agricultural practice – environmental services, which are not addressed by other measures (CMO and LFA), which can be grouped in 5 categories:

- **Basic support**: Compliance with environmental minimum standards, or at least two additional measures as pre-requisite for other farm related measures.
- **Extensification**: Abandonment or reduction of agricultural inputs and organic production methods. Measures not applicable to single plots.
- **Conservation of cultivated landscape and traditional production methods**: Most of these measures concentrate on grassland with the objective to conserve or improve extensive production methods.
- **Soil and water conservation measures**
- **Project related measures**: measures referring to certain regions, only, or maintenance measures applicable to single plots.

Conventional farms may participate in all ÖPUL measures, while for farms receiving support for organic production certain restrictions apply (Table 5-3). For example, organic farms are excluded from the measures "Abandonment of agricultural inputs", „Abandonment of growth regulators", and „Integrated production" as these restrictions to production are already covered by the measure "Organic farming". Detailed descriptions of eligibility criteria for single measures are not given as only very few measures can be combined with organic farming.

Table 5-3: Possible combination of measures ÖPUL (applicable to single plots)

Measures		2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	2.11	2.12	2.13	2.14	2.15	2.16	2.17	2.20	2.21	2.22	2.23	2.24	2.25	2.26	2.27	2.28	2.30	2.31
Basic support	2.1		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Organic Production Measures	2.2	x															x	x	x	x	x	x	x	x	x			x	x
Abandonment of yield increasing inputs: grassland	2.3	x															x	x		x					x			x	
Abandonment of yield increasing inputs: arable land	2.4	x															x		x		x	x			x				x
Reduction of yield increasing inputs: grassland	2.5	x															x	x		x					x			x	
Reduction of yield increasing inputs: arable land	2.6	x															x		x		x	x			x				x
Integrated fruit production	2.7	x							x														x						x
Abandonment of herbicides in fruit production	2.8	x						x															x						x
Integrated wine production	2.9	x									x													x	x				x
Abandonment of herbicides in vine production	2.10	x								x														x	x				x
Integrated vegetable production	2.11	x																											x
Integrated production of ornamental plants	2.12	x																			x[1]								x
Integrated production in protected production	2.13																												x
Abandonment of growth regulators	2.14	x															x				x	x			x				x
Abandonment of fungicides	2.15	x															x				x	x			x				x
Abandonment of silage prod. in spec. areas	2.16	x	x	x	x	x	x								x	x		x		x					x			x	x
Kepp cultivated landscapes open (inclinated areas)	2.17	x	x	x		x											x			x					x				
Production of rare agricultural plants	2.20	x	x		x		x														x	x			x				x
Conservation of ext. fruit production (Streuobst)	2.21	x	x	x		x											x	x										x	
Vegetation of arable land	2.22	x	x		x		x						x[1]		x	x			x			x			x	x	x[2]		x
Erosion control - arable production	2.23	x	x		x		x								x	x			x		x				x				x
Erosion control - fruit production	2.24	x	x					x	x																				x
Erosion control - vine production	2.25	x	x							x	x														x				x
Conservation of small structured landscapes	2.26	x	x	x	x	x	x			x	x				x	x	x	x	x		x	x		x				x	x
Maintenance of environmentally valuable plots	2.27	x																			x								x
Establishment of landscape elements	2.28	x																			x[2]								x
Salzburger Regionalprojekt	2.30	x	x	x		x											x			x					x				
Project related to preventative measures of water conservation	2.31	x	x		x		x	x	x	x	x	x	x	x	x	x	x		x		x	x	x	x	x	x	x		

[1] ornamental plants on arable land, [2] not for land with 20 year obligation

Basic support (paid to all farms participating in a minimum of one ÖPUL measure)

Measures in which organic farms can participate in addition to measures for organic production

Source: ÖPUL (2000a)

Conventional farms may participate in other measures on top of the basic support and compile their individual combination of measures, which fits their farm organisation, while organic farms can only combine basic support with organic farming measures. Payment levels of different measures are highlighted in Figure 5-4.

Table 5-4: Payment levels for the five most important measures within ÖPUL (€/ha)

Measures	Organic		ÖPUL	
	Grassland	Arable land	Grassland	Arable land
Basic support (€)	43 - 73	36	43 - 73	36
Organic farming*	160 - 251	327 – 799	not applicable	
Abandonment of inputs	not applicable		160	73 – 436
Green cover of arable land	-	51 - 87	-	51 - 87
Keep landscape open	145 – 363	-	145 – 363	-

*Certification bonus: 36 €/ha

Source: ÖPUL (2000b)

The measures „Ökopunkte Niederösterreich“ and „Salzburger Regionalprojekt“ only apply to regionally restricted projects and will not be considered in the following.

Annual payments within ÖPUL are determined according to income losses related to the implementation of each measure plus an additional incentive (< 20%). A ceiling of 690 €/ha applies for arable and grassland. This ceiling of payments can be exceeded to 872 €/ha if farms participate in various project related measures (Measures 2.17, 2.26, 2.27, 2.28, 2.31;see Table 5-3).

Beginning at a farm size of 100 ha payments are reduced step by step. For organic farms this reduction is only 50% of the standard reduction (Grüner Bericht 2002).

1. Farms up to 300 ha: 85% for conventional farms, 92.5% for organic farms.
2. Farms with 300-1000 ha: 75% for conventional farms, 87.5% for organic farms.

This represents a clear advantage for organic farms for all ÖPUL measures.

In total 69.5 million euro per year (data for 2000) or 12% of the ÖPUL budget are expended on the measure “Organic Production” (ÖPUL 2003) (Table 5-5).

Table 5-5: Expenditure within ÖPUL (Mio. €, year 2001)

	Expenditure in Mio. €	Percent
Basic support	100.6	17.1
Organic farming	69.5	12.2
Reduction of inputs on arable and grassland	74.9	12.7
Green cover of arable land	91.6	15.6
Keep landscape open	41.2	7.0
Abandonment of agricultural inputs arable & grassland	72.0	12.2
Other measures	138.6	23.6
Total	588.4	100.0

Source: Grüner Bericht (2002)

This represents an average of 254 €/ha. However, similar budgets are spent on measures which apply only to conventional farms, i.e. "Reduction" or "Abandonment of Agricultural Inputs" in arable and grassland, with 13% and 12% of expenditure.

In the year 2002, 18,576 organic farms existed in Austria, of which 96% are financially supported. Most organic farms are supported via the organic farming measure (92%), while nearly 2% of organic farms are supported via the programme "Öko-Punkte Niederösterreich" and nearly 3% through other ÖPUL measures (Grüner Bericht 2002).

Project based measures

Since the year 2000, land use measures under Natura 2000 (Council Directive 43/92 and 409/79) and Nitrate Directive (Council Directive 676/91) are integrated in the agri-environmental programme ÖPUL as regionalised projects (Land Niederösterreich 2003b). For the first time, environmental legislation is implemented with agri-environmental and rural development legislation in an integrated way. The objective was to guarantee a uniform implementation in the whole country and simplify application and uptake for farmers and foresters. ÖPUL defines the framework within which the Bundesländer compile regionally specific projects. Thus these measures are implemented through nine different legislative programmes.

Integrated Natura 2000 measures

In April 1999, Natura 2000 was implemented in 140 Regions covering 16% of the total land area, of which approximately 15% are in agricultural use.

The integrated Natura 2000 measures address the following objectives: the maintenance of wet or dry grassland, rehabilitation or creation of habitats, conservation of ecologically valuable elements on areas of regular use, conservation of small plots, development and implementation of whole farm nature protection plans. Natura 2000 measures are implemented on a voluntary basis with economic

incentives. Contracts are made on management restrictions and corresponding compensation payments. Prerequisite is the implementation within a regional project and the approval by a regional ÖPUL office (Land Niederösterreich 2003b).

Three measures were designed to address the mentioned objectives:

a) Conservation of ecologically valuable areas

b) Establishment of landscape elements

c) Conservation of small structures

"Conservation of ecologically valuable areas" seems to be the most attractive measure (38,347 participating farms) (Annex: Table 10-10), while the measures "Establishment of landscape elements" and "Conservation of small structures" are less accepted (5,693 and 4,729 participating farms).

Organic farms are only eligible to the measure "Conservation of small structures" and, therefore miss out on the payments via the measures "Conservation of ecologically valuable areas" and "Establishment of landscape elements" compared to conventional farms.

Nitrate Directive

The objective of the water protection projects within ÖPUL is to guarantee water conserving agriculture by addressing a large number of farmers, improvement of groundwater quality in project areas, independent and programme oriented advisory services, and conservation of local water supply. Projects predominantly aim at areas with an extensive nitrate problem. In the year 2001, water protection measures were implemented on 121,382 ha UAA on 2,740 farms in the Bundesländer Burgenland, Kärnten, Oberösterreich, Wien and Steiermark, of which 1,877 are in Oberösterreich (Achatz 2003).

The basic principles are optimisation of fertiliser input, minimisation of clean fallowing periods, and training and advice of farmers. These basic principles are implemented via several mandatory and voluntary measures, which differ slightly between Bundesländer but are based on common principles (Table 5-6). The following five measures are implemented:

- organic farming,
- abandonment of inputs on arable land,
- integrated production of vegetables,
- integrated production of ornamental plants,
- integrated production in protected production (under glass or foil).

Support is paid as "top-up" payments: if a farmer participates in one of these measures and additionally in a water protection measure, an additional payment is made.

Organic farms can participate in all measures for water protection and, additionally, receive 22 €/ha for being organic within the water

protection measures. However, this payment (22 €) is also offered to conventional farms which participate in the measures "Abandonment of inputs on arable land" and, thus, does not favour organic farms.

Nevertheless, the possibility of combining measures tends to be more beneficial for organic than for conventional farms because conventional farms need to completely abandon inputs which is a large step from their regular farming practice.

Table 5-6: Water protection measures implemented within ÖPUL

	Measure	Bundesland*	Payment
Mandatory Measures	Min. 30% of UAA in project area	all	
	Basic support acc. to ÖPUL 2000	all	
	Vegetation of arable land in autumn and winter only level 2 (min. 35% or 45%). Exemption from vegetation option A.	all	
	Attendance of training modules	all	51 €/ha and year
	Temporary ban of application of nitrogen fertilisers	all	
	Split fertiliser application	all	
	Special conditions for farms with livestock densities of 2,0 to 2,5 LU/ha UAA	all	
	Farm specific nutrient balancing	all	109 € per farm and year
Voluntary measures	Plot specific nitrogen balancing	K, B, N, O, St, V,	145 € per farm and year
	Soil sampling and analyses (Nmin)	W, B, N, O,	14 € per sampled plot, up to a max. of 73 € per crop and max. 254 € per farm
	Increase of vegetation higher than 35% or 45%. Exemption from vegetation option A. max. 30% legumes	all	ca. 2 €/ha arable land per percent above 35% or 45% to a max. 29 €/ha arable land
	Conversion of arable land to permanent grassland	K, N, O, St, V,	182 €/ha converted arable land
	Application of manure near to soil surface	B, K, N, O, St,	ca. 1 € per m³ of applied liquid manure
	Organic production	B, K, N, St, W	22 €/ha
	Abandonment of inputs on arable land	B, K, N, St, W	22 €/ha
	Integrated vegetable production (outdoor)	W	22 €/ha
	Integrated production of ornamental plants (outdoor)	W	22 €/ha
	Integrated protected production	W	145 €/ha

* K:Kärnten, B: Burgenland, N: Niederösterreich, V: Vorarlberg, S: Steiermark, W: Wien, O: Oberösterreich

Source: Eichert and Häring (2003) based on ÖPUL (2000)

5.3.1.1.2 Payment levels through agri-environmental measures: Model calculations based on regional average organic and conventional farms

Based on data from Eurostat (2003) on organic and conventional farm structure in 2000 in Austria, potential payment levels for national average conventional farms participating in a minimum of one ÖPUL measure were compared with potential payment levels of organic farms. The average ÖPUL farm instead of the average conventional farm was chosen to be compared with the average organic farm as only few Austrian farms do not participate in any ÖPUL measure (22%).

In a second step the average farm of all farms (conventional, organic and ÖPUL) in Austria and the average of all farms in the three NUTS1 regions were compiled and the potential payment level for an uptake of the organic measure or the uptake of a hypothetical ÖPUL package calculated. The objective of this second model calculation was to eliminate the effect of land use differences between organic and other farm types and to demonstrate the effect of regional land use structures.

Calculations were based on the following assumptions.

1. Farmers maximise their revenues from payments.
2. The five most important crops are considered, only.
3. Model farms participate in the six environmental measures with the highest participation (these represent 72% of total expenditure).
4. If several potential payment rates could apply the most likely one is used (example: different slopes).
5. Organic farms participate in all environmental measures which they may add to measures for organic production measures.

Payments to the average organic farm are significantly higher (215 €/ha) than payments to the average ÖPUL farm (Table 5-7). In addition to basic support payments organic farms may receive support for organic production methods and an additional annual payment (36 € for the first 10 ha) compensating for the costof certification according to Council Regulation (EC) 2092/91.

Table 5-7: Payments through ÖPUL to regional average farms participating in a combination of ÖPUL measures and regional average organic farms (€/ha)

Measures	ÖPUL farms	Organic farms	Difference
Basic support	48	67	19
Organic farming (incl. certification support)	-	264	264
Abandonment of inputs (grassland)	79	-	-79
Reduction of inputs (arable land)	33	-	-33
Keep landscape open (grassland)	72	129	57
Green cover of arable land	17	4	-13
Total payments	248	464	216

Source: Eichert and Häring (2003) based on ÖPUL (2000b), Eurostat (2003)

The differences in total payment rates are partly related to differences in production structure of ÖPUL and organic farms. Due to a higher share of permanent grassland (Figure 10-4) organic farms benefit from a differentiated basic support which favours grassland in comparison to arable land (Table 5-4).

Payments for keeping grassland areas open are higher on organic than on ÖPUL farms due to the higher grassland share of organic farms (83% vs. 45%). Similarly, payments for green cover of arable land are much lower on organic farms because the share of arable land is much lower (7% vs. 31%).

Conventional farms which do not participate in ÖPUL rely on a similar production structure as organic farms. In contrast "ÖPUL farms" rely on a more diversified production structure. Lower shares of grassland are compensated by higher shares of cereals and other crops (vine, fruit and vegetable production).

These observations are confirmed by a classification of farm types by Kirner (2001, Invekos 1999): 98% of all organic farms rely on grassland and nearly 59% are pure grassland farms, while only 40% of all organic holdings farm arable land and a mere 1.2% are pure arable farms.

A comparison of the national and regional average farms of the 3 NUTS1-regions further explores this (Table 5-8). The hypothetical optimal uptake of organic plus combinable measures are compared with the hypothetical optimal combination of measures (in both cases) for the average of all farms in the respective regions.

Table 5-8: Payment levels (€) of regional average of all farms participating either in measures for organic farming in comparison to their participation in ÖPUL measures

	Eastern Austria	Western Austria	Southern Austria	Austria total
ÖPUL max. measures	207	339	322	290
Organic plus comb. measures	348	451	435	412
Difference	+141	+112	+113	+122

Source: Eichert and Häring (2003) based on Eurostat (2003), ÖPUL (2000a)

For the average Austrian farm, participation in the organic farming scheme results in higher payments than participation in a combination of other ÖPUL measures (+ 122 €). Despite a very different land use (Figure 10-4) in the three greater regions the organic farming scheme results in higher payments in all three regions. This clearly is due to the higher payment levels for arable and grassland in measures supporting organic production than a combination of other ÖPUL measures supporting conventional production (Table 5-4).

In Eastern Austria the highest differences in payment levels between farming systems is observed: Here the share of arable land is higher than in other regions and the absolute differences for payment to organic vs. conventional arable land is higher than the differences observed for grassland.

5.3.1.2 Other measures

5.3.1.2.1 Vocational training

This priority supports vocational training in the area of nature protection and landscape management, thus contributing to improving the environmental performance of agriculture in general.

An explicit support of vocational training for organic farmers does not exist at the national level. However, certain Bundesländer implement specific measures for vocational training for organic farmers, e.g. in Steiermark a specific project offers lectures on nature protection and organic farming (ARGE Naturschutz 2003). In Kärnten some vocational schools familiarise apprentices with organic farming methods (Landesregierung Kärnten 2001). However, from an overall perspective very few vocational training measures exist on organic farming.

5.3.1.2.2 Processing and marketing

This priority supports processing and marketing activities of farms. Several measures specifically mention and support organic farming:

- Marketing of organic milk and dairy products.
- Establishment of distribution structures for fresh vegetables, fresh potatoes, vegetable and potato processing.
- Establishment of marketing structures for oil pumpkins, other oilseeds and medicinal plants and spices.

All other measures do not differentiate between organic and conventional farms (BMLFUW 2000).

5.3.1.2.3 Forestry

This priority area implements measures for afforestation, maintenance and improvement of the economic, ecological and societal utility of forests and forest areas with specific welfare for tourism. Specific mention of organic or conventional production methods is not made.

5.3.1.2.4 Adaptation and development of rural areas

Producer groups and associations of farms are supported in their efforts to improve product marketing such as investments, market analyses and advisory services. This measure particularly refers to products of special quality such as organic or integrated products. Furthermore, typical regional or traditional processing methods and product innovations with a positive impact on the environment, animal welfare and hygiene are supported. Thus, although organic products are mentioned in this measure they are addressed with the same importance as specific conventional production systems (BMLFUW 2003).

Diversification is supported via measures for professionalisation and quality improvement as well as reorientation of agricultural activities and activities related to agriculture. Furthermore, co-operations among agricultural firms and co-operations with firms of other sectors are supported. The objective of this measure is to increase non-agricultural income options. Special offers of agri-tourism on organic farms are supported, as well as special offers for health, horseback riding, disabled and child friendly tourism. The aim is to achieve a 15% participation of Austrian farms in some type of special programme for the adaptation and development of rural areas.

Although specifically mentioned in some measures support directly favouring organic farming could not be identified as actually taking place (BMLFUW 2003).

5.3.1.2.5 Modernisation of agriculture

This priority implements measures for investments in farms and the establishment of young farmers. Measures on investments are designed as to contribute to ecological objectives. Eligible investments are

- conversion to species appropriate housing,
- pits for liquid manures,
- deposit sites for farm yard manure and paving stones for composting of manure,
- farm specific biomass energy heating systems,
- investments to improve quality, hygienic and environmental conditions, and
- investments in organic farms in general.

Although this measure does not explicitly favour organic farms (except for the last point) it might be especially beneficial for organic farms. Support can be used for conversion of animals housing in accordance with organic standards.

The measure "Establishment of Young Farmers" does not favour organic or conventional farms.

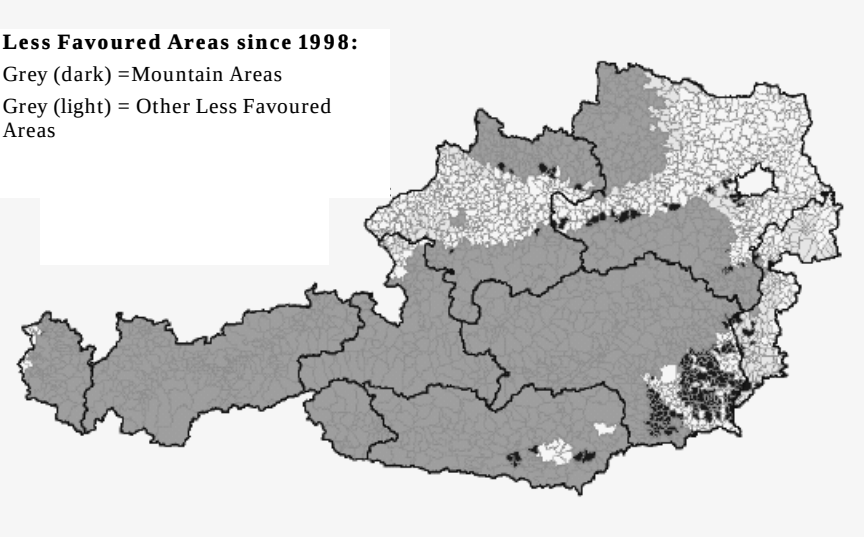
5.3.1.2.6 Less Favoured Areas and Areas with Specific Environmental Disadvantages

Measures implemented for Less Favoured Areas (LFA) and Areas with Specific Environmental Disadvantages are import measures supporting the development of rural areas. Less Favoured Areas and Areas with Specific Environmental Disadvantages are defined as follows:

1. **Mountainous areas**: Min. 700 m altitude (average of municipality) or min. 20% inclination (average of municipality) or min. 500 m altitude and 15% inclination.
2. **Other Less Favoured Areas**: Agricultural disadvantages defined by number of agricultural holdings max. 30 and max. 55 inhabitants/km² (in some regions 70) or high employment rate in agriculture (> 15%).
3. **Small areas**: Max. 30 agricultural holdings per region, hilly regions, wetlands and flood plains, border regions (BMLFUW 2003).

Figure 5-2 shows the regional distribution of Less Favoured Areas in Austria.

Figure 5-2: Less Favoured Areas in Austria



Source: BMLFUW (2000)

In 2001 a total of 280 million euro or 26% of compensation payments of the RDP were expended for Less Favoured Areas and Areas with Specific Environmental Disadvantages. The level of participation depends on regional conditions.

On average, farms in LFA receive 174 €/ha LFA payments. The payment level per farm depends on a mix of factors: field size, type of land use (forage area/other uses), farm type (foraging livestock farms vs. farms without foraging livestock), and farm specific rating of constraints (inner and outer traffic situation, climate and soil conditions), restriction to farms with at least 2 ha UAA.

Interestingly, 85.5% of organic but only 47% of conventional farms in Austria are located within LFA (Figure 5-3) (Grüner Bericht 2001), of which 59% are permanent grassland farms (Kirner 2001) as LFA tend to be grassland dominated regions (Figure 10-3).

Table 5-9: Location of holdings depending on production method

	LFA	other LFA	Small areas	non LFA
Organic farms	86%	4%	3%	8%
Conventional farms	47%	9%	11%	33%

Source: Grüner Bericht (2001)

This suggests that in these regions conversion to organic farming requires only minor changes in farm organisation. As a result, a large share of LFA payments ends up being expended on organic farms. Accordingly, regions with high shares of LFA area (West and South) are

characterised by higher organic farming shares than the East of the country (Figure 5-3).

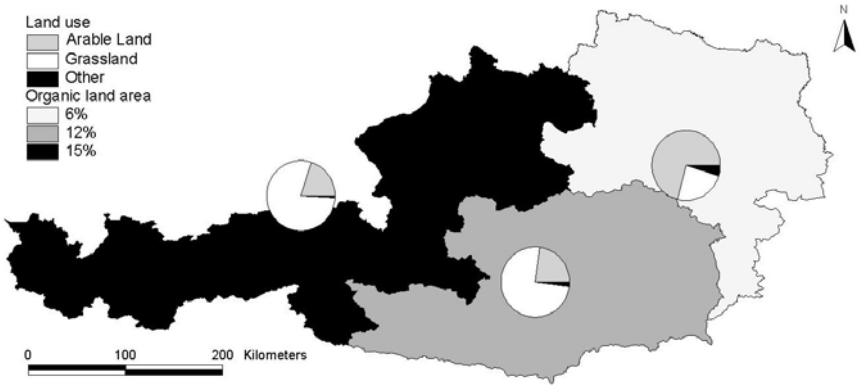
Support for structural measures is also implemented within the framework of LFA measures: In 2001, 1.49 million euro were expended for 13 organic farmers associations for publicity, advisory systems and organisation. Thus, these payments benefit organic farming or it's supply chain (Grüner Bericht 2002).

5.3.2 Quantitative evaluation

5.3.2.1 Uptake of organic farming

Organic farming is spread unevenly throughout Austria (Figure 5-3). Similarly, the production structure of organic farming varies significantly according to regional characteristics. While in Eastern Austria a high share of arable land is observed, the share of organic land area of total land area is low. In contrast in the West of Austria a high share of grassland is observed and a very high share of organically farmed land area.

Figure 5-3: Average regional share of organic land as % of total UAA and land use of organic UAA (Eurostat 2003)



5.3.2.2 Support of organic compared to conventional farms

The EU farm accountancy data network (FADN) was used for the assessment of the importance of different payments to farms. Grouping according to farm types was done by FADN according to the farm type classification and sample size criteria described in Chapter 4. In comparison to the results provided in Chapter 4 which refer to the year 2000 and are based on a selection of comparable farms, results presented in the following refers to the year 2001 and to the whole group of farms for each farm type.

On the one hand data was available for different farm types. On the other hand, data was available for the three farm types located in Less Favoured Mountain Areas:

1. Milk farms from 300 to 600 m altitude (Milk 2),
2. Milk farms higher than 600 m altitude (Milk 3), and
3. Grazing livestock higher than 600 m altitude (Grazing livestock 3).

5.3.2.3 Farm types

In Austria, on average, organic farms receive significantly higher agri-environmental payments (+200 €/ha) and significantly higher Less Favoured Area payments (+103 €/ha) than conventional farms. Mixed crop and livestock farms seem to benefit most from a conversion to organic farming in terms of agri-environmental payments between organic and conventional production (250 €/ha), while the lowest difference in agri-environmental payments is observed on milk farms (33 €/ha). Differences observed on field crop farms are 230 €/ha, on milk farms 163 €/ha, and 174 €/ha on grazing livestock farms.

Table 5-10: Payment levels according to farm type (€/ha) based on FADN (2003) in 2001

	Fieldcrops		Milk		Grazing livestock		Mixed (crops and livestock)		Average of all farm types	
Subsidies	CF	OF	CF	OF	CF	OF	CF	OF	CF	OF
Agri-Environment	227	457	257	420	231	405	177	427	225	425
Less Favoured Areas	12	44	188	221	147	221	46	106	79	182
Other rural development	0	0	3	3	2	6	1	1	1	3
Forestry total	0	0	2	3	1	7	0	1	1	3
Total Rural RDP	240	501	450	647	382	639	224	535	307	614

Grazing livestock farms, milk and mixed farms seem to benefit most from the eligibility criteria for Less Favoured Area payments. In contrast, field crop farms receive very low average LFA payments because crop farms do not tend to lie in LFA areas. However, the relative difference in LFA payments between organic and conventional farms is much higher on field crop farms than for other farm types. This suggests that organic crop farms are more likely to lie within LFA areas than conventional crop farms, while for the other farm types this difference in location seems to be less marked. In contrast milk farms require only minor organisation at changes during conversion and therefore tend to be found in Less Favoured Areas.

5.3.2.4 Farm types in Less Favoured Mountain Areas

In Less Favoured Mountain Areas, on all three farm types agri-environmental payments are higher on organic farms. All organic farm types received higher payments than the comparable conventional farms (Table 5-11). On average, organic milk farms from 300 to 600 m altitude (Milk 2) receive 184 €/ha more in agri-environmental payments, organic milk farms above 600 m altitude (Milk 3) receive 123 €, and organic grazing livestock farms receive 113 € more per hectare than their conventional counterparts. Due to higher shares of grassland and forage area organic farms tend to benefit more from grassland payments (farming structure: Table 5-12). This is in part due the possibility for organic farms to combine the standard ÖPUL payment with the measure "organic farming" and other ÖPUL measures.

Table 5-11: Payment levels according to altitude and farm type in Less Favoured Mountain Areas (€/ha) based on FADN (2003) in 2001: organic compared to conventional farms

	Milk 2		Milk 3		Grazing livestock	
Subsidies	CF	OF	CF	OF	CF	OF
Agri-Environment	239	423	290	413	283	396
Less Favoured Areas	157	170	254	252	246	249
Other rural development	5	2	3	3	4	8
Forestry total	1	1	3	3	2	7
Total Rural Development	402	597	550	670	534	661

Milk 2: Milk farms from 300 to 600 m altitude; Milk 3: Milk farms above 600 m altitude

Table 5-12: Land use of organic compared to conventional farms according to altitude and farm type in Less Favoured Mountain Areas (€/ha) based on FADN (2003) in 2001

	Milk 2		Milk 3		Grazing livestock	
Land use	CF	OF	CF	OF	CF	OF
Cereals (%)	13	7	6	4	12	3
Other field crops (%)	2	1	0	0	1	0
Permanent crops (%)	0	0	0	0	1	1
Forage (%)	85	92	93	95	87	96
Total livestock density (LU/ha)	1.4	1.0	1.2	1.0	1.2	0.9

Compared to agri-environmental payments, differences in average LFA payments are only minor. Only on milk farms from 300 to 600 m altitude (Milk 2) organic farms receive noticeable (13 €/ha) higher LFA payments. The payment level per farm depends on a mix of factors: field size, type of land use (forage area/other uses), farm type (foraging livestock farms vs. farms without foraging livestock), and farm specific rating of difficulties (inner and outer traffic situation, climate and soil conditions). The observed payment levels suggest that organic and conventional farms in LFA regions are very similar with regard the eligibility criteria for LFA payments. Conversion to organic farming requires only minor changes in farm organisation in these regions. This is affirmed by the fact that 85.5% of all organic farms in Austria are located within LFA (Grüner Bericht 2001), of which 59% are permanent grassland farms (Kirner 2001) as LFA tend to be grassland dominated regions (Figure 10-3).

5.3.3 Conclusions and recommendations

5.3.3.1 Relative attractiveness of the Austrian Rural Development Plan measures for organic farming

Qualitative analysis of the RDP (Rural Development Plan) has shown that only the Priorities “Processing and marketing”, “Agri-environmental measures”, “Adaptation and development of rural areas”, and to a limited extent “Modernisation of agriculture” address organic farming with specific support measures. However, the only measure that actually clearly favours organic farming in terms of higher payments is the „Agri-environmental measures” implemented within the framework of the ÖPUL-Programme, particularly the possibility of combining measures and higher ceiling of payments, which increases with farms size if farms are larger tan 100 ha.

Most other measures within the RDP do not provide a special treatment of organic farming in terms of specific or additional support, in particular the Priorities “Forestry” and “Young farmers”. However, these measures may be and are used for projects on organic farming. The measures “Less Favoured Areas” and “Areas with Specific Environmental Disadvantages” do not specifically provide for organic farming support

but organic farms tend to lie within these regions as conversion requires only minor changes in farm organisation in these regions. Thus, a considerable part of LFA payments end up being paid to organic farms.

Standard curricula in vocational training include information on organic farming and specific training courses are offered for nature protection and organic farming within the measure “Vocational training”.

In Austria, land use measures of environmental legislation have been integrated in the agri-environmental and rural development legislation as project based measures, i.e. Natura 2000 measures and water directive measures. Measures implemented within Natura 2000 tend to disadvantage organic farming compared to conventional, while the water directive directly addresses organic farming but pays the same amounts to farms which reduce agricultural inputs.

In summary, most of the measures implemented in the Austrian RDP still bear the potential for a more targeted support of organic farming.

Quantitative analyses have shown, that in Austria, on average and for all farm types, organic farms receive significantly higher agri-environmental payments (+200 €/ha) and Less Favoured Area payments (+103 €/ha) than conventional farms. Mixed crop and livestock farms seem to benefit most from a conversion to organic farming in terms of agri-environmental payments (250 €/ha), while the lowest difference in agri-environmental payments is observed on milk farms (33 €/ha). Differences observed on field crop farms are 230 €/ha, on milk farms 163 €/ha, and 174 €/ha on grazing livestock farms.

Grazing livestock farms, milk and mixed farms seem to benefit most from the eligibility criteria for Less Favoured Area payments. In contrast, field crop farms receive very low average LFA payments because crop farms do not tend to lie in LFA areas. However, the relative difference in LFA payments between organic and conventional farms is much higher on field crop farms than for other farm types. This suggests that organic crop farms are more likely to lie within LFA areas than conventional crop farms, while for the other farm types this difference in location seems to be less marked. In contrast milk farms require only minor organisational changes during conversion and therefore tend to be found in Less Favoured Areas.

In Less Favoured Mountain Areas, on all three farm types agri-environmental payments are higher on organic farms. On average, organic milk farms from 300 to 600 m altitude (Milk 2) receive 184 €/ha more in agri-environmental payments, organic milk farms above 600 m altitude (Milk 3) receive 123 €, and organic grazing livestock farms receive 113 € more per hectare than their conventional counterparts. Due to higher shares of grassland and forage area organic farms tend to benefit more from grassland payments. This is in part due the possibility for organic farms to combine the standard ÖPUL payment with the measure “organic farming” and other ÖPUL measures.

Compared to agri-environmental payments, differences in average LFA payments are only minor. Only on milk farms from 300 to 600 m altitude (Milk 2) organic farms receive noticeable (13 €/ha) higher LFA payments. The observed payment levels suggest that organic and

conventional farms in LFA regions are very similar with regard to the eligibility criteria for LFA payments. Thus conversion to organic farming requires only minor changes in farm organisation. This is confirmed by the fact that 85.5% of all organic farms in Austria are located within LFA of which 59% are permanent grassland farms as LFA tend to be grassland dominated regions.

5.3.3.2 Recommendations for improving the Austrian Rural Development Plan measures for organic farming

In Austria, most measures still bear the potential for a more targeted support of organic farming. Areas were specific support with higher subsidy levels to organic farming seems justified and particularly relevant are: i) investment support for housing and machinery and ii) support to develop specific market channels as has been done for some product groups, i.e. pumpkin oil and certain vegetables.

5.4 France

The National Rural Development Plan for France was to cover the period 2000-2006. However, since 6th August 2002, following the change in government, no new entrants were accepted onto programmes while a review was carried out. Since then, agri-environmental and rural development policy in France has been reformulated, with some reforms introduced over the summer of 2003, but new arrangements for the organic farming scheme are still awaited. As result of this situation, there have not been any new entrants to the various rural development and agri-environment schemes since 2002 – although agreements in place prior to the suspension of the RDP remain valid. The review presented below (including payment rates, budgeted expenditures on RD measures, and so on) therefore covers the period 2000-2002 only.

5.4.1 Description and qualitative evaluation

5.4.1.1 Agri-environmental measures

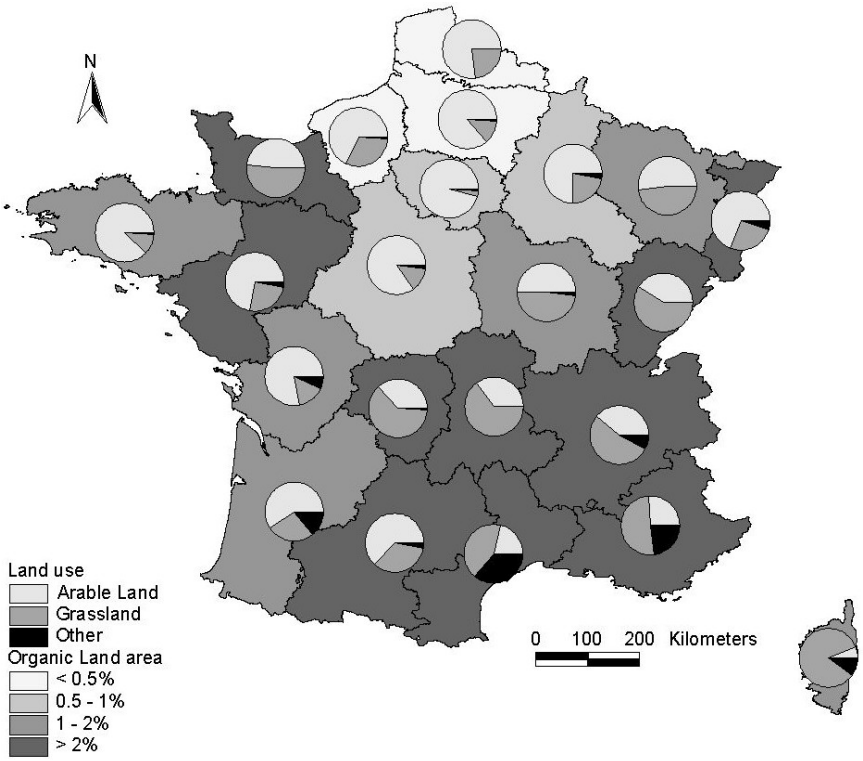
5.4.1.1.1 Action Plan for organic agriculture

In December 1997, because of the growing domestic demand (20 percent annual increase), the former agricultural minister, Louis Le Pensec, announced an action plan – Plan Pluriannuel de Developpement et la Promotion de l'Agriculture Biologique (Riquois 1997) – to support organic production. The plan involved subsidies totalling 80 million Francs (12.3 million €) to stimulate and improve organic production, distribution and sales, and aimed at converting one million hectares of farmland and increasing the number of organic producers to 25,000 by the year 2005. In order to achieve this goal, financial support for farm conversion was increased, and support was extended to marketing initiatives as well as to training and research. In 1998, 60 million Francs (approximately 9 million €) were allocated to support conversion payments – these monies were distributed by the regions.

With the change of government in 2002, the action plan was effectively terminated and has not yet been replaced by an alternative policy. A review (Saddier 2003) of key issues relating to the development of the organic sector was presented to the Minister earlier in 2003. It is expected that a new *plan pluriannuel de developpement de l'agriculture biologique* will be published in 2004 as well as new payment rates for supporting organic farming.

The number of agricultural holdings practicing organic agriculture in France increased from 10,364 in 2001 to 11,288 in 2002 (9% increase), while the area of land managed organically increased during the same period from 419,750 ha to 517,965 ha (23% increase). This represents 1.75% of France's UAA. Uptake is higher in the South and Northwest, typically regions with a higher proportion of grassland, but in general French organic agriculture is characterised by a higher proportion of arable cropping than in other countries (Figure 5-4).

Figure 5-4: Organic land area as a proportion of UAA in France, 2002 (Agence Bio 2003) and land use by main crop type, 2000 (Eurostat 2003)



5.4.1.1.2 Organic conversion support

In France[16], organic farms were supported financially only while converting. Existing organic farms did not get any special support - it was explicitly stated in the French RDP that no 'maintenance' payments were to be made. The payments also had an upper limit of 500,000 French francs (75,770 €) per farm during the conversion period.

Support for organic conversion was until 2002 linked to the *conversion à l'agriculture biologique* (CAB) measure included amongst the agri-environmental measures of the national rural development plan. This support was granted within the framework of the *contrats territoriaux d'exploitation* (CTEs). The CAB CTEs covered farms commencing their conversion process as well as farms which were already organic but were converting additional land to organic production. Since August 2002 it is no longer possible to initiate a CAB CTE, and following the suspension of the CTEs the trend of high numbers of farmers converting to organic production which was observed in the first half of 2002 has been halted.

[16] as in the UK until mid 2003 in England and 2004 in Wales

The national government of France is introducing the *contrats d'agriculture durable* (CADs) in 2003, replacing the CTEs. Decree No. 2003-675 of 22 July, 2003 defines CADs and modifies the *code rural*. Payments for organic conversion will be granted within the framework of CADs; however, the CAB CADs will only come into force once a decree relating to payments to holders of CADs is published in the *Journal Officiel de la République Française*. Such a decree will outline the amounts and maximum payment levels which could be granted according to different types of actions/measures. CADs will have a fixed duration of five years, and holders of CADs will be required to comply with requirements of 'usual good farming practice'. Previously signed CTEs remain valid until the end of their normal duration, but cannot be extended.

Organic conversion CTEs were more common in 'peripheral' regions of France. In 2000, 13% of CTE holders were engaged in organic farming, and in May, 2003 CAB CTEs represented 8.5% of the totality of CTEs. This proportion was considerably higher in *départements* such as Drôme (29%), Corse (28%), Morbihan (22%), and Côtes-d'Armor (22%). Approximately one-third (35%) of organic holdings in France benefited from organic conversion CTEs, and nearly 4,000 CTEs, which included the organic conversion measure, had been signed before 31st May, 2003 (Agence Bio 2003).

Table 5-13 shows total levels of expenditure allocated to conversion to organic agriculture from 1998-1999 to 2000-2002, as well as the number of contracts signed during those two periods. At 10% of agreements, 5% of land area and 25% of expenditure, organic farming accounted for a relatively high share of agri-environmental agreements by the end of 2001 (Table 5-14), with a significant increase in total resources committed to organic farming, and in the value of individual contracts.

Table 5-13: Organic farming conversion contracts and expenditure levels, 1998-2002

	Agri-environmental measures			Contrats Territoriaux d'Exploitation			
	1998	1999	Annual average	2000	2001	2002	Annual average
Number of contracts featuring CAB measure	2,080	2,624	2,352	579	1,862	1,452	1,298
Average amount per contract (k €)	16.8	15.5	16.2	41.1	45.7	50.8	45.8
Total amount of funding committed (M €)	34.9	40.8	38.0	23.8	85.0	73.7	60.9

Source: Saddier (2003)

Table 5-14: Uptake of organic farming compared with all agri-environmental measures, 2000-2001

	Number of agreements	Land area (1000 ha)	Expenditure (k €)
Total	30,005	1,850	59,691
of which organic	2,948	82.5	15,527

Source: European Commission (2003)

Table 5-15 shows the levels of financial support available for conversion to organic farming under the agri-environmental measures in force from January 1998 and the levels of support available within the framework of CTEs from May, 2000. Although the period for receipt of the CTE payments had been extended to 5 years, compared to 2-3 years for the previous scheme, the rates were reduced after the first two years as shown in Table 5-16.

Table 5-15: Levels of support provided for conversion to organic agriculture (€/ha)

	Agri-environmental measures (from 23/01/98)			Contrats Territoriaux d' Exploitation (from 17/05/00)		
	Annual amount	Duration (years)	Total amount	Average annual amount	Duration (years)	Total amount
Other annual crops	181	2	363	244	5	1,219
Seeds, aromatic plants	181	2	363	305	5	1,524
Vegetables	304	2	608	305	5	1,524
Permanent pastures	107	2	213	107	5	533
Citrus fruits	716	3	2,149	701	5	3,506
Specialized olive groves	457	3	1,372	457	5	2,287
Vineyards (first 10 hectares)	838	3	2,515	701	5	3,506
Vineyards (additional hectares)	838	3	2,515	457	5	2,287
Other perennial crops	838	3	2,515	701	5	3,506

Source: Saddier (2003)

Table 5-16: Tapering of payments for the conversion to organic farming, 2000-2002

	Orchards, seeds, vegetables, aromatic and medicinal plants	Other annual crops	Grass land	Specialised olive groves	Other perm. crops
Year 1 and 2	511	409	180	640	980
Year 3 and 4	255	205	90	385	588
Year 5	170	136	60	255	392

Source: Observatoire (2000)

Before 2000, the main growth in organic farming was in the grassland area and livestock production. In 2000, however, this picture changed: Growth of organic animal production slowed down and the arable land increased faster than the grassland (Table 5-17, Table 5-18), particularly in 2001. This change was in part due to the increased payments for cereals and oilseeds.

Table 5-17: Organic and in-conversion land area (ha), 2000-2002 -% change in brackets

	2000	2001	2000
Cereals	52,560	63,182 (+20%)	78,723 (+25%)
Protein crops and oilseeds	16,236	23,318 (+44%)	29,681 (+27%)
Vegetables	6,317	6,284 (0%)	6,996 (+11%)
Fruits	8,092	8,477 (+5%)	8,945 (+6%)
Vineyards	11,669	13,426 (+15%)	15,013 (+12%)
Aromatic and medicinal plants	1,282	1,474 (+15%)	1,716 (+16%)
Pastures and meadows	242,533	275,105 (+13%)	344,011 (+25%)
Other	22,351	28,484 (+25%)	32,880 (+15%)
Total	361,040	419,750 (+16%)	517,965 (+23%)

Source: Agence Bio (2002 and 2003)

Table 5-18: Organic animal production (head), 2000-2002 -% change in brackets

	2000	2001	2002
Total cows	68,211	88,278 (+29%)	106,874 (+21%)
Sheep	83,378	100,319 (+20%)	109,144 (+9%)
Broilers	6,079,610	6,375,492 (+5%)	4,877,219 (-24%)
Laying hens	1,386,788	1,415,653 (+2%)	1,327,389 (-6%)

Source: Agence Bio (2002 and 2003)

5.4.1.1.3 Other agri-environment measures

As discussed above, the main basis for organic farming and agri-environment agreements with farmers was the territorial contracts (*Contrats Territoriaux d´Eploitations*, CTE) available until 2002 and the *Contrats d'agriculture durable* (CADs) introduced in 2003, which make it possible to reward the social and ecological performance of agriculture.

Under the original RDP, a national list of actions were identified at the national level, with some actions being specific to certain regions. All farming systems can potentially benefit from the agri-environmental measures. Among the main actions identified for the agri-environmental schemes are the following: modifying crop rotations; introducing crops generating environmental amenities; rehabilitating, restoring and maintaining fixed elements of the landscape; adjusting fertilizer practices and plant health treatments; preserving methods of soil use which are beneficial to the landscape; and supporting farmers operating in semi-urban environments. Alongside conversion to organic farming, the conversion of arable land into extensive grassland was the other type of general measure being implemented. The levels of support are shown in Table 5-19.

No specific provisions for organic farming in Natura 2000 and water catchment areas were identified.

Table 5-19: List of selected agri-environmental measures and levels of aid

Title of Measure	National Ceiling of Aid (€)
Conversion of arable land into extensive grassland	375/ha/year
Conversion of arable land into ley	259/ha/year
Introduction of additional crop in initial crop rotation	600/ha/year
Encouragement of rotational practices incl. sunflowers and limit areas of bare soil in winter	76/ha/year
Introduction of biological pest control	183/ha/year
Replacement of mineral fertiliser with organic fertiliser	76/ha/year
Mulching projects	30/ha/year
Conversion of arable land into crops advantageous to flora or fauna	from 145/ha/year to 600/ha/year
Conversion to organic farming	from 53/ha/year to 899/ha/year

Source: French National Rural Development Plan 2000-2006 (European Commission 2000)

5.4.1.2 Other Rural Development Plan measures

The following priority areas are potentially of relevance to organic farming, although specific reference to organic farming is typically not made – with the obvious exception of the aid scheme for organic conversion.

5.4.1.2.1 Investments in agricultural holdings

No specific mention is made of organic farming or of activities related to improving environmental or animal welfare conditions/standards.

5.4.1.2.2 Training

Strategic element in every area covered by the RDP; agri-environment is among the three action priorities within the training component. Reference is made to enabling farmers to "improve their knowledge and skills" in order to better meet the sustainable development challenge. Actions relating to agri-environment are eligible for financial support.

5.4.1.2.3 Less Favoured Areas

Payment of compensatory allowances for natural handicaps are made where compliance with good agricultural practice can be demonstrated; levels of good agricultural practice vary from one less-favoured area to another, depending on climatic conditions, altitude, production conditions and so on. Payment rates vary from 48 € to 186 €. A maximum of 50 hectares per holding are eligible for a premium, with the first 25 hectares receiving higher rates than the subsequent 25 hectares. No specific preferential treatment for organic farmers has been identified. While the proportion of organic farming in LFAs is higher than other regions, as in other countries, and the uptake of the conversion payments is highest in peripheral regions, this may well be due to other factors (lower technical constraints, levels of general organic farming support) rather than specifically the LFA support. To the extent that LFA payments are targeted at smaller holdings, this might be thought to benefit organic farmers, but more detailed statistical analysis would be needed to confirm this, and experience elsewhere suggests that organic holdings are often above average in size (Chapter 3), particularly in the Less Favoured Areas.

5.4.1.2.4 Processing and marketing

Investments relating to quality products (including organic products) are identified as being eligible for support.

5.4.1.2.5 Young farmers

The settlement of young farmers was to be promoted systematically. Obstacles such as high social security payments for small farms and lack of production support were to be removed. It was hoped in this manner to motivate in particular the young to become active in agriculture.

5.4.2 Quantitative evaluation

Since the schemes have been suspended, and future payment rates are as yet unpublished, we have not included a detailed comparison of the

relative eligibility for agri-environmental payments of conventional and organic farmers similar to that in the Austrian case study. With the tapering of payments (reduced levels in later years of conversion) and the absence of maintenance payments, the situation is similar to that in the UK, although overall payment rates are higher and there is greater support for organic horticulture. As in the UK, this makes it difficult to identify a typical level of payment to use in such a comparison. Also as in the UK and elsewhere, average support levels per hectare for organic farmers are typically higher than the average for all agri-environment schemes, but this will be offset by higher costs of meeting the scheme requirements and income foregone, particularly if organic premium prices are not obtained.

Of the agri-environment measures specified, many of these would appear to be compatible with organic farming, and in some cases the payments indicated appear generous compared with the organic farming payments. However, due to the suspension of the schemes, we were unable to obtain precise information about the combinability of these schemes. To the extent that it is possible to combine schemes without significant dual funding deductions, then the organic farmer in conversion is likely to be at an advantage compared with the conventional farmer. If the schemes cannot be combined, then the rates indicated may well be more attractive to the conventional farmer, particularly once the organic farmer has completed conversion and no longer qualifies for support. By 2002, nearly 4000 conversion agreements had been signed (Agence Bio 2003) representing only one third of organic farmers in France, so that most organic farming in France remains unsupported by direct payments for organic farming.

In terms of prioirties for rural development expenditure (Table 5-20) contains information on budgeted expenditures for six areas, which together represent nearly the totality of the allocated funds. Amongst the measures allocated substantial funding are agri-environment, less-favoured area schemes, assisting young farmers, processing and marketing grants, and farm investments. Protection of the environment and animal welfare was not allocated substantial funding, but has been included here as it is an area which is relevant for organic farming. Overall, organic farming accounted for 25% of agri-environment expenditure in 2001, although total agri-environment expenditure indicated in Table 5-14 at 60 million euro is substantially less than the 500 million € budgeted.

Table 5-20: Selected measures from the French Rural Development Plan (budget in Mio. €)

Millions of €	2000				2001				2002			
	Total cost or public expnd.	EU contri-bution	of which Objective 2		Total cost or public expend.	EU contri-bution	of which Objective 2		Total cost or public expend.	EU contri-bution	of which objective 2	
MEASURES			Total cost or public expend.	EU contri-bution			Total cost or public expend.	EU contri-bution			Total cost or public expend.	EU contri-bution
a. Farm Investments	233	78	139.8	46.8	198.6	60.2	119.2	36.1	240.1	80.4	144	48.3
b. Setting up of young farmers	289.8	125	173.9	75	281.7	122.3	169	73.4	277.2	121.4	166.3	72.8
e. LFA and areas subject to env. constraints	385.7	134.5	231.4	80.7	394.4	197.2	236.6	118.3	400	200	240	120
f. Agri-environment	490.1	245.1	294.1	147	563.1	281.5	337.8	168.9	618.2	309.1	370.9	185.5
g. Improvement of processing and marketing of agric. Products	355.7	53.4	142.3	21.3	355.7	53.4	142.3	21.3	355.7	53.4	142.3	21.3
t. Protection of the environment, animal welfare	9.1	4.3	5.5	2.6	14.8	7	8.9	4.2	30.3	14.7	18.2	8.8
a + b + e + f + g + t	1763.4	640.3	987	373.4	1808.3	721.6	1013.8	422.2	1921.5	779	1081.7	456.7
Programme Total	1944.4	717.1	1093.8	418.8	1976.8	793.4	1112.1	464	2147	878.8	1213.2	514.7

Source: French National Rural Development Plan 2000-2006 (European Commission 2000)

5.4.3 Summary and Conclusions

Support for organic farming was increased in 1998 and again under the Agenda 2000 reforms, with the period for support being extended from 2 to 5 years and the levels of payment for specific crops modified. This contributed to a significant increase in the number of producers converting compared with the situation before 1997 and the Riquois action plan, with organic farming accounting for about 10% of agri-environment agreements, 5% of land area, and 25% of expenditure in 2001. By the end of 2002, nearly 4000 conversion agreements had been signed, representing only one third of organic farmers in France, so that most organic farming in France remains unsupported by direct payments for organic farming. Since August 2002, it has not been possible to register new agreements in France as all schemes have been subject to review.

Due to the lack of FADN data and alternative financial analyses identified, it has not been possible to carry out a detailed evaluation to determine whether the payment levels in 2000-2002 were sufficient to compensate for the costs and income foregone of organic management. On the basis of the analyses from other countries, and the uptake levels shown above, it is likely that the support levels for annual and perennial crops were sufficient, but that payments for grassland, particularly in the later years of conversion, may not be sufficient to encourage livestock production. Despite this, some tendency towards higher uptake in Less Favoured Areas can be observed.

As in the UK, the conversion support payments are front-loaded to cover the period when farmers do not have full organic status and therefore do not have access to organic premium prices. However, as in the UK, the fact that no maintenance payments were available for established organic producers means that they are entirely dependent on adequate prices being achieved to maintain their long-term viability and performance relative to conventional producers. We do not know if this was in fact the case, but from experience elsewhere there is clearly a risk that the market does not provide sufficient security to achieve this and that other mechanisms are needed to ensure that the provision of public goods is adequately rewarded in the long-term.

It remains to be seen to what extent these issues will be addressed under the new arrangements. However, the delay in implementing these is also causing serious concern among organic producer organisations in France. With the latest indication being that the new CADs will not be implemented before early 2004, this means that there will have been no conversion support for more than 18 months. This is particularly impacting on those producers who registered for conversion before the suspension of the CTEs and who farmed organically in the intervening period without financial compensation or with very low levels of compensation. Since the suspension of the CTEs, only a few producers have started conversion without support in the belief that the new system would be implemented quickly.

It is likely that many more are waiting for the situation to be resolved before starting conversion. This has the potential to impact on the development of organic farming in France in similar way to the delay in reviewing and restarting the Organic Farming Scheme in the UK in 1998/99. This led to a rush of producers starting conversion together when the schemes reopened, and these producers subsequently achieved organic status together in large numbers in 2001, resulting in significant problems marketing the sudden increase in supply – in the case of the dairy sector the marketing problems were still not resolved in 2003.

The situation in France illustrates that it is not just the levels of support and market demand that are critical for the development of the sector, but that administrative issues can have a major impact, with stop/start schemes potentially causing serious damage.

5.5 Italy (Marche)

The central Italian regions may be considered as representing a sort of "average" agricultural conditions for Italy, in terms farm size, production diversification and climate and natural conditions. They present also average socio-economic conditions and are still strongly characterised by their rural territory from a social and cultural point of view. Marche region in particular has been selected for this study as it presents all these general characteristics; besides concerning organic farming in particular, it can be considered among the Italian region where organic farming has first been developed, and nowadays it counts a share of organic farms over the national average, and presents a well established organic agri-food industry.

The main goal of the Rural Development Programme of the region Marche is assuring long term economic sustainability for farms, within a general framework of environmental safeguard and preservation of lively rural areas, enhancing the land's resources for the general development of and for improvement in the quality of life of the region as a whole.

Marche's RDP is projected to link as much as possible the different measures of intervention, in order to create a legislative network that encourages co-operation and interdependency among rural actors and rural policies, and to increase the effectiveness of policy intervention.

The plan gives global objectives for farms and for the agri-food systems (competitiveness, efficiency and quality) and for the action of the public authorities guaranteeing sustainable development (protection of the environment and of the quality of life in rural areas). The general strategy of the RDP is specifically implemented through 19 measures, clustered in three priority axes, according to their general aim (Table 5-21).

Table 5-21: Priorities and Measures implemented in Marche Region

Priorities and Measures	Budget share 2000 - 2006
Priority 1: Improvement of the competitiveness of agricultural and agri- industrial systems	
A - Investments in agricultural farms	22.7%
B - Support for young farmers	2.9%
C - Formation	0.7%
D - Preretirement	0.7%
G - Improvement of transformation and commercialisation	11.3%
K - Land reparcelling	1.23%
L - Support for farm management	0.2%
M - Marketing of agricultural products	1.0%
V - Financial engineering	1.4%
Priority 2 : Protection and development of the landscape and the environment	
E - Less Favoured Areas	2.1%
F - Agri-environmental measures	28.7%
H - Afforestation of agricultural land	8.1%
I - Other forestry measures	4.3%
Q - Water resource management in agriculture	2.3%
T - Agri-environment protection, arboriculture, animal welfare	1.0%
Priority 3: Support for integratet development in rural areas	
N - Essential services for the economy and the rural population	0.2%
O - Renewal and improvement of the villages and protection of the rural heritance	2.7%
P - Diversification activity in the agricultural sector and analogous	4.3%
R - Development and enhancement of the rural infrastructure	2.8%
S - Support for touristic and artisanal activity	1.2%
Appraisal	0.2%
X – of which in-course measures	0.1%

Source: Regione Marche (2000)

In the following only measures specifically relevant for organic farming are evaluated.

5.5.1 Descriptive and qualitative evaluation

5.5.1.1 Agri-environmental measures relevant for organic farming

Agri-environmental measures are jointly reported in Measure F of the second priority area and refer to the protection and improvement of the environment through the widespread use of agricultural production methods with less environmental impact in general and activities contributing to the conservation and improvement of the landscape and environmental resources (afforestation and other forestry measures, improvement of infrastructures for the management of water resources, environmental monitoring). Measure F originally comprises 4 Sub-measures.

Sub-measure F1): Low environmental impact farming

Sub-measure F2): Organic farming

Sub-measure F3): Safeguard of rural landscape and of the typical agricultural land structure

Sub-measure F4): Improvement of environment for wildlife purposes

Specific support concerning organic farming was considered in the Sub-measure F2, while Sub-measure F1 refers to integrated farming. The other two Sub-measures have not received significant attention, and therefore have not been activated anymore after 2001.

The basic approach to support for organic farming is based on Council Regulation (EC) 2078/92, and is mainly based on per hectare premiums for organic production. Farmers who take part in *zonal agri-environmental programmes* promoted by local authorities, in consultation with socio-economic partners including environmental bodies (the reference area should be at least 1,000 ha), get a priority for their applications for Sub-measure F2. In this way, interventions are likely to be territorially concentrated with more effective results on the environment.

In order to apply for support under Sub-measure F2, farmers must meet the following conditions:

1. adoption of a management plan drawn up by a technician for the practice of organic production techniques (or a conversion plan where these techniques are being introduced) and maintenance of the water network according to the principles of good farming practice;
2. winter soil cover (green cover for vines and fruit crops; cover crops up to the end of December through grass seeding to be carried out before 30 September; prohibition of all fertilisation and grazing in the indicated period) – for surfaces with a gradient of less than 20% it is not necessary to sow cover crops provided that multiannual forage is sown over at least 50% of the UAA which should be allocated for these crops;
3. burial of crop residues (except those relating to fruit crops and vines);

4. maintenance of hedges and the water collection network;
5. compliance with the general principles of Council Regulation (EC) 2092/91.

Areas with meadows and pastures are not eligible for support, except in the case of holdings with livestock, if at least 50% of livestock production is sold according to the certification scheme of Council Regulation (EC) No 1804/99. The per hectare premiums for organic farming, according to the different farm location, and in comparison with the premiums for integrated farming under Sub-measure F1 are indicated in Table 5-22.

Table 5-22: Premiums for implementation of Sub-measures F1 and F2. Values are indicated in €/ha

	Sub-measure F1 - integrated farming	Sub-measure F2 – organic farming			
Crops		Hill and plain areas	difference with respect to F1	Mountain areas	difference with respect to F1
Cereals (except maize)	56	196	140	146	90
Maize	56	246	190	181	125
Proteic crops	56	410	354	306	250
Sunflowers	56	126	70	101	45
Horticultural crops	266	560	294	560	294
Forage	56	246*	190*	201*	145*
Meadows & grazing pastures	56	126*	70*	126*	67*
Fruit crops	586	780	194	780	194
Vines	466	780	314	646	180
Olives	346	600	254	500	154

*where organic livestock rearing is practised – where this is not the case the premium is reduced by € 100.

Premiums refer to maintenance of the organic technique: they must be increased by 10% where organic agriculture is being introduced.

Source: Regione Marche (2000)

Sub-measure F1 supports low environmental impact farming according to the guidelines indicated in "Integrated production - principles and technical guidelines" 1993, and refers therefore specifically to integrated farming systems. This Sub-measure can be considered as the most direct alternative to organic farming, and the lower payments it allows are counterbalanced by less restrictive regulations for farmers. The regulation for integrated farming systems takes into account two main aspects: evaluation of actual necessity of intervention and indication of allowed methods of intervention. Concerning the first aspect, criteria are set concerning how to assess actual necessity for defending against diseases, parasites and weeding. Once the necessity of intervention is actually present, methods allowed are:

- a qualitative selection of possible types of intervention;
- a quantitative optimisation of timing and quantities of intervention.

Concerning the first point, it is recommended to use cultivars that prove to be more resistant, agronomic techniques creating unfavourable conditions for parasites and weeds, bio-technical intervention (antagonists and/or attractive organisms), environmentally safe natural products. Chemicals are allowed under the condition that a compromise is reached concerning technical requirements and environmental and health safeguard.

The second point considers parameters for the correct distribution of the inputs allowed for intervention in the integrated farming, and refers specifically to the use of efficient spray machinery for pesticide distribution, and to the criteria for minimising the quantitative application of crop protection and weed control inputs both in terms of number of application and of quantities used in each application.

The operative scheme of Sub-measure F1 is quite similar to that for organic farming. Economic support is given on a per hectare basis, according to the different crops. No distinction is made between mountain and plain areas. Payments are computed according to estimates of reduced farm income deriving from the adoption of low environmental impact farming, and are summarised in Table 5-22; they may be increased by 10% if at least two of the below indicated conditions are apply:

- The farm is in a park.
- Livestock activity is present in the farm.
- Water control scheme, or new hedges, or environmental engineering schemes are adopted.
- The farm is in an area with high hydro-geologic risk.

Like for the organic farming case, per hectare payments may be further integrated by specific premiums for hedge maintenance, cover crops, burial of crop residues and water network maintenance, (see Table 5-23)

The above mentioned conditions are compulsory for being eligible for support for organic farming. Beneficiaries of Sub-measure F2 may integrate the basic subsidies if, on a voluntary basis, they decide to adopt specific techniques aiming to reduce soil erosion.

Such interventions are:

1. Farm project for water storage and water network improvement;
2. Bioengineering techniques for the protection of banks and water courses for the protection of farm areas under risk of erosion;
3. Plantation of autochthonous hedges and trees on farm land in order to maintain or restore the local rural landscape.

Farmers who undertake such non-productive investments shall receive a premium (Table 5-23) calculated on the basis of incurred costs: where this is granted concurrently with the premiums described below, these

must remain within the ceilings set out in Council Regulation (EC) No 1257/1999.

Table 5-23: Additional premiums for environmental friendly activities under Sub-measures F1 and F2 (€/ha)

	Sub- measure F1 (integrated farming)	Sub- measure F2 (organic farming)
Cover crops	150	150
Burial of crop residues	80	80
Hedge maintenance	50	40
Technical advice for the implementation of the measure F1/F2	20-50*	30

*50 €/ha for fruit, olive, horticulture, 20 € for other crops

NB: premiums refer to maintenance of the organic technique: the must be increased by 10% where organic agriculture is being introduced.

Source: Regione Marche (2000)

Premiums may be increased by 10% if at least two of the following conditions apply:

1) The farm is in a national park area.
2) Livestock activity is present in the farm.
3) Water control scheme, or new hedges, or environmental engineering schemes are adopted.
4) The farm is in an area with high hydro-geologic risk.

From the mid term monitoring report of the Marche RDP data show that the presented applications for Sub-measure F1 are more than those for Sub-measure F2 (Table 5-24). Nevertheless, the total number of actually funded applications are nearly similar between the two Sub-measures. It is to point out the large difference between admissible and actually funded applications: this is due to budget shortage with respect to the interest generated by agri-environmental measures. This situation has pushed the Marche regional government to make a clear stance on organic farming, by raising the funding of the organic (F2) measure to 25 millions euros, and by deleting the low-input farming measure (F1). The modification of Marche RDP has been approved by Regione Marche on September 2003 and will be actually implemented starting from January 2004. In what follows, the quantitative analysis confirms the strong level of "competition" between the organic and integrated option, with total payments per herctare in some cases higher than those for organic farming, due to the integration with extra payments from environmentally friendly activities.

Table 5-24: Number of applications and payments for agri-environmental measures (2002)

Sub-measures	R	Applications actually funded	Total payments	Average payment per application
F2 (organic farming)	1,436	607	5,357,744	8,827
F1 (integrated farming)	1,551	876	4,581,986	5,231
Total	2,987	1,483	9,939,730	6,702

Source: Regione Marche (2003)

The geographical distribution in the region (Table 5-25) shows for year 2002 the highest relative importance of the Ascoli Piceno province, mainly due to the high number of applications for Sub-measure F1. Note that organic farming applications account for only 40% of the total, but in terms of payments it receives 54% of the total payments for agri-environmental measures.

Table 5-25: Geographical distribution of applications and payments for agri-environmental measures in Marche region by province, 2002

Province	Number of funded applications (2002)				Payments (2002)			
	Organic farming F2	Integrated farming F1	Total	% sub meas. F2	Organic farming F2	Integrated farming F1	Total	% sub meas. F2
Ancona	9%	17%	14%	28%	11%	37%	23%	26%
Ascoli Piceno	28%	67%	51%	22%	22%	37%	29%	41%
Macerata	29%	11%	19%	64%	34%	19%	27%	67%
Pesaro Urbino	33%	4%	16%	84%	33%	6%	21%	86%
MARCHE TOTAL	100%	100%	100%	41%	100%	100%	100%	54%

Source: Regione Marche (2003)

5.5.1.2 Other measures relevant for organic farming

5.5.1.2.1 Investment in farms (Measure A)

The basic aim of Measure A is to increase farms competitiveness, through a support of investments for cost reduction, product innovation, product positioning and valorisation. The farm efficiency increase shall be framed within sustainability condition, and must assure improvement for labour conditions, and animal welfare. Specific attention is paid to interventions in favour of farm income diversification. For livestock production, generic investment in organic livestock farms are admissible, for beef, sheep, pork, chicken and eggs productions. Concerning crop production, for cereals, protein and oilseeds crops, specific support is available for organic crop conversion, under the condition that the

overall regional production is not increased. For potatoes and vegetables, generic investment for organic production are admissible. The maximum rates of support for investments are specified in Table 5-26 for different categories of farms.

Table 5-26: Investment aid for farms (%): conventional compared to organic farming support

	Conventional farms	Conventional farms if young farmers	Organic farms	Organic farms, if young farmers
Min. support	30%	35%	40%	45%
Max support (only in LFA)	40%	45%	50%	55%

Source: Regione Marche (2003)

Both for conventional and organic family run farms, the total contribution cannot be higher than 500,000 €/farm or 250,000 €/working unit. For livestock farms and for farms where investments for processing and marketing are at least 1/3 of the total investment, the maximum contribution is 600,000 €/farm or 300,000 €/working unit. For conventional and organic co-operatives the maximum contribution is 800,000 €/farm if they employ up to 3 working units, and 1,500,000 € if they employ more than 3 working units.

5.5.1.2.2 Investment in the processing/marketing of agricultural products (Measure G)

Measure G aims to improve the competitiveness of agri-food products, mainly through product re-positioning and valorisation of food traditions and of the linkages with the rural territory. Also, attention is paid to the efficiency improvement of distribution channels. Preference is given to low environmental impact initiatives and to projects for product innovation and quality improvement.

For what concerns organic farming in particular, measure G prioritises investments in the processing and marketing for organic products (together with other specific types of investments). Applications for this kind of investment are admitted for the following sectors:

- Crop products;
- Cereals, oilseeds, fodder, olives, vegetables, potatoes, wine, seeds, floriculture, mushrooms;
- Livestock products;
- Meat (beef and veal, pig, sheep, poultry and rabbit meat, meat from alternative livestock farming); eggs; milk and cheese.

Admitted investments are those for building, improvement or purchase of fixed assets (land is excluded); purchase of machinery and equipment (including PC and software); generic costs for patent and licences, consultancies, etc. 40% of these cost may be supported under this measure.

5.5.1.2.3 Marketing of high quality products (Measure M)

Measure M aims to encourage the adoption of initiatives for the creation of new added value for agri-food products, mainly through the enhancement of quality and the repositioning of products according to the aspects of typicality and traditional food. It is composed by three Sub-measures:

Sub-measure 1): The development of quality products

Sub-measure 2): Quality certification

Sub-measure 3): Innovative actions for the marketing of quality products

Sub-measure 3 specifically targets also organic products, within a general strategy concerning the recovery of town and village centres in rural areas and the promotion of rural tourism.

Admitted investments are those for the creation or restructuring of outlets for the direct sale of organic products, and the acquisition of machinery, equipments, etc. that might be required for organic product sales.

The level of aids is 40% of total eligible costs in normal areas and 50% in Less Favoured Areas (45% and 55% for farmers' associations with priority given to young farmers), in compliance with the "de minimis" rule.

5.5.1.2.4 Less Favoured Areas (Measure E)

The basic aim of Measure E is the environmental safeguard of marginal areas through the maintenance of agricultural activity in rural areas, specially referring to extensive livestock. The areas classified as LFA are listed according to art. 18 Council Regulation (EC) 1257/99 (ex art.3 paragraph 3, Dir. 268/75/CEE), and to art. 19 Council Regulation (EC) 1257/99 (ex art.3 paragraph 4, Dir. 268/75/CEE.

Compensatory payments are given to livestock farmers in LFAs who maintain livestock breeding for at least 5 years, with a livestock density index between 0.5 and 2 LU/ha of fodder or pasture, and with at least 3 LU. Only cattle, horses, sheep and goats are eligible. From the perspective of organic farming it's relevant to note that in order to be eligible for measure E, it is compulsory for the farmer not to farm or breed GMOs.

There is no distinction for organic and conventional farms in the payment level, that are structured as follows, according to the kind of LFA where the farm is:

- 200 €/year per hectare of fodder UAA, for farms in LFAs with strong depopulation rates;
- 150 €/year per hectare of fodder UAA for farms in LFAs with average depopulation rates;
- 100 €/year per hectare of fodder UAA for farms in other LFAs

Payments are, therefore, not differentiated for organic and conventional farms, but nevertheless it can be argued that such a measure can have indirect positive effects for organic farms. In fact, the present distribution of organic farms is predominantly concentrated on the mountain and high hill areas of the internal northern part of Marche region, typically classified as LFAs. This means that organic farms are proportionally advantaged with respect to conventional farms due to the present localisation. Also, it is to consider that the availability of LFA payments can attract new farmers to conversion, given that in general conversion is easier for fodder and pastures, i.e. for farms in LFAs.

Unfortunately, from the Monitoring report of Marche it is not possible to get the disaggregated data about the actual distribution of organic and non organic farms in LFA, as the only data available refer to farm that receive payment for Measure F as a whole, hence including both organic and integrated farms.

5.5.1.3 Support for organic farming in other Italian regions

In the following a short description of the level of support under the agri-environmental measures of the RDP of other Italian regions is presented, and summarised in Table 5-27 and Table 5-28. Regions have been classified according to their classification as Objective 1 regions or not Objective 1 region, given the different procedure of compilation of RDP in the two cases.

The general schemes for organic farming support are often quite different from one region to the other. In Table 5-27 and Table 5-28 we have tried to come to a common representation of the support for the main crops and in some cases information for specific crops has not been presented. In particular, the situation concerning permanent pastures and meadows has not been reported, as it is very differentiated, and support is in most of the cases conditioned to the existence of a set of conditions widely diverse from region to region. For each region, the level of support is presented both for introduction and maintenance of organic farming, and in some cases a further sub-classification is available according to geographical areas within each region. Note that though we have tried to present data in order to have information on the lowest and highest level of support for the various crops in the different regions, such data should be considered as a basic reference, given that in many cases the overall support may be modified depending on the condition of the farmer (e.g. young farmers), on the characteristics of the farm (e.g. presence of livestock) or on specific non productive investments made in the farm. Finally, Figure 5-5 and Figure 5-6 show a graphical representation of the minimum and maximum level of support for organic arable crops.

Table 5-27: Organic farming premiums: Objective 1 Regions (€/ha)*

			Vine for common wine	Fruit trees	Olive	Arablecrops	Horticulture	Industrial crops	Forage crops	Maize	Seeds legumes
Basilicata	Introduc-tion		725	725	423	181	337		302	-	-
	Mainten-ance		652	652	381	163	303	-	272	-	-
Calabria	Introduc tion		900	450	426	158	500	-	150	-	-
	Mainten-ance		630	596	298	111	350	-	105	-	-
Campania	Introduc-tion	Plain	818	964	805	217	592	298	-	-	-
		Hill	972	813	605	217	-	355	-	-	-
		Mountain	964	564	662	217	-	371	-	-	-
	Mainten-ance	Plain	688	919	725	182	542	243	-	-	-
		Hill	842	769	525	182	-	300	-	-	-
		Mountain	834	519	582	182	-	316	-	-	-
Molise	Introduc-tion/ Mainten ance	Ordinary areas	-	750	480	262	420	-	215	-	430
		Preferential areas	-	900	576	314	504	-	258	-	516
Puglia	Introduc-tion		695	1127	402	140	328	268	-	-	-
	Mainten-ance		625	1014	335	117	295	241	-	-	-
Sardegna	Introduc-tion		615	807	496	***214***	600	368	219	327	245
	Mainten-ance		492	645	397	***172***	480	295	175	262	196
Sicilia	Introduc-tion / Mainten-ance	Ordinary areas	600	750	750	***400***	550	-	300	-	-
		Preferential areas	700	800	800	***500***	600	-	350	-	-

* Figures in bold and italic print indicate that the premiums refers to cereals only

Source: Gambelli (2003) based on ISTA data

Table 5-28: Organic farming premiums: Non-Objective 1 Regions (€/ha)*

			Vine for com. wine	Fruit trees	Olive	Arable crops	Horticultural	Industrial crops	Forage plants	Maize	Seeds legumes
Abruzzo	Intro./ Maint.	Ordinary areas	700	-	400	***200***	500	400	-	-	-
		Preferential areas	840	-	480	***240***	600	480	-	-	-
Emilia Romagna	Introduc-tion	Ordinary areas	625	750	469	156	390	296	156	-	-
		Preferential areas	750	900	562	187	469	356	187	-	-
	Mainten-ance	Ordinary areas	568	682	426	142	355	270	142	-	-
		Preferential areas	682	818	511	170	426	324	170	-	-
Friuli Venezia Giulia	Introduc-tion		800	-	540	500	600	-	300	-	-
	Mainten-ance		800	-	540	500	600	-	300	-	-
Lazio	Introduc-tion	Ordinary areas	770	770	390	***165***	600	330	165	-	-
		Preferential areas	810	810	460	***195***	600	380	195	-	-
	Mainten-ance	Ordinary areas	695	695	355	***150***	550	300	150	-	-
		Preferential areas	730	730	420	***178***	550	358	178	-	-
Liguria	Intro./ Maint.	Ordinary areas	795	980	780	***380***	600	-	267	-	-
	Intro./ Maint.	Preferential areas	900	1110	900	***430***	600	-	327	-	-
Lombardia	Introduc tion		-	815	-	***185***	-	-	221	-	-
	Mainten-ance		-	740	-	***170***	-	-	221	-	-
Piemonte	Introduc-tion	Ordinary areas	850	850	-	***220***	490	-	98	-	-
		Preferential areas	900	900	-	***240***	515	-	110	-	-
	Mainten-ance	Ordinary areas	700	700	-	***170***	460	-	85	-	-
		Preferential areas	750	750	-	***185***	463	-	93	-	-

* Figures in bold and italic print indicate that the premiums refers to cereals only

Table 5-28 (continued): Organic farming premiums: Non-Objective 1 Regions (€/ha)*

			Vine for common wine	Fruit trees	Olive	Arable crops	Horticultural	Industrial crops	Forage plants	Maize	Seeds legumes
Marche*	Introduction	Hill	585	585	660	*216*	616	204,6	286,66	271	-
		Mountain	710,6	858	550	*161*	616	155,1	231	199	-
	Maintenance	Hill	780	780	600	*196*	560	186	260,6	246	-
		Mountain	646	780	500	*146*	560	141	210	181	-
Toscana	Introduction		891	891	495	*297*	660	396	220	429	297
	Maintenance		810	810	450	*270*	600	360	200	390	270
Trentino	Intro./ Maint.	Province of Trento-ordinary	850	600	450	540	540	-	200	-	-
	Intro./ Maint.	Province of Trento-preferential	900	850	450	600	-	-	-	-	-
	Intro./ Maint.	Bolzano	900	900		600	600	600	600	-	-
Umbria	Introduction		880	882	550	495	594	0	297	-	-
	Maintenance		800	801	500	450	540	-	270	-	-
Valle d' Aosta	Introduction		900	380	-	400	302	-	332	-	-
	Maintenance			350	-	-	-	-	-	-	-
Veneto	Introduction		900	900	900	-	-	-	-	-	-
	Maintenance		810	810	810	-	-	-	-	-	-

* Figures in italics indicate that the premiums refers to cereals only

Note: (*) A further increase of 10% of the basic premium is available, in case are present at least two of the following conditions:
The farm land is in an park area;
presence of organic animal breeding in the farm;
adoption of non obligatory engagements reported in the interval of the present measure, or rather, adoption of a farm project for water management, or adoption of naturalistic techniques or implementation of new hedges;

The surface, object to the compensation falls back in an area of a high hydrological risk or an area with a high nitrate contamination, individuate in the Marche Region

Source: Gambelli (2003) based on ISTA data

Figure 5-5: Support for organic arable crops in Italian regions: maximum values

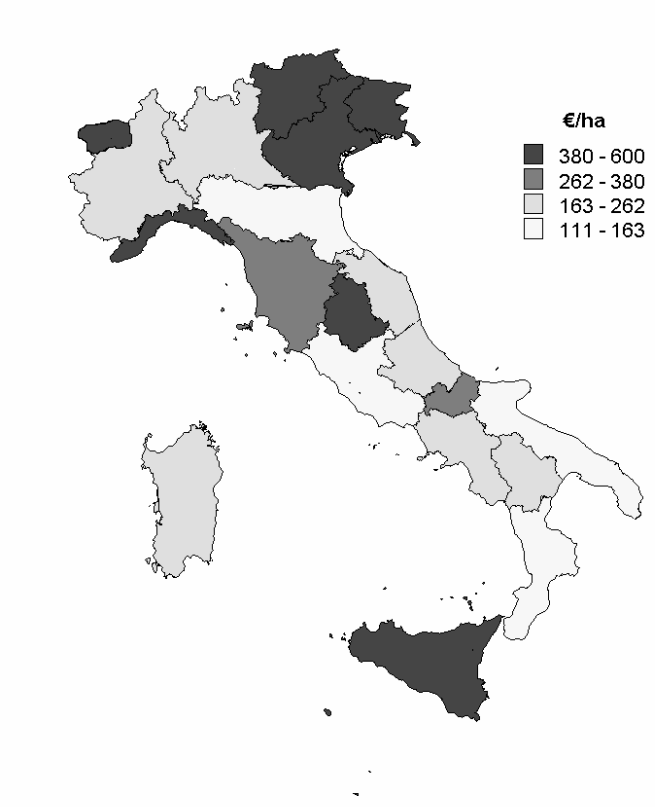
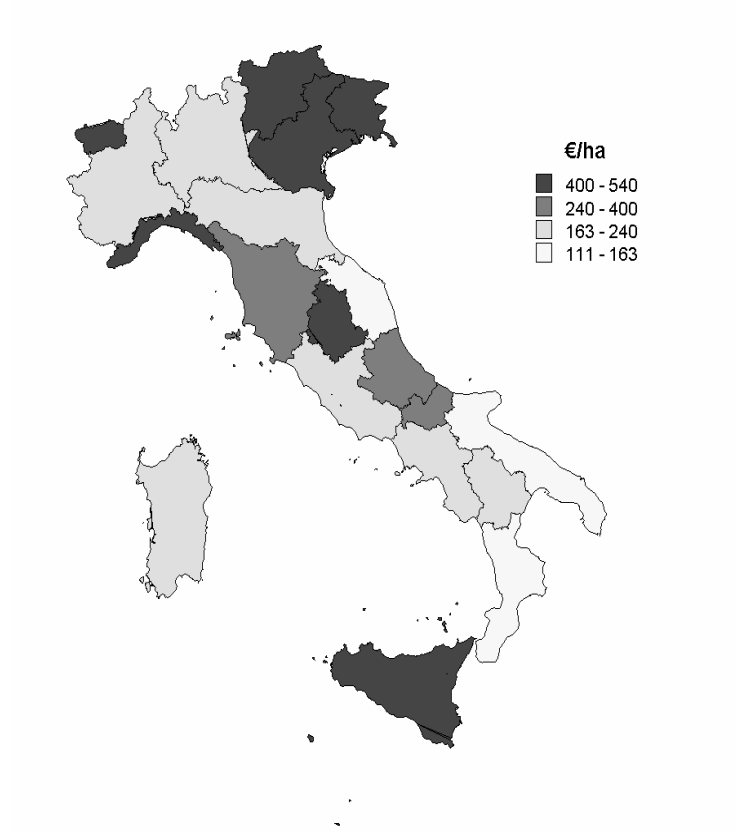


Figure 5-6: Support for organic arable crops in Italian regions: minimum values



5.5.2 Quantitative evaluation

5.5.2.1 Uptake of agri-environmental measures

Of the four sub-measures of measure F, only Sub-measures F1 (integrated farming) and F2 (organic farming) can be considered successful in terms of number of applications and of amount of funds allocated, and Marche Region has decided not to maintain years Sub-measures F3 and F4 for the next years.

Table 5-29 summarises the level of uptake of sub-measures F1 and F2 in terms of number of applications and hectares funded in year 2001 and 2002 (Regione Marche 2003).

The average per hectare premium is higher in the F1 Sub-measure. This is due to the different types of farms applying for funding under measure F: in fact, 45% of organic funded hectares refer to forages and pastures, that are extensive production for which the per hectare payment is considerably lower than for other crops. Furthermore, F1 applications are relatively higher for permanent crops, that receive high per hectare payments. In particular higher payments for integrated permanent crops are due to the higher incidence of the additional payments for environmental friendly activities, that are included in the total assigned public fund data. This means that integrated farmers have applied more for productive investments with respects to organic farmers, which leads also to an overall average payment per hectare slightly higher for integrated farming than for organic farming.

It is worth mentioning that the number of presented applications for Sub-measure F1 and F2 has been considerably higher than those actually funded, due to insufficient budget. For the next programming period, the overall amount of funds for organic farming will be substantially incremented, with 25 millions of euros extra budget allocated by the Marche region.

Table 5-29: Funded applications for agri-environmental measures (years 2001 and 2002)

Agri-environmental measures, data refers to applications funded in year 2001 and 2002		Accepted applications		Hectares funded		Average premium per ha (€)	Assigned public funds (000 €)	
		N°	%	ha	%		Total	of which EAGFL
Sub-measure F2 – organic farming	Annual crops: cereals, maize, sunflower, horticultural crops	363	35%	13,076	27%	361	4,726	2.363
	Permanent crops: fruits, olives, vine	205	20%	4,251	9%	332	1,409	705
	Other: forages and pastures	460	45%	31,286	64%	88	2,759	1.379
	Total F2	1,028	100%	48,612	100%	183	8,894	4.447
Sub-measure F1 - integrated farming	Annual crops: cereals, maize, sunflower, horticultural crops	300	34%	10,850	47%	160	1,741	870
	Permanent crops: fruits, olives, vine	460	53%	6,552	29%	369	2,419	1.210
	Other: forages and pastures	116	13%	5,553	24%	76	422	211
	Total F1	876	100%	22,956	100%	200	4,582	2.291
Total F1 + F2		1,904		71,568		188	13,476	6,738

Source: Regione Marche (2003)

5.5.2.2 Farm level evaluation of support of organic versus conventional farms

Per hectare payments indicated in Sub-measure F2 show a general advantage for organic farming with respect to conventional and integrated farming as well.

The implementation of the RDP in Marche region has increased the level of support for organic farming with respect to the previous Council Regulation (EC) 2078/92 regime, with the exception of sunflower and fodder crops (Table 5-30). The lower premium for fodder crops is justified by the necessity to correct the fact that in Italy more than 50% of organic land was dedicated to pastures and fodder crops, even if no livestock was present on farm. For sunflower the reason why premiums have been reduced could not be identified.

Table 5-30: Premiums for organic farming before and after the implementation of Marche RDP (regional averages €/ha)

Crop	2078/92	1257/99	1257/99 / 2078/92
Cereals excluding Maize	185	188	2%
Maize	185	235	27%
Proteins	275	393	43%
Sunflower	185	122	-34%
Horticultural	275	560	103%
Alternated forage (for rotation)[1]	185	139	-25%
Meadows and pastures[1]	275	26	-91%
Fruits	671	780	16%
Viticulture	568	758	33%
Olive	330	584	77%

[1] data do not consider livestock farms

Source: Zanoli (2002)

Though organic farming is receiving an increasing specific support in RDP, it must be noticed that if we compare organic support with the estimated income loss due to the switch from conventional to organic farming, in some cases premiums can not be considered a sufficient compensation. Table 5-31 shows the results of a simulation of the effects in terms of income per hectare of conversion to organic, based on FADN data for representative conventional and organic farms.

Table 5-31: Impact of conversion on revenues of farms in Marche (1999)

Crop	Estimated income loss due to conversion to organic without org. payments (€/ha)	Relative advantage organic /conventional (€/ha) including organic payments
Cereals excluding Maize	145	43
Maize	196	39
Proteins	369	24
Sunflower	78	44
Horticultural	2,615	-2,055
Alternated forage (for rotation)[1]	129	10
Meadows and pastures[1]	10	15
Fruits	698	82
Viticulture	868	-110
Olive	698	-115

[1] data do not consider livestock farms

Source: Zanoli (2002)

Though the organic sample is very small and not representative, results are nevertheless interesting. In particular, organic vegetables and fruit (including wine) seem still to receive insufficient compensation, though they represent crops whose demand is higher than supply. Furthermore, they are crops that could represent an interesting option for the agricultural sector of Marche, given the characteristics of the territory and the presence of consolidated wine production. The insufficient compensation under RDP for horticulture crops is determined by the ceilings that Regione Marche has in fixing the payments: organic fruit production receive the highest possible payment, and a further increase would be available only through government aids.

A further investigation based on "2002 FADN Database for Monitoring" shows a comparison of the overall support (i.e. total CAP and RDP payments) between organic and non organic farms (Table 5-32); note that non organic farms also include farms who receive payments for Sub-measure F1, i.e. agri-environmental measures for lower impact and integrated farming.

Table 5-32: Average total payment level for organic and non organic FADN farms in Marche, year 2002

Description of farms uptake of organic conversion	Total payments (€) per farm	Total payments (€) per ha	Total payments as % of Gross Income	Average total payments as % of Net Income	Average RDP payments as % of Net Income
Non organic	8,348	336	32%	63%	4%
Totally or partially organic and in conversion	15,036	481	39%	69%	23%
Of which:					
Partially organic, in conversion	17,862	678	54%	93%	43%
Partially organic, converted	16,589	391	39%	74%	16%
Partially organic converted and in conversion	17,733	426	34%	56%	9%
Totally organic, converted	7,960	429	28%	53%	22%

Source: INEA (2003)

Though the FADN database is not statistically representative, and covers only 88 organic farms, both converted and in conversion, the results show that organic farms receive on average higher per hectare total payments than non organic farms, with the exception of the category of totally organic that have still a part of UAA in conversion. It is also to point out that fully converted organic farms, despite the higher level of per hectare payment, show an incidence of payments with respect to gross farm income that is lower than non organic farms, due to the considerably higher gross income they obtain. Also, the share of net

income due to RDP payment is considerably higher. Note that for non organic farms RDP payments cover just 4% of net income vs. 23% of organic farms, showing again the favourite treatment of organic farming in the Marche accompanying measures regulation.

A further analysis limited to arable crops due to lack of more general data shows how CAP payments and RDP subsidies for organic crop may influence organic and conventional "average" farm in Marche. In Table 5-33 payments for the average Marche's organic farm refer to the highest available CAP payments and payments for maintenance of organic farming, (i. e. payments referring to plain and hill areas) and are compared with the maximum CAP payments for the same areas available for the average Marche's conventional farm. Note that data refer only to basic per hectare payments, hence excluding both possible integrations coming from the application of the non productive investments payments for organic farms (see Table 5-33), extra payments for specific farm location, and all the other possible payments RDP measures payments, which of course can be considered only case-specifically. Also, the unavailability of data on geographical farms location does not allow to consider the effects of LFA payments.

Table 5-33: Maximum average payments for conventional and organic "average" farm: arable crops

	Average Organic Farm			Average conv. farm
	CAP payments	Organic payments (RDP)	Total	CAP Payments
Durum wheat	128	107	235	520
Wheat	2.055	696	2.751	348
Spelt	25	21	45	-
Barley	168	141	309	124
Rye	42	35	78	13
Maize	152	77	229	120
Industrial crops	408	152	560	335
Fodder crops	2.351	1.969	4.319	900
Total payment per farm	5.327	3.197	8.525	2.360
Total per ha	352	211	564	299

Source: Gambelli (2003) based on ISTA data

Data show a total average payment per farm for arable crops considerably higher for the organic case: this is due both to scale factors (the average farm size is 15 ha for organic and 8 for conventional) and to structural factors. In fact, the different land use structure, strongly characterised by durum wheat production in the organic farm

determines high payments due to durum wheat extra payments of 344 /ha. This aspect is confirmed by per hectare payments that are higher for organic also at the CAP payment level. The difference of course increase when considering the organic payment level, that take the difference with respect to conventional per hectare payment to 265 €.

5.5.3 Conclusions and recommendations

5.5.3.1 Relative attractiveness of Marche Rural Development Plan measures for organic farming

The Marche RDP can be considered an overall positive environment for organic farming, not only for the specific support measures, but more in general for the emphasis put on the enhancement of product quality and on environment protection.

The success of al the agri-environmental measures in Marche's RDP is confirmed by the high number of applications for the organic farming measures: 1,028 application actually accepted for a total 48,612 ha, prevalently distributed in permanent pastures (45%) and annual crops (35%), with an average payment for organic farms of 188 €/ha.

The Rural Development Plan has generally increased the level of per hectare payment with respect to Council Regulation (EC) 2078/92, with the exception of sunflower, permanent pastures and alternated forage. The stronger increase (+106%) refers to payments for horticultural crops, but such improvement shows to be still widely insufficient to cover the income loss compared to conventional horticulture. Organic vine and olive production as well is not sufficiently compensated, showing a potential income loss around 110 €/ha.

The relevance of RDP payments in Marche for the economic sustainability of organic farming is confirmed by an analysis on FADN data showing that while the share of RDP payments with respect to net income for conventional farms is 4%, it ranges between 9% for partially organic converted and in conversion farms and 43% for partially organic, in conversion farms.

Besides specific support for organic farming, it is to point out that organic farms are proportionally more diffuse in mountain and internal areas, in many cases with large extensive livestock farm, hence indirectly being proportionally favoured by LFA per hectare payments.

5.5.3.2 Recommendations for improving Rural Development Plan measures for organic farming in Marche

Recommendations for improving organic farming policies under Marche RDP refer mainly to the necessities of interventions concerning three topics:

Demand side policies: The basic approach of Marche RDP for organic farming is to support only (and partially) the supply side, through incentives to organic production, or to investments and processing. This is an issue common to all Italian regions, where very little has been done to support or stimulate the demand of organic products. Demand support policies can be considered as a necessary complement, given that organic supply support alone might produce a decrease in organic prices (like happened for milk in Austria) to such an extent that organic farming is no longer profitable in relative terms. Demand support for organic products may be obtained through an increase in market transparency, which reduces the risk of frauds, simply introducing widespread information campaign for consumers, concerning the general characteristics and peculiarities of organic products.

Budget constraints for organic measures: the lack of funds for organic measures which has lead to only 50% of organic farming applications being accepted and subsidised in the current year: many organic farmers are really facing bankruptcy, since in most cases (i.e. marginal areas) conventional farming is no longer a viable alternative for most of them. This situation has pushed the Marche regional government to make a clear stance on organic farming, by raising funding of the organic (F2) measure to 25 millions euros, and by **deleting** the low-input farming measure (F1). This clear-cut decision is expected to have significant impact on the uptake, but if it is not coupled with market and demand management policies it could have negative impact on organic farmers profits by depressing organic farm-gate prices.

Technical assistance: Regional authorities should also support specific technical assistance for organic farming, which is substantially inexistent in Marche (and Italy), and leads to dangerous distortions[17]. The Marche organic farmer association (AMAB) considers minimal to have at least 2 advisers per province (for a total of 8 technical advisors). A specific measure could be studied in this direction, while strengthening the farmer's education with courses for farmers and technicians, and, very important, with scholarships for farmers and advisers in order to get specific training at Italian or foreign universities or research institutions.

[17] It is common knowledge that inspectors, which often are free-lance consultants of inspection bodies, offer technical advice to organic farms, mixing advice and inspection services, although this is expressly forbidden by EU regulations

5.6 Germany (Baden-Württemberg)

In Germany, all *Bundesländer* implement individual Rural Development Plans as the natural as well as the political conditions for agriculture vary widely. The German framework regulation specifies five priorities of action: 1) improving rural structures, 2) improving production and marketing structures, 3) sustainable farming, 4) forestry and 5) coastal protection.

Baden-Württemberg, as one of the German Federal States has been selected for this study as it is the region with the longest tradition in organic farming in Germany, has a high share of organic farms and organic land area, as well as an established organic food industry.

In Baden-Württemberg, the Rural Development Regulation is implemented through the "Maßnahmen- und Entwicklungsplan Ländlicher Raum Baden-Württemberg" (MEPL). Total expenditure of this programme is 1,888,67 million euro (2002-2006), including an EU contribution of 763 million euro from the European Agricultural Guidance and Guarantee Fund, Guarantee Section. The objectives of the RDP are supported via two main priority areas with thirteen different measures (MLR 2000).

Table 5-34: Priorities, measures and expenditure of the Baden-Württemberg Rural Development Programme (in 2002)

Priorities / Measures	Total expenditure in Million €	Budget share
Priority I: Structural Improvements		
Agricultural investment support	170.8	37%
Young farmers	21.1	5%
Reparcelling	8.2	2%
Processing and marketing	38.0	8%
Marketing high quality products	1.7	0%
Less Favoured Areas	53.6	12%
Countryside development programme	24.0	5%
Innovative measures for women in rural areas	0.46	0%
Priority II: Agri-environmental measures and forestry		
MEKA	122.7	26%
Nature and landscape conservation	7.68	2%
Nature parks	1.67	0%
Forestry	6.00	1%
Other silvicultural measures	7.8	2%

Source: MLR (2000)

In budgetary terms, support for Nature conservation, Less Favoured

Areas support and for agricultural investment support are the most important.

5.6.1 Descriptive and qualitative evaluation

5.6.1.1 Agri-environmental Programme (MEKA)

The agri-environmental programme of Baden-Württemberg is called MEKA (Marktentlastung und Kulturlandschaftsausgleich). It was adopted in 1994 and amended in the year 2000. It was originally installed as an EU pilot project in 1992. It is taken as an example for the implementation of other agri-environmental programmes in Germany.

In 2001, 55% of total UAA were managed under the MEKA I or II programme (up to 2003 MEKA I and II ran parallel), and 82% of all farms in Baden-Württemberg participated in at least one MEKA-measure (MLR 2000). In 2003, 148.3 million euro will be expended on MEKA, in 2002 145.3 million euro were expended.

Payment levels for the single MEKA-measures are given in Table 5-35, the possible combinations of measures in Table 5-36. The resulting uptake of single measures is given in Table 5-37 for MEKA I and MEKA II measures in 2002 to provide an overview of the importance of different measures.

Table 5-35: Payment levels for the single MEKA-measures (€/ha)

Measure	Conventional	Organic
Soil analysis		
analysis of liquid manure (whole farm payment)	30	30
arable land	20	20
grassland	10	10
Environmental friendly farmyard manure management		
documentation (whole farm payment)	100	100
arable land	40	40
grassland	40	40
Control and survey mycosis (wine)	50	50
Basic payment (grassland)	90	90
Stocking density 0.5 - 1.4 LU/ha forage area	40	-
Grassland with high species diversity	50	50
Organic farming		
certification (whole farm payment)	-	40
arable land	-	170
grassland	-	130
permanent crops	-	600
Abandonment of pesticides		
arable land	80	-
grassland	80	-
permanent crops	80	-
Mulching end of Februay (arable land)	110	110
Mulch sowing (arable land)	60	60
17 cm seeding row (cereals)	60	60

Source: MLR (2000)

Table 5-36: Possible combinations of measures in MEKA

	Nr.	A	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	E1	E2	E3	E4	E5	E6	F	G
Nr.	Measure	Farm audit (env.)	Extensive grassland management (nine measures)	Stocking density 0.5 - 1.4 GVE/ha forage area (grassland)	Steep grassland	Grassland with high species diversity	Extensive grassland-management (ecological relevant areas, habitats, protection of species)	"Streu-obst"	Conservation of zoned steep viticulture	Endangered breed (domestic animals)	Aban-donment herbicides	Organic cultivation	Abandonment of plant growth regulators	Nreduc-tion 20%	Green cover	Mulch sowing (arable land)	Abandon-ment herbicides	17 cm seeding row (cereals)	Application of biological/ biotechnical pest control practices	Conser-vation of protected habitats
A	Farm audit (environment)																			
B1	Extensive grassland management	+																		
B2	Red. livestock density***	+	+																	
B3	Steep grassland	+	+	+																
B4	Grassland with high species diversity	+	+	+	+															
B5	Extensive grassland-management	+	+	+	+	+														
C1	"Streuobst"	+	+	+	+	+	+													
C2	Conservation of steep viticulture	+	o	o	o	o	o	o												
C3	Endangered species (domestic)	o	o	o	o	o	o	o	o											
D1	Abandonment pesticides	+*	+	+	+	+	+	+	+	o										
D2	Organic cultivation	+*	+	-	+	+	+	+	+	o	-									
E1	Abandonment of plant growth reg.	+	o	o	o	o	o	+	o	o	-	-								
E2	N reduction 20%	+	-	-	-	-	-	+**	-	o	-	-	+							
E3	Green cover	+	o	o	o	o	o	+	+	o	+	+	+	+						
E4	Mulch sowing (arable land)	+	o	o	o	o	o	+	o	o	+	+	+	+	+					
E5	Abandonment of herbicides	+	o	o	o	o	o	+	+	o	-	-	+	+	+	+				
E6	17 cm seeding row (cereals)	+	o	o	o	o	o	+	o	o	-	-	+	+	+	+	+			
F	Biological/biotechnical pest control	+	o	o	o	o	o	+	+	o	-	-	+	+	+	+	+	+		
G	Conservation of protected habitats	-	-	-	+	-	-	-	-	o	-	-	-	-	-	-	-	-	-	

+ cumulating possible, - cumulating not possible, o - cumulating not relevant, * combination not possible with support of beneficial insects by prognoses and beneficial insect conserving pesticides in fruit production, 4-step crop rotation, ** only on arable land, ***0.5 - 1.4 LU/ha forage area (grassland), 1 ecological relevant areas, habitats & protection of species

Source: MLR (2000)

Table 5-37: Uptake of MEKA measures in 2002[18]

Measure		Participating farms	UAA (ha)	Farms (%)	UAA (%)
Abandonment of chemical inputs (organic farming)	MEKA I	1,504	67,058	1,98%	1,03%
Mulch sowing (arable area)	MEKA I	2,531	54,589	3.3%	3.7%
Vorderwälder cattle	MEKA I	2,646	19,881	3.5%	1.3%
17 cm seeding row (cereals)	MEKA I	3,435	67,058	4.5%	4.6%
Maintenance of "Streuobstbeständen"	MEKA I	4,307	5,373	5.7%	0.4%
Pheromones in viticulture	MEKA I	5,451	14,105	7.2%	1.0%
100% Greening /Grassland	MEKA I	6,047	42,207	8.0%	2.9%
Abandonment of growth regulators wheat	MEKA I	11,750	69,653	15.5%	4.7%
Abandonment of growth regulators rye	MEKA II	2,417	6,780	3.2%	0.5%
Abandonment of chemical inputs (organic farming)	MEKA II	3,128	36,126	4.1%	2.5%
Reduction of N fertiliser by 20%	MEKA II	3,197	105,232	4.2%	7.1%
Inclination > 35% (part of extensive grassland)	MEKA II	4,279	13,020	5.6%	0.9%
Autumn greening 70%	MEKA II	4,389	17,562	5.8%	1.2%
Analysis of N content of liquid manures	MEKA II	4,557	4,613	6.0%	0.3%
Mulch sowing (arable area)	MEKA II	4,784	63,198	6.3%	4.3%
Abandonment of herbicides	MEKA II	5,736	24,862	7.6%	1.7%
Stocking density 0.5-1.4 (part of extensive grassland)	MEKA II	7,241	135,298	9.5%	9.2%
Advice on fertilisation (according to administrative norms)	MEKA II	7,469	103,014	9.8%	7.0%
Soil sampling N-fertilisation	MEKA II	7,854	23,160	10.4%	1.6%
17 cm seeding row (cereals)	MEKA II	8,253	126,614	10.9%	8.6%
Species diversity (part of extensive grassland)	MEKA II	9,197	65,881	12.1%	4.5%
Abandonment of growth regulators wheat	MEKA II	9,589	55,661	12.6%	3.8%
Crop rotation (min. 4 crops)	MEKA II	9,934	276,902	13.1%	18.8%
25% - 35% inclination (part of extensive grassland)	MEKA II	10,230	34,770	13.5%	2.4%
Documentation of farming practices	MEKA II	10,523	10,595	13.9%	0.7%
Autumn greening 100%	MEKA II	15,316	115,848	20.2%	7.9%
"Streuobst"	MEKA II	18,952	28,315	25.0%	1.9%
Extensive grassland (total)	MEKA II	32,961	450,732	43.5%	30.6%

Source: MLR (2000)

[18] Only measures considered with an uptake >3% of all farms and the organic farming measure.

5.6.1.2 Other measures

5.6.1.2.1 Agricultural investment support

The agricultural investment support programme „Agrarinvestitionsförderungsprogramm“ is divided in two sub-measures: i) investment support and ii) regional development. The investment support programme provides for grants and reduced interest loans for farms. Measures for energy saving and reorganisation, biomass systems, direct marketing and accommodation are implemented within this measure.

The sub-measure “regional development” provides for environmental friendly farming and adequate animal housing, as well as the reduction of agricultural emissions. For example, investments in machinery for mechanical weed control, conservation tillage and erosion control measures are supported. Thus, this sub-measure can be of advantage for organic farming although not specifically mentioned.

5.6.1.2.2 Young farmers, reparecelling and innovative measures for women in rural areas

These measures are not bound to a certain farming system and no indirect difference between organic and conventional farming can be found.

5.6.1.2.3 Processing and marketing

The measure “processing and marketing” supports marketing initiatives, which are concerned with processing and marketing of organic or regionally grown agricultural products. This measure provides for investment-aid in acquisition, stocking, cooling, sorting, market-driven preparation, packing, labelling, treatment and processing of organic or regionally originated agricultural products.

The purpose of the promotion of organic products is the concentration of supply (concentration of disposal, cooperation, tie-ups), technical progress for improved marketing efficiency, technical progress for improvement of quality and durability. This represents a certain privilege for organic farming.

5.6.1.2.4 Marketing high quality products

This measure is implemented via two sub-measures: 1) marketing concept concerning organic or regionally originated agricultural products and 2) the advancement of market structures concerning high quality products.

Sub-measure 1 support offers market analyses, development plans, advisory services and planning of marketing initiatives as well as constructive training concerning organic or regionally originated agricultural products.

Sub-measure 2 supports the advancement of market structure concerning high quality products, such as: i) integrated production, ii) regionally typical production and processing methods, iii) traditional production methods, iv) improved or innovative production methods, v) production methods with clear positive impacts for environment, animal welfare or hygiene.

The promotion of organic products in this measure can be seen as a certain privilege for organic farming systems although allowed subsidy levels are non-discriminating between different measures.

5.6.1.2.5 Less Favoured Areas

Within the RDP for Baden-Württemberg 19.9% of funds are dedicated to the LFAs in the year 2002, which applies to 62% of the UAA of Baden-Württemberg (MLR 2000). Payments vary from 50 €/ha to 178 €/ha and depend on the location of the farm and soil conditions. The subsidy is based on the area. Payments are made for arable forage and grassland, whereas intensive crops such as sugar beets or horticultural crops are excluded. If payments are made for livestock, livestock density is limited to one LU per forage area. Thus, payments do not specifically address organic farming but organic farms may benefit indirectly. Furthermore, a maximum of 20 dairy cows can be supported per farm thus favouring small farms.

5.6.1.2.6 Countryside development programme

The countryside development programme "Entwicklungsprogramm Ländlicher Raum" (ELR) supports the conservation and creation of employment by establishment of small businesses. The measures provides for grants and interest reduced loans. Improvement of working and living conditions, countering the migration and absorbing the structural change in rural areas is the aim of this measure.

5.6.1.2.7 Forestry and other silvicultural measures

The priority "forestry" concentrates on natural management techniques to improve the conservation and ecological role of forests. A measure to support the extension of forests (conditional on planting certain numbers of deciduous trees) also exists. Premia are paid for income losses due to afforestation of agricultural areas. The measure "other silvicultural measures" is mainly designed for emergency aid for forestry.

5.6.1.2.8 Environment protection

Nature protection

This measure is implemented by the "Landschaftspflegerichtlinie" (LPR). This priority supports nature protection measures, nature conservation contract schemes, biotope and landscape conservation schemes, and land buying for nature protection purposes and other services (management, monitoring, evaluation and survey of nature protection measures). This applies to the following areas: nature conservation areas, landscape protection measures, natural heritage areas, natural heritage as single structure, §24a-Biotop according to nature protection legislation, protected vegetation, Natura-2000-areas incl. waters, areas with integrated nature protection concepts (e.g. Plenum), riparian strips, networks of biotops or concepts to assure minimum area and "other areas", e.g. project for species protection or surrounding areas.

The sub-priority “other services” offers the support of marketing concepts and improvement of market structures for organic or regionally originated high quality products. These products have to be produced in one of the aforementioned nature protected areas. Support contains market analyses, development plans, advisory services and planning of marketing initiatives as well as constructive training concerning organic or regionally originated high quality products (MLR 2000).

Natural parks

This measure supports the maintenance of landscape and biotope, species protection, public relations measures and development concepts for integrated and environmentally sensitive development of rural areas in nature parks, as well as educational events and organisations with a focus on nature, forestry. Furthermore, the development of an integrated environmentally sensitive tourism is supported, as well as improvement and maintenance of cultural heritage sites in rural areas.

5.6.2 Quantitative evaluation

In Baden-Württemberg 2,900 organic holdings (3.82% of all farms) farmed 5.29% of total land area in the year 2000 (Eurostat 2003).

According to a survey by Nieberg and Lütteken (2003), in the year 2000, 6,881 million euro were spent on organic farming under Council Regulation (EC) 1257/99 and 5,070 million euro under Council Regulation (EC) 2078/92, of which 50% was financed by EU funds and 50% by Federal and Baden-Württemberg funds. In total, 40,000 euro were expended on marketing measures and 150,000 euro on investment measures under the processing and marketing measure. Within the marketing of high quality products 55,000 euro was expended on the “Streubost” measure on organic farms. Additionally, organic farmers organisations received a total of 235,000 euro and 13.5 advisors working full-time with organic issues are financed (Nieberg and Lütteken 2003).

As no FADNdata was available for Baden-Württemberg model calculations were used to demonstrate the potential difference in payments to organic and conventional farms. Based on organic and conventional farm structure in 1999 (Statistisches Landesamt Baden-Württemberg 2001) (Table 5-38), in Baden-Württemberg, potential payment levels for regional average organic farms (Table 5-39) participating in MEKA II were compared with potential payment levels of conventional farms (Table 5-40). Calculations are based on the assumption that farmers optimise their mix of support measures to receive the maximum absolute amount of revenues from subsidies. All clearly identifiable land uses are considered: arable land, cereals, total grassland and permanent crops, as well as whole farm payments (e.g. certification support). All possible combinations of measures were considered. Measures referring to regional specifics, such as farming of moorland, nature protected areas, etc. were neglected.

Table 5-38: Land use of regional average organic and conventional farms in Baden-Württemberg

	Conventional	Organic
Arable	57 %	45 %
Grassland	39 %	52 %
Permanent Crops	3 %	3 %

Source: Eichert and Häring (2003) based on Statistisches Landesamt Baden-Württemberg (2001)

The regional average organic farm receives more payments per hectare than the regional average conventional farm (+70 €/ha) (Table 5-39 and Table 5-40), mainly due to higher payments for organic arable and grassland.

Table 5-39: Payments under the agri-environmental programme MEKA II for organic farms: Model calculations based on regional average farm (€/ha) in 1999

Measure	ha	€/ha	Total
Soil analysis (arable area)	10	10	100
Soil analysis (grassland)	10	30	300
Basic payment (grassland)	13.9	90	1,251
Organic cultivation (arable area)	12.2	170	2,074
Organic cultivation (grassland)	13.9	130	1,807
Organic cultivation (permanent crops)	0.8	600	480
Mulch sowing (arable area)	12.2	60	732
17 cm seeding row (cereals)	5.5	60	330
Certification	10	40	400
Total payments per farm			7,474
Total payments per ha	26.9		278

Source: Eichert and Häring (2003) based on Statistisches Landesamt Baden-Württemberg (2001), BfN (2003).

Table 5-40: Payments under the agri-environmental programme MEKA II for conventional farms: Model calculations based on regional average farms (€/ha) in 1999

Measure	ha	€/ha measure	Total
Soil analysis (arable area)	10	10	100
Soil analysis (grassland)	10	30	300
Basic payment (grassland)	7.6	90	684
Stocking density 0.5 – 1.4 LU/ha forage area	7.6	40	304
Abandonment of pesticides and synthetic N-fertilizer	19.4	80	1,552
Mulch sowing (arable area)	11.2	60	672
17 cm seeding row (cereals)	7.1	60	426
Total payments per farm			4,038
Total payments per ha	19.4		208

Source: Eichert and Häring (2003) based on Statistisches Landesamt Baden-Württemberg (2001), BfN (2003).

5.6.3 Organic farming support within the agri-environmental measures in Germany

The most important support for organic farming is allocated within the agri-environmental measures. These are designed quite differently in the various Bundesländer. For example, some Bundesländer have a special measure for continuing organic farming on grassland while others do not implement such a measure. A quantitative comparison (payment levels) of measures is therefore not possible.

In an attempt to give a first indication of the attractiveness of measures, despite a lack of comparable information on the net-benefit of measures Bichler (2003) compared the average potential support received by organic farms with that received by conventional farms for participating in comparable agri-environmental measures for each Bundesland as explicated in section 5.6.2. The sum of payments of possible measures for organic and conventional farms is given in subsidies (€) per hectare (Figure 5-7). For confidentiality reasons due to sample size, this calculation was not possible for the Bundesländer Bremen, Hamburg and Berlin.

According to these model calculations in all Bundesländer it may be financially more attractive to participate in the regional organic farming scheme than in a range of agri-environmental measures. However, these absolute payment levels do not necessarily seem to determine the uptake or existence of organic farming (Figure 5-8). Similarly, support for continued organic production methods in grassland was compared with support for general extensification measures, which refer mainly to livestock density indicators (roughage consuming livestock per total forage area) (Figure 5-9). In more than half of the German Bundesländer agri-environmental measures applicable to grassland tend to benefit

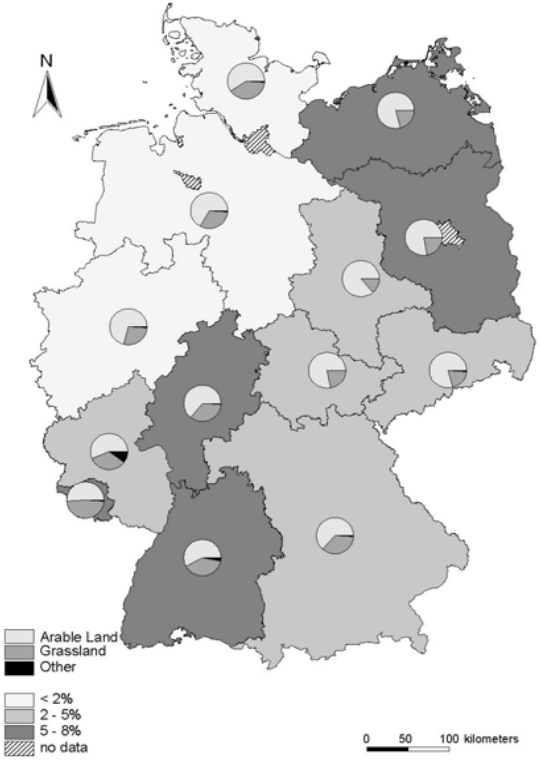
conventional grassland more than organic grassland (Figure 5-9). This is reflected in Figure 5-10, where only in some regions a design of agri-environmental programmes beneficial to organic production actually results in higher shares of organic grassland (Baden-Württemberg, Hessen).

Thus, although payment levels are assumed to have an important influence on conversion rates, other motivations are also possible: i) political climate towards organic farming, farmers confidence in political action (Zanoli et al. 2000); ii) support of organic farming in the past, iii) tradition (e.g. in Baden-Württemberg there is a traditional idea of organic Farming), iv) total support levels, v) natural conditions, vi) land use.

Figure 5-7: Difference in support levels (€) for average organic regional farms and conventional regional farms participating in comparable agri-environmental measures Council Regulation (EC) 1257/99 in 2001

Source: Bichler (2003) based on StatistischesBundesamt (2001), BfN (2003)

Figure 5-8: : Organic land area as percent of total UAA (year 2001) and land use shares (1999)

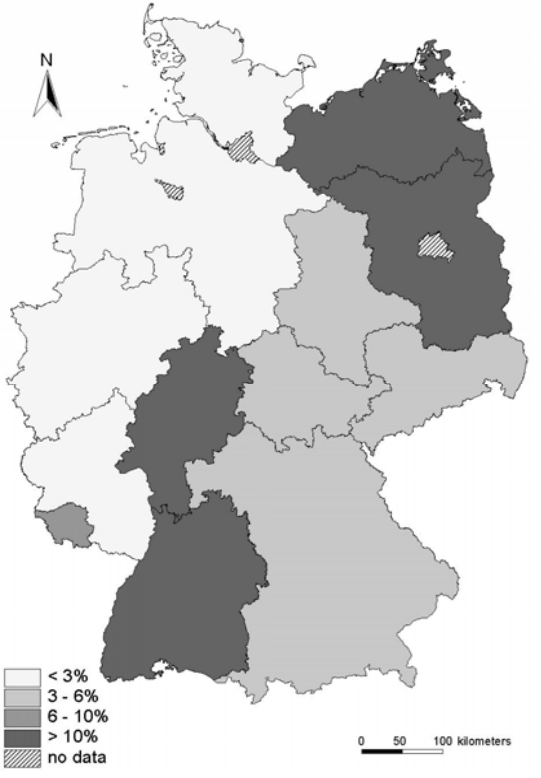


Source: Bichler (2003) based on Statistisches Bundesamt (2003)

Figure 5-9: Difference in support levels (€) for agri-environmental measures for conventional and organic grassland in 2001

Source: Bichler (2003) based on Statistisches Bundesamt (2003), BfN (2003)

Figure 5-10 : Organic grassland in % of total grassland in 2001



Source: Bichler (2003) based on Statistisches Bundesamt (2003)

5.6.4 Conclusions and recommendations

5.6.4.1 Conclusions

In Germany, all *Bundesländer* implement individual Rural Development Plans. Baden-Württemberg was selected as case *Bundesland* for Germany as it is the region with the longest tradition in organic farming in Germany with a high share of organic farms and organic land area and a well established organic food industry.

In Baden-Württemberg, 1,888,7 million euro is spent on the RDP "Maßnahmen- und Entwicklungsplan Ländlicher Raum Baden-Württemberg" between the years 2000 and 2006. The objectives of the RDP are supported via two main priority areas with 13 different measures.

Qualitative analysis of the RDP has shown that only the measures “Agricultural investments”, “Processing and marketing”, “Marketing of high quality products” address organic farming with specific support measures but differences in support levels cannot be identified. The most attractive measures for organic farming are those implemented under „Agri-environmental Programme “MEKA” via area payments.

The measure “Nature Protection” provides for market analyses, development plans, advisory services or marketing initiatives, specifically mentions organic farming but does not discriminate in terms of subsidy levels.

The other measures within the RDP do not provide a special treatment of organic farming in terms of specific or additional support, in particular the measures “Less Favoured Areas”, “Young Farmers” and “Reparcelling”, and “Countryside Development Programme”.

Thus, most of the RDP measures still bear the potential for a more targeted support of organic farming.

Quantitative analyses demonstrate, that on average, in Baden-Württemberg organic farms potentially receive higher payments than conventional farms as measures for grassland and for arable land support organic farming via higher area payments. However, these data refer only to the absolute payment levels and not to the net-benefit of measures which would have to also take the costs of the implementation of different measures into account. A similar analysis of all Bundesländer in Germany showed that only in all Bundesländer, it may be financially more attractive to participate in the regional organic farming scheme than in a range of agri-environmental measures. Similarly, in more than half of the Bundesländer agri-environmental measures applicable to grassland tend to benefit organic grassland more than conventional grassland.

5.6.4.2 Recommendations

In Baden-Württemberg, nearly all measures still bear the potential for a more targeted support of organic farming. Areas were specific support with higher subsidy levels to organic farming seems justified and particularly relevant are:

- investment support for housing and machinery,
- support to develop specific market channels,
- improved options to combine other agri-environmental measures with organic farming measures.

5.7 Spain

5.7.1 Descriptive and qualitative evaluation

5.7.1.1 Priorities

Rural policies in Spain are mainly based on the Integrated Operative Program, and on the Rural Development Plan. Within such framework the main themes considered are:

- improvement of farm structure,
- early farmer retirement,
- aids for young farmers,
- compensatory payments for LFAs,
- afforestation of agricultural land,
- agri-environmental measures.

Spain has decided to adopt a “horizontal approach” to rural development policies, which means that there is a common set of rules that can be considered as essential for a sustainable development of agriculture and rural development, and that are applied in the same way in all autonomous communities, to ensure that all farmers are equally treated, wherever they live and work. Each autonomous community is responsible for the management and implementation of their programme, under co-ordination of the national central administration. It refers to all rural areas in Spain apart from Navarre and the Basque Country, which will part-finance the measures with their own resources. This programme completes the package of rural development measures programmed at regional level, which also includes the horizontal programme 2 (limited to certain regions only).

The horizontal measures are designed to promote sustainable development in the Spanish countryside by improving both the conditions of production and agricultural infrastructure and providing for environmental protection.

Total public funding for the programme will amount to 3,132,081 €, with 2,222,856 € provided by the European Community through the

Guarantee Section of the EAGGF (European Agricultural Guidance and Guarantee Fund).

The main goals are to rationalise the use of inputs; make holdings more viable; reorganise the sectors of production and improve quality of life and nature conservation.

5.7.1.1.1 Improvement of farm structure

Actions supported are those referring to:

- Interventions aimed to improve farmers living conditions, improve production quality, or the hygiene of livestock.
- Investments for crops or livestock.
- Mechanisation and farm equipment.
- Plantation of ligneous crops.
- Acquisition of specific livestock species for reproduction.

Supports are in the form of:

- Direct support for 15-20% of the investments made.
- Investments financing with low interest loans (1,5 – 0%).
- Aids for investment depreciation recovery.

5.7.1.1.2 Young farmers aids

Support payments are basically a lump sum of 15,025 € per farm, or alternatively a 100% reduction of interests on loans of a total actualised value up to 15,025 €. No differences are considered between organic and conventional; this measure may indirectly favour organic farmers given their relatively younger age on average with respect to the conventional ones.

5.7.1.1.3 Less Favoured Areas

These payment are intended to help producers facing difficult farming conditions in Less Favoured Areas to maintain sustainable agricultural systems. Different allowances are available depending on the specific situation in three types of area:Mountain Areas, areas under risk of depopulation, and areas with special difficulties (a highly vulnerable environment or with a high ecological value).

Payments are not differentiated between organic and conventional. They are as follows:

- Minimum payment per farm: 300 €;
- Maximum payment per farm: 2,000 €;

- Basic payments are: 75 €/ha forMountain Areas;
  45 €/ha for areas under risk of depopulation;
  120 €/ha for areas with special difficulties.

LFA cover large part of Spanish territory, taking up 80% of the land on which 38% of the population live (Star Committee 2000), so they are not indirectly in favour of organic farming. For the period 2000-2002 Table 5-41 presents the results of approved applications for LFAs.

Table 5-41: Approved applications for LFAs in Spain

	Number of applications	Total payments (1000 €)
2000	135,290	56,659.18
2001	114,594	151,395.95
2002	103,296	86,138.67

Source: MAPyA (2003a)

5.7.1.1.4 Early retirement

Assistance for early retirement (linked to the start-up assistance for young farmers available under horizontal programme 2) is designed both to renew the agricultural workforce and make holdings more viable through rationalisation, consolidation and improvements in skills levels.

The quantified programme objectives are as follows: providing agri-environmental premiums for 179,000 producers occupying a total of 2.9 million ha; reafforestation of 150,000 ha of agricultural land (involving 14,000 beneficiaries); compensatory allowances for 150,000 farmers occupying 12 million ha together with a 10 % increase in the reference income; early retirement for 12,000 farmers, transfer to new owners of 180,000 ha of land, the creation of 8,000 economically viable new holdings and the preservation of 16,000 jobs. No significant advantage for organic farming may be envisaged.

5.7.1.1.5 Afforestation of agricultural land

This measure will help to combat soil erosion and desertification and is particularly important for farming and the environment in Spain. It will also help holdings to diversify without producing products that are in surplus. The national plan for afforestation approved for the 1994-1999 period meant that 450,000 ha of agricultural land could be planted with trees and 173,000 ha of forest improved on agricultural holdings. There were 35,000 beneficiaries, giving an average of 13 ha per beneficiary. The Community contribution over the period amounted to € 589 million. The measure was nevertheless highly successful. Afforestation was highly significant in Andalusia (135,000 ha), Castilla la Mancha (75,000 ha), Castilla Leon (94,000 ha) and Extremadura (52,000 ha). The Spanish authorities emphasise the importance of this programme in increasing hill forests and thus contributing very effectively to combating erosion and desertification. They want to continue the work done in the previous period along the same lines, taking into account the experience gained, by stating that the “weight of the past” (significant financial amount paid

for the compensation subsidy for loss of income over 20 years as a result of the afforestation of 450,000 ha) will require the number of afforested hectares to be reduced compared with the previous period. No specific advantages for organic farming can be considered.

5.7.1.1.6 Agri-environmental measures

The agri-environmental Priority considers measures that the region **must** include in the rural development plan. The centrepiece of the programme is a package of agri-environmental measures and premiums, designed to promote economically viable farming in harmony with the environment. Specific support measures for organic farming are embedded in the Agri-environment measure, and will be discussed in detail in what follows.

5.7.1.2 Agri-environmental measures specifically relevant for organic farming

The aim of agri-environmental priority is to obtain production systems suited to the needs of environmental conservation and to make economic management and conservation of natural resources compatible.

They are intended to have the following effects:

- encourage less intensive cereal production and the use of traditional fallow periods and crop rotation (cereals/sunflower);
- reduce the use of chemical fertilisers and plant-health products and provide assistance for organic farming;
- combat erosion, prevent fires and maintain wasteland; encourage cultural practices that protect flora and fauna in humid areas;
- encourage better husbandry of irrigation water;
- promote the integrated management of holdings to help preserve agri-sylvo-pastoral systems, preserve endangered indigenous species and promote ecological livestock farming.

Rationalising inputs (Measure 3)

Organic farming is specifically ruled in sub-measure 3.3 of the agri-environmental priority, referring to Measure 3: rationalising inputs, that considers in general the introduction of crop practices that reduce the polluting effects of soil and water through a verifiable reduction in chemical products, and is structured as follows:

- **Sub-measure 3.1 - Integrated control:** Substitution of 50% of application of chemical products with natural products of vegetal origin, useful insects, sexual confusion etc.. This sub-measure considers also the necessity of avoiding treatments immediately before product commercialisation, and requires analysis of residuals in the final production.

- **Sub-measure 3.2 - integrated production:** a national technical committee will supervise actual uptake of integrated production management. Also, a 30% reduction in chemical treatment is required, and crop rotation schemes must be adopted. The integrated production scheme must be adopted for all the land area dedicated to the same cultivar.
- **Sub-measure 3.3 - organic farming:** the regulatory framework for organic farming according to Reg 2092/91 applies entirely. Applicants must prepare a farming planning scheme for the entire farm area, and must be member of Consejo Regulador de Agricultura Ecològica in the Autonomous Community he belongs to. Furthermore, applicants must accept controls from a certification and control body, and accept to make analysis on the final production obtained.

Table 5-42 shows the premiums referring to measure 3: subsidies are computed as a general rule on the basis of the loss of income and additional costs caused by using agri-environmental practices with regard to the usual good farming practices, to which is added, if necessary, and on documentary evidence, a maximum incentive factor of 20%, which is specified in the plan.

Table 5-42: Payments for implementation of measure 3 sub-measures 3.1, 3.2, and 3.3 (€/ha)

Crops	Integrated control 3.1	Integrated production 3.2	Organic farming 3.3
Arable crops (not irrigated)	53	56	92
Arable crops irrigated	85	93	135
Fruit trees (not irrigated)	70	74	119
Fruit trees	141	153	256
Fruit trees (nuts)	177	198	364
Olives	124	147	267
Horticultural plants	198	213	258
Horticultural plants in greenhouse	420	481	505
Grapes	343	388	496
Grapes (wine production)	148	160	228
Citrus	273	346	468

Source: MAPyA (2003b)

Table 5-43: Comparison among measure 3 payment levels: Sub-measure 3.3 (organic farming) = 100

Crops	Integrated control 3.1	Integrated production 3.2
Arable crops (not irrigated)	58	61
Arable crops irrigated	63	69
Fruit trees (not irrigated)	59	62
Fruit trees	55	60
Fruit trees (nuts)	49	54
Olives	46	55
Horticultural plants	77	83
Horticultural plants in greenhouse	83	95
Grapes	69	78
Grapes (wine production)	65	70

Source: MAPyA (2003b)

Table 5-43 shows that organic premiums are particularly higher than those for integrated control and integrated farming for what concerns olives and fruit in general, that are almost double for organic farming. More similar payments are those referring to horticulture, and to a lesser extent to grapes.

Organic livestock is specifically considered under sub-measure 9.3, that is part of measure 9 "integrated farm management", whose other sub-measures are as follows:

9.1: Improvement and conservation of the physical environment (actions in agri-sylvo-pastoral systems, i.e. pasture areas, "rastrojos" (stubble) areas, "dehesa" and grasslands, notably by rationalising livestock practices and by clearing the undergrowth, etc.),

9.2: Maintaining native breeds in danger of extinction (for threatened species included on the FAO list),

9.4: Extensification of beef and sheeps and goats

9.5: Rationalisation of pasture management.

The general regulatory framework for organic livestock under sub-measure 9.3 are Council Regulation (EC) 2092/91 and 1804/99. Before the sub-measure application, a technical committee will be created, in order to indicate the appropriate kind of vegetable feed, the calendar for pastures, etc. Applicants must maintain a regular farm register, and must be member of Consejo Regulador de Agricultura Ecològica in the Autonomous Community he belongs to. Furthermore, applicants must accept controls from a certification and control body, and accept to make analysis on the final production obtained. Application of the various options of sub measure 9.3 is subject to accomplishment of action indicated under sub-measure 9.1, and payments incorporate basic payment under sub-measure 9.1, plus integration for further income loss compensation due to organic practice and incentives.

Table 5-44: Payments for organic livestock farms, sub-measure 9.3

Type of support	Payments (€/ha)
9.3.1 Fodder and Stubble: requires accomplishment of sub-measure 9.1.1	126
9.3.2 Maeadows: requires accomplishment of sub-measure 9.1.2	140
9.3.3 Grassland, Pasture for horses: requires accomplishment of sub-measure 9.1.3	180
9.3.4 Bee culture	24

Source: MAPyA (2003b)

Sub-measures 9.1: "Improving and conserving the physical environment" is articulated as follows:

9.1.1: Interventions in pasture areas, with maximum 1,4 LU/ha: 40 €/ha;

9.1.2: Substitution of arable crop with fodder and pasture areas: 48 €/ha;

9.1.3: Grassland, pastures for horses and biodiversity maintenance inMountain Areas: 108 €/ha.

Payments of sub-measure 9.3 indicated in Table 5-44 may be integrated with additional payments for sub-measure 9.2, that is 120 € /Livestock unit.

Extensification sub-measures 9.4 and 9.5 are also likely to be adopted in an organic farming scheme; payments are as follows:

- beef extensification (sub-measure 9.4): 180 €/ha;
- sheep and goats extensification (sub-measure 9.4): 63 €/ha;
- rational management of pastures (sub-measure 9.5): 60 €/ha.

5.7.1.3 Other agri-environmental measures

In addition to measure 3, referring to the reduction of chemical products, and sub-measure 9.3 referring to organic livestock, a wide range of other agri-environmental measures are introduced in the Spanish RDP, covering a wide range of different approaches to environment protection. It is important to point out that the horizontal approach of Spain RDP allows each farmer to apply for each of the available agri-environmental measures. This put organic farmers automatically in a favoured position with respect to conventional farmers as their farm structure allows them to apply for a wide variety of the below indicated agri-environmental measures.

5.7.1.3.1 Extensification of agricultural production (Measure 1)

Soil improvement in cereal regions and increase in their organic content and microbe activity and, therefore, their water retention capacity. Given the emphasis on extensification and crop rotation, measure 1 can be considered positively for organic farming. It consists of 4 sub-measures:

1.1: Traditional fallow land (keeping the stubble for 5 months to improve the soil) payment: 41 €/ha;

1.2: Extensification to protect the flora and fauna (action to improve the habitat of birds); payment: 56 €/ha;

1.3: Crop rotation including sunflowers (improvement in cereal/sunflower rotation); payment: 60 €/ha.

1.4: Withdrawal of land (recovery of sites of high environmental value); payment: 138 €/ha for arable crops, 270 €/ha for ligneous crops.

5.7.1.3.2 Plant species in danger of extinction (Measure 2)

Maintaining biodiversity and genetic resources by using plant species in danger of extinction, while rationalising the use of inputs. This measure can have indirect positive effects for organic farming due to requirements of input reduction for crops and alfalfa, i.e. productions widely used in organic farming.

Table 5-45: Payment levels for plant species in danger of extinction (€/ha)

Crop type	Payment
Arable crops in danger of extinction, 20% crop protection inputs reduction	456
Alfalfa in danger of extinction, 20% crop protection inputs reduction	511
Arable crops in danger of extinction, 20% fertilisers inputs reduction	447
Alfalfa in danger of extinction, 20%, fertilisers inputs reduction	426
Arable crops in danger of extinction with crop protection and fertilisers reduction	514
Alfalfa in danger of extinction with crop protection and fertilisers reduction	600
Horticultural in danger of extinction, 20%, fertilisers inputs reduction	571
Horticultural in danger of extinction, fertilisers and crop protection reduction	600
Pluriannual crops in danger of extinction	341
Pluriannual crops in danger of extinction, and 20% fertilisers inputs reduction	551
Pluriannual crops in danger of extinction, and 20% crop protect. inputs reduction	521
Pluriannual crops in danger of extinction, fertilisers and crop protection reduction	732

Source: MAPyA (2003b)

5.7.1.3.3 Limiting erosion in fragile environments (Measure 4)

For this measure no clear specific effects for organic farming can be envisaged.

4.1: Ligneous crops;payment: 132 €/ha;

4.2.: Cereals (avoiding soil loss on steep slopes with different growing methods); payment: 54 €/ha;

4.3: Maintenance of abandoned land (reducing the dangers of erosion and fire by pruning and clearing); payment: 39 –99 €/ha.

5.7.1.3.4 Protecting the flora and fauna in humid areas (Measure 5)

Actions targeting the desiccation of humid areas to improve the habitat of aquatic birds. For this measure no clear specific effects for organic farming can be envisaged. It includes 3 sub-measures:

5.1: Rice (prolonging the length of flooding, reducing inputs); payment: 397 €/ha;

5.2: Sugar cane (set of practices aiming to improve the environmental impact of this traditional, very fauna-friendly crop); payment: 721 €/ha;

5.3: Oversowing of cereals (increasing the amount of seed to provide bird feed); payment: 39 €/ha.

5.7.1.3.5 Special systems for environmentally-friendly farming (Measure 6)

Improving traditional production methods to improve biological diversity and soil protection.

6.1: Enclosures, boundary walls maintenance; payment: 600 €/ha;

6.2: Cactus cropping; payment: 198 €/ha;

6.3: Laburnum cropping; payment: 198 €/ha.

For this measure no clear specific effects for organic farming can be envisaged.

5.7.1.3.6 Rationalising the use of water and extensification incentive (Measure 7)

Improving the management of water resources by reducing the use of irrigation water. Given that among the basic input saving principles of organic farming a special attention is paid to water saving practices, this measure can be considered indirectly in favour of organic farming.

50% reduction payment: 173 €/ha;

70% reduction payment: 278 €/ha;

100% reduction payment: 409 €/ha.

5.7.1.3.7 Protecting the landscape and controlling fire (Measure 8)

For this measure no clear specific effects for organic farming can be envisaged.

8.1: Protecting and enhancing the rural landscape (conservation of the landscape's structural elements); payments: 18-84 €/ha.

8.2: Pasture systems with wolves and bears present; payment: 4 €/ha.

8.3: Fire-prevention method (green cuttings); payment: 100 €/ha.

Most of agri-environmental measures are not specifically referring to organic farming, with the exception of measure 3.3, and consider support payments for a wide range of environmentally friendly activities also for conventional farms. Specific payments are given to integrated control and integrated production methods, ranging between 49 and 95% of organic payments, which makes integrated farming a concrete alternative. The overall structure of the agri-environmental measure does not seem to explicitly incentive organic farming. Nevertheless, many of the agri-environmental measures fit particularly well in the organic farming approach, and organic farms may be considered in a favoured position with respect to conventional farms to apply for the different agri-environmental measures, specifically for measures 1, 2, 7.

5.7.2 Quantitative evaluation

5.7.2.1 Uptake of agri-environmental measures

Table 5-46 summarises the uptake of the different measures of the Spanish RDP in year 2001. In terms of number of contracts, the most diffuse measures are those concerning landscape protection, while on the other side organic farming accounts only for 938 contracts. Nevertheless, the average size of organic farms is considerably higher than the average of all farms, as in terms of hectares sub-measures 3.1 and 9.3 cover 16% of the total area interested by RDP. The specific measures for organic farming and livestock receive alone about one third of total public funds allocated for rural development, and if we consider the low number of organic farms, we can conclude that they receive on average higher support than conventional farms. This result is supported by the data concerning the average payment per hectare: with an average of 199 €/ha sub-measures 3.3 and 9.3 are the most remunerative in the RDP framework.

Table 5-46: Uptake of agri-environmental measures under the Spanish RDP (2001)

	Contracts		Area		Average paym.	Total public funds allocated		
Measures	Number	%	ha	%	€/ha	'000 €	%	of which EAGGF ('000 €)
Extensification: sub-measures 1.1, 1.2, 1.4, 9.4, 9.5	4,900	16%	137,353	21%	46	6,337	10%	3,948
Protection of plant varieties of plants in danger of extinction: sub-measure 2.1	0	0%	0	0%	0	0	0%	0
Reduction of fertilisers, and integrated production: sub-measures 3.1, 3.2	5,158	16%	39,889	6%	143	5,699	9%	2,988
Crop rotation: sub-measure 1.3	5,363	17%	105,748	16%	64	6,744	10%	4,923
Organic farming: sub-measures 3.3, 9.3	938	3%	104,130	16%	199	20,706	32%	14,945
Landscape protect.: sub-measures 4.1, 4.2, 4.3, 7.1, 8.1, 8.2, 8.3, 9.1, 9.6	8,733	28%	144,504	22%	114	16,540	26%	12,406
Other actions: submesures 5.1, 5.2, 5.3, 6.1	5,341	17%	128,100	19%	50	6,453	10%	4,354
Total measures on ha basis	30,433		659,725		95	62,480	97%	43,561
Maintenance of native breeds in danger of extinction: sub-measure 9.2	1,098		17,871*		120**	2,160	3%	1,563
Total	31,531					64,640		45,128

*Livestock units; **€/LU

Source: MAPyA (2003b)

Besides specific measures for organic farming, it is to consider that the horizontal nature of RDP allows to every farmer to apply for every measure. Therefore, the overall support to organic farmers (i.e support deriving also from non organic measures) may be integrated through all the other sub-measures, for which organic farmers are of course in a favourite position with respect to conventional farmers.

Differently from the organic farming case, specific sub-measures for integrated farming and input reduction (3.1; 3.2) seem to refer to smaller farms, covering 6% of ha in comparison of 16% in terms of number of contracts. These sub-measures have the second average highest payment per hectare, and can therefore be considered anyway as an interesting option for farmers that do not intend to stick to the most restrictive organic scheme.

5.7.2.2 Farm level support of organic versus conventional farms

The FADN database for Spain considers only 27 organic farms in 2001, compared to 8,419 conventional farms, so the information we obtained cannot be considered statistically representative. Furthermore, given the aggregate nature of data available, it is not possible to indicate clearly the correspondence of different farm structures between organic and conventional with the different payment level.

The results are nevertheless of interest (Table 5-47), and show that organic farms receive on average higher total payments per hectare than non-organic farms.

The superiority of organic premiums is particularly evident for environmental subsidies, while on the other side it is much lower for LFA payments. This may be due to the low territorial representativity of the organic FADN sample, as on the basis of the RDP regulations there is no evidence of a lower support for organic farms. More interesting is the data on conventional, which given the higher number of farms involved may be considered a more accurate indicator. The relatively high value of LFA payments and environmental payments is a result of the flexible nature of the Spanish RDP measures, and indicates that also non organic farmers may be able to integrate consistently their farm income through different agri-environmental measures, that clearly favour organic farms but can regard conventional farms as well, and through LFA payments that, as LFA cover around 80% of Spanish territory, can be considered a sort of “basic” integration for most farms.

Table 5-47: Average subsidies for conventional and organic FADN farms, 2001 (€/ha)

Type of subsidy	Conventional	Organic
Agri-Environmental subsidies	50	127
LFA subsidies	152	27

Source: FADN (2003)

Based on Eurostat average organic farm data it is possible to calculate the maximum average payment per hectare referring to organic payments under sub-measures 3.3 and 9.3 (Table 5-48).

Results are presented in Table 5-48 and show the strong importance of payments for grassland areas, that account for more than 50% of the theoretical maximum payment that the average organic farm may receive.

Table 5-48: Maximum payments from sub-measure 3.3 and 9.3 for an average organic farm

Crop	ha	€/ha	€
Cereals	6.05	135	817
Pulses	0.64	135	86
Root crop	0.13	258	34
Vegetables*	0.3	258	77
Arable forage, etc.	0.79	135	107
Permanent grassland	22.45	149	3,338
Fruit and berries	1.24	256	317
Citrus	0.24	468	112
Olives	3.44	267	918
Wine	0.9	228	205
Other**	0.07	505	35
Average payment per ha		167	6,047

* incl. Melons and Strawberries

**Tree and vine nurseries, other and greenhouse perennials

Source: Gambelli (2003) based on Eurostat (2003)

A comparison with the conventional average farm payments from agri-environmental measures is possible only for grassland payments (sub-measures 9), as a lack of available farms structure data does not allow evaluation of the other sub-measures. Table 5-49 summarises the results based on the assumption that the conventional average farm receives payments for sub-measures 9.1 (improvement and conservation of the physical environment), 9.4 (extensification of beef and sheep and goats), 9.5 (rational management of pastures), while the organic average conventional farm receives payments for sub-measures 9.3 (specific payments for organic farming), 9.4, 9.5. per hectare payments are substantially lower for the conventional case, and such difference is amplified when considering the different structures of the organic farm: total payments for grassland in the organic case are more than four times those for the conventional case.

Table 5-49: Maximum payments available for permanent grassland: average organic and conventional farm

	ha	€/ha	Total payments
Organic	22.45	330	7,412
Conventional	7.07	247	1,745

Source: Gambelli (2003) based on Eurostat (2003)

5.7.3 Conclusions and recommendations

5.7.3.1 Relative attractiveness of Rural Development Plan measures for organic farming in Spain

The Spanish Rural Development Plan can be considered an overall positive environment for organic farming, especially for the attention paid to the environmental safeguard issue and the wide variety of possible agri-environmental measures that organic farming may adopt. Nevertheless, specific support measures for organic farming are accompanied by a wide range of measures also for non organic farmers.

The weight of the organic sector in Spain is not particularly high, and only 3% of contracts for RDP measures in year 2002 refer specifically to organic farming. Nevertheless, the total amount of financial resources allocated to organic farming reaches 32% of the total budget in the same year. With an average payment for organic farming of about 200 €/ha, that may be integrated with payments from other agri-environmental measures, the organic sector may be considered adequately supported from a financial point of view. Organic livestock is mainly supported on per ha payments for fodder, grass and meadows land with payments ranging from 126 to 180 €/ha. Substantial integration for livestock may come from other agri-environmental sub-measures, shifting the average payment for organic grassland area to 330 €/ha. Given the average organic land use structure is strongly characterised by grassland, such results show high potential support for organic farming.

Other agri-environmental measures may indirectly affect organic farming given its natural vocation for environmentally safe methods of production, but a quantitative estimate is not available.

LFA payments may not be considered as indirect support for organic farming, as they refer to 80% of Spanish territory, hence influencing the majority of farms, and no differentiation is available for organic.

The closest alternative to organic farming measures, i.e. integrated farming, may be considered particularly attractive in terms of payments allowed, especially for farmers who do not want to comply with the tighter constraint (and in some cases higher costs) due to the organic scheme. This is particularly relevant for horticulture and vine production where payments are respectively 83% and 78% that those for organic. Integrated farming

and low-input farming measures appear more appealing to small, marginal farmers than the organic measures, probably due to lack of adequate technical assistance and extension in the organic sector

5.7.3.2 Recommendations for improving Rural Development Plan measures for organic farming in Spain

- Demand side support: like most of policy support schemes for organic farming originally based on former Council Regulation 2078/92, only supply side measures and interventions are specifically considered. Demand support for organic products may be obtained through an increase in market transparency, which reduces the risk of frauds, simply introducing a widespread information campaign for consumers, concerning the general characteristics and peculiarities of organic products.
- Marketing and processing: little attention has been paid to these issues and to the possible link with typical products and rural tourism as additional vehicles for boosting organic products. Furthermore the domestic market for organic products is still quite small and the Spanish organic sector is still mainly relying on exports to clear the market. Export markets have higher transaction costs for farmers, and need specific marketing institutions (cooperatives or similar) to be effectively exploited.
- Knowledge systems in the organic sector: it has not been particularly taken into consideration in the RDP, where nearly no measures considers the aspects of research and development and of technical assistance for the organic sector.

Most of these limitations have recently been taken into consideration by the Spanish Ministry of Agriculture, Alimentation and Fishery, that has recently presented a Strategic Plan for Organic Farming, covering measures to be undertaken in the period 2004-2006. The Plan was planned to be presented in December 2003, and is articulated on eight main objectives:

1. Development and support to organic farming;
2. Support for processing of organic products;
3. Improvement of marketing conditions for organic products
4. Improvement of consumers confidence and information concerning organic products;
5. Improvement of technical support for the organic sector;
6. Harmonisation and enforcement of certification and control bodies;
7. Improvement of connectivity within the organic sector;
8. Improvement of research and development for the organic sector;

Of these objectives, the first one specifically considers the necessity of prioritisation of the support measures for organic farming already implemented in the RDP, for the period 2004-2006, while the other proposed actions go towards an integration of the above mentioned limits of current rural policies for organic farming.

5.8 United Kingdom (England and Wales)

Following the introduction of devolved administrations for the four countries of the UK, rural development and organic farming policy has become the responsibility of the respective parliaments and assemblies and their administrations, with separate rural development plans in each country. For the purposes of this case study, the English and Welsh situations are analysed in detail, and no reference is made to policy in Scotland and Northern Ireland, where the range of measures applied to organic farming has until recently been more limited. While there is still a degree of commonality in approach between the English and Welsh situations, there are specific differences and these are explored here.

In addition to the different rural development plans, each of the four countries has now introduced various forms of action plans for organic farming – Wales in 1999, Northern Ireland in 2001, England in 2002 and Scotland in 2003. Again, the main elements of the English and Welsh plans are highlighted in this case study, with only passing reference to those in the other countries.

The UK case study focuses on England and Wales and deals mainly with agri-environment, less-favoured area, marketing and processing and training initiatives, as well as other support mechanisms deriving from the action plans and implementation of structural (Objective 1) and related measures. Of the nine components of the rural development regulation, the provisions for young entrants and early retirement have not been implemented in England and Wales, and therefore these are not considered further.

5.8.1 Descriptive and qualitative evaluation

5.8.1.1 Priorities

The government's overall aim for English countryside and rural policy as set out in the English Rural Development Plan (ERDP) is "to sustain and enhance the distinctive environment, economy and social fabric of the English countryside for benefit of all". The plan has two key priorities: Priority A – the creation of a productive and sustainable rural economy, and Priority B – conservation and enhancement of the rural environment. The organic farming scheme falls under the Priority B remit. Details of measures, schemes and the Chapters and Articles utilised from Council Regulation (EC) 1257/1999 are shown in the Annex to the ERDP. With respect to the Rural Development Plan, the Government felt that Council Regulation (EC) 1257/1999 did not meet all the national objectives and the programme was supplemented by other initiatives described in the Rural White Paper: Our Countryside the Future A Fair Deal for Rural England.

Key features/aims of the Wales Rural Development Plan 2000-2006 include the diversification of farming activities and the protection of the environment and rural heritage. Three areas of priority were identified:

- Under Priority 1 ("to create stronger agriculture and forestry sectors"), provisions exist to make funds (grants) available for investments to improve farm practices beyond minimum standards and to diversify farming activities. Environment-related investments, such as improvements in animal welfare, are included.
- Under Priority 2 ("to improve the economic competitiveness of rural communities and areas"), provisions exist for training aimed at assisting farmers to adapt to changing market conditions and opportunities. Through a Processing and Marketing Grant, assistance is available to make Welsh farm businesses more competitive, and to increase the proportion of produce which is processed within Wales. Organic farming has been identified as one of four key sectors within this programme.
- Under Priority 3 ("to maintain and protect the environment and rural heritage"), provisions exist for the continuation of an integrated, whole farm agri-environmental scheme (Tir Gofal). Criteria are established for the management by farmers of specific habitats. This priority also covers the organic farming scheme.

5.8.1.2 Measures and regional discretion

The arrangements for administering measures vary according to the need to ensure the delivery of national priorities, and the appropriateness of developing local solutions. The measures fall under three main categories depending on national priorities and local targets (Table 5-50).

Table 5-50: Schemes and their levels of regional discretion

Schemes with no regional discretion	Schemes with national framework and some local discretion	Schemes with national targets but operating to local targets
Environmentally Sensitive Areas Organic Farming Hill Farming Allowance (within LFAs)	Countryside Stewardship Scheme (Tir Gofal in Wales) Farm Woodland Premium Woodland Grant Energy Crops (not in Wales)	Processing and Marketing Grants Rural Enterprise (Farm Enterprise and Farm Investment Grants in Wales) Vocational Training

Some restrictions on application of measures exist in areas subject to environmental restrictions such as National Nature Reserves and National Parks. Measures under Article 33 which form part of the Rural Enterprise scheme are available throughout rural areas apart from Objective 1 and certain objective 2 areas.

5.8.1.3 Overview of scheme expenditure and area covered

Table 5-51 to Table 5-53 indicate the levels of uptake and expenditure for the different RDP schemes in England and Wales. From these tables, it can be seen that organic farming accounts for about 15% of agri-environment expenditure in both countries, a very significant increase from less than 1% before 1999 (Lampkin et al. 1999). However, the data in Table 5-51 refers to new agreements in 2001– other data published by DEFRA (2003) provides a detailed breakdown of uptake of the Organic Farming Scheme in England, indicating that by 2002, 1,083 agreements covering 173,000 ha were supported at a cost that year of £11.6 million (16.8 million euro). In Wales, the 548 agreements by 2002 covered 51,000 ha at a cost that year of £5.8 million (8.4 million euro).

Table 5-51: England RDP scheme agreements, land area and expenditure levels, 2001

	Agreements made	Area covered (1 000 ha)	Value £m (Mio. €)
Organic Farming Scheme	763	56	2.2 (3.2)
Hill Farming Allowance	10,944	1,368	42.5 (61.6)
Countryside Stewardship	1,585	57	7.8 (11.3)
Environmentally Sensitive Areas	470	36	3.5 (5.1)
Processing and Marketing	27	Na	6.0 (8.7)
Rural Enterprise Scheme	207	Na	Na
Vocational Training Scheme	94	Na	2.8 (4.1)
Afforestation Schemes	4,512	24,350	13.5 (19.6)

Sterling rates converted at 1 £ = 1.45 €

Source: DEFRA (2003)

Table 5-52: Expenditure on Welsh agri-environmental schemes, 1999/00-2003/04, Mio. m (Mio. €)

	Actual		Budget		RDP Targets	
Scheme	1999/00	2000/01	2001/02	2002/03	2003/04	00-06
Rural Development Plan Agri-Environment Schemes						
Tir Gofal	2.0 (2.9)	4.5 (6.5)	5.7 (8.3)	15.4 (22.3)	18.4 (26.7)	
Agreements (No.)	nd	nd	1,200 total	nd	nd	4,200
Organic Farming	4.4	4.5	2.3	5.8	6.1	
Agreements (No.)	254	158	35	101	180	1,270
Old Agri-Environment Schemes						
Environmentally Sensitive Areas	6.7 (9.7)	7.1 (10.3)	7.5 (10.9)	9.2 (13.3)	9.2 (13.3)	
Habitat Scheme	0.7 (1.0)	0.8 (1.1)	0.7 (1.0)	0.7 (1.0)	0.7 (1.0)	
Moorland Scheme	0.08 (0.11)	0.09 (0.13)	0.09 (0.11)	0.03 (0.04)	0.01 (0.01)	
Organic Aid Scheme	0.02 (0.03)	0.06 (0.09)	0.03 (0.04)	0.03 (0.04)	0.02 (0.03)	
Tir Cymen	5.7 (8.3)	5.5 (8.0)	5.2 (7.5)	4.4 (6.4)	3.5 (5.1)	
Total expenditure (Mio. €)	18.2 (26.4)	21.2 (30.7)	20.8 (30.2)	33.8 (49.0)	35.9 (52.1)	

Sterling rates converted at 1 £ = 1.45 €

Source: Welsh Assembly Government (2000-2003)

Table 5-53: Land area covered by agri-environment schemes in Wales (1,000 ha)

Scheme	Actual		Forecast			Target	
	1999	2000	2001	2002	2003	2004	2006
RDP Agri-Environment Schemes							
Tir Gofal	0	35	57	100	150	200	210,000
Organic Farming	0	24	40	50	65	80	87,000
Old Agri-Environment Schemes							
ESA	180	180	175	165	160	155	
Habitat Scheme	8	8	7	5	4	3	
Moorland Scheme	3	3	2	1	0	0	
Organic Aid Scheme	3	3	2	0	0	0	
Tir Cymen	89	85	75	65	55	40	
Total land in an AE scheme	283	338	355	386	434	478	
% of agric land in AE schemes	17%	20%	21%	23%	25%	28%	

Source: Welsh Assembly Government (2000-2003)

5.8.1.4 Context for organic farming support

5.8.1.4.1 England

The main support for organic farming in England has been through the Organic Farming Scheme, which was launched in 1999 following the review and closure of the original Organic Aid Scheme (1994-1998). In 2000, the Organic Farming Scheme was integrated unchanged into the Agenda 2000 Rural Development Plan.

The framework for agri-environmental and rural development policy is set out in the English Rural Development Plan (DEFRA 2000b), but as a consequence of the foot and mouth disease crisis in 2001, the 'Curry' Commission was established to review food and farming policies in England, reporting in early 2002 (Curry Commission 2002). The DEFRA response to the Curry Commission proposals was published in December 2002. Collectively, these set out a vision for more vibrant rural communities through the development of a more sustainable, confident, integrated agricultural sector with stronger links to consumer needs and desires, with higher environmental quality and standards. Organic agriculture is increasingly accepted as one of the mechanisms for achieving the vision and arresting the problems faced by industrial agriculture.

In 2001, a stakeholder working group was established by DEFRA to review organic farming policy in England, leading to the publication of an Action Plan (2002) in July 2002. No production target was set, the focus instead being on increasing the proportion of the UK market supplied by UK

produce. Actions identified included reform of the Council Regulation (EC) 2092/91 control system in the UK, development of official statistics on organic farming, working with multiple retailers on issues affecting the development of organic farming, removal of information and marketing barriers and improving research and development expenditure as well as offering financial support for farmers after conversion. Many of the actions have been implemented during 2003.

5.8.1.4.2 Wales

As in England, the Organic Farming Scheme provides the main avenue for direct financial support to organic farmers, with some differences in implementation. The scheme is implemented in the framework of Welsh agricultural policy as set out in the Welsh Rural Development Plan 2000-2006, and the government/stakeholder agreed 'Farming for the Future' initiative (which pre-dates but serves a similar function to the Curry report in England).

Many other initiatives are supported as part of the Welsh organic action plan published in March 1999, the first in the UK. The plan set a target to achieve 10% of Welsh agricultural output by 2005 and identified a range of policy, market and information-related initiatives to achieve this, including the establishment of a standing stakeholder-based strategy group, the introduction of maintenance payments, closer integration of the Organic Farming and Tir Gofal schemes, improvements in supply infrastructure, developing processing capacities, improving marketing intelligence, statistics and consumer research, and the establishment of Organic Centre Wales as a vehicle for a co-ordinated information strategy. The activities under the action plan are highlighted in a new report: Organic Farming in Wales, 1998-2003, and the development of a second action plan has now been initiated.

The development of the organic sector in Wales was reviewed by the National Assembly's Agriculture and Rural Development Committee in 2002, with the outcomes summarised in the report, "The Future of Organic Farming in Wales" (October 2002). The report recommended a range of new policy initiatives with increased focus on market demand and the consumer, including public procurement and public information initiatives.

In the light of this report and developments in England, the Welsh Assembly Government has agreed to introduce organic maintenance payments for organic farmers from autumn 2003, and is supporting a range of other public procurement and education initiatives through an extended remit for Organic Centre Wales.

5.8.1.5 Individual Rural Development Plan measures

5.8.1.5.1 Organic farming

Recent support for organic farmers has been in two main forms: the Organic Farming Scheme (OFS) and the Organic Conversion Information Service (OCIS). The OFS makes payments for farmers during the conversion process only, payment rates are shown in Table 5-54 below. Under the OFS there is a lower limit of 1hectare with no upper limit on farm area receiving payment in England, although there is a 300 ha ceiling in Wales for arable crops and other enclosed land, although farms can be larger than this payment ceiling.

The Organic Conversion Information Service (OCIS), launched in 1996 provides governmental support for 1.5 days free advice in preparation for conversion, and there are also lump sum payments under the Organic Farming Scheme of £300 (435 €) in the first year, followed by £200 (290 €) and £100 (145 €) in following years for advice and training for start up organic units.

Table 5-54: Payment rates for the England and Wales Organic Farming Schemes, £/ha (€/ha), 1999-2003

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Arable area payment scheme eligible land and land in permanent crops	225 (326)	135 (196)	50 (73)	20 (29)	20 (29)	450 (653)
Ineligible arable land and grassland (other enclosed land in Wales)	175 (254)	105 (152)	40 (58)	15 (22)	15 (22)	350 (508)
Unimproved grassland or rough grazing (unenclosed land and grazed woodlands in Wales)	25 (36)	10 (15)	5 (7)	5 (7)	5 (7)	50 (73)

Sterling rates converted at 1 £ = 1.45 €

Source: Organic Centre Wales (2003) & Welsh Assembly Government (2000-2003)

Under the OFS, farmers may qualify for other payments under agri-environment support payments, such as Countryside Stewardship, Tir Gofal; and the now no longer available Environmentally Sensitive Area, Habitat and Nitrate Sensitive Area schemes. However, Farm Woodland Premium, Woodland Grants and Moorland Scheme payments for reducing stock numbers could not be combined with the OFS unless on separate areas of land on the holding. Where schemes are combined on the same areas of land, payments are adjusted to avoid dual funding of similar activities – in most but not all cases farmers can still benefit from combining schemes.

The limited budget (£12 million (17 million euro) in England) and the higher than expected uptake of the initial OFS in 1999 meant that the scheme closed within six months of opening and was re-implemented in spring 2001 with increased funds of £19 million (28 million euro) – current annual expenditure on the OFS is around £22 million (32 million euro). In Wales, adequate funds were made available, but the scheme was closed to new applicants for part of 2000, while the scheme was being reapproved and integrated with the RDP, reopening in autumn 2000.

5.8.1.6 Other agri-environment schemes

5.8.1.6.1 Environmentally Sensitive Areas (England and Wales)

The Environmentally Sensitive Area (ESA) scheme currently covers 10% of agricultural land in England. There are tiered payments relating to the levels of compliance and environmental sensitivity of the area, with higher tiered areas receive higher payment levels. Typically, there are far higher levels of farms entering ESA schemes at the lower tier payments with their less restricted land use activities. Farmers entering into the scheme draw up a 10-year agreement (which can be terminated after 5 years) with farmers receiving an annual payment per hectare of land. As at October 2001, there were 577,000 ha under agreement with 60% of eligible land in the ESAs being voluntarily incorporated into the scheme. Whilst this may appear to be a low level of compliance, many of the ESAs are predominantly arable and these areas require higher levels of compliance. In 2001, 860 new applications covering 107,000 ha were received, an increase of over 20% over the previous year. 1,800 applications to renew agreements were received in 2002.

5.8.1.6.2 Countryside Stewardship (England)

The Countryside Stewardship scheme (CSS) applies to areas outside of the Environmentally Sensitive Areas. It involves annual regional consultation directed at conserving specific landscapes, protecting and enhancing wildlife habitats, conserving archaeological features, restoring neglected land and increasing possibilities for access and enjoyment of the countryside. The annual target setting is based on current targets and the ability of previous years to meet such targets. It is essentially different from the ESA payments, which are to protect what is already there, whereas CSS is attempting to produce positive changes.

The prescriptions incorporated under the CSS include: landscape conservation, meadow, marshes and wet pasture enhancement through the reduced use of pesticides and fertilisers, restoring and creating waterside features as well as managing water levels, woodland landscape enhancement of deer parks, orchards, community forests and upland woodlands. Agreements are for 10 years, and because of over subscription applications have been competitive. Whilst most applications were farm management based, other special projects have been highlighted including some for bird species such as Cirl Bunting.

1998 saw the implementation of the Arable Stewardship option, due to changing arable farming practices – the increased movement away from mixed farming and spring sowing to increased specialisation and autumn sowing has led to a decrease in over-wintering stubbles and habitats for

small mammals and ground feeding birds. The arable option was piloted in East Anglia and the West Midlands in 1998, building on proposals from English Nature, RSPB and The Game Conservancy and was adopted nationwide in 2002.

5.8.1.6.3 Tir Gofal (Wales)

Tir Gofal was launched in 1999 as a comprehensive agri-environmental scheme, incorporating some aspects (i.e. identified best practice) of earlier agri-environment schemes such as Environmentally Sensitive Areas, Tir Cymen and the Habitat Scheme, which were discontinued for new applicants. The scheme has been designed in such a way that measures contribute to meeting requirements of the UK Biodiversity Action Plan and to the management of the Natura 2000 network of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). Its objectives include, *inter alia*, to benefit wildlife on agricultural land and to protect characteristic rural landscapes. Tir Gofal is a whole farm scheme, and is suitable for the full range of farm types, sizes and locations. Environmental measures apply to the whole farm, as all of the land entered into the scheme must be compatible with good environmental practice. The main components of the scheme are:

- an obligatory whole farm section consisting of a suite of measures designed to go beyond good environmental practice;
- obligatory management of "Priority Habitats";
- optional management of habitats and features;
- provision for public access to the countryside; and
- additional payments for habitat and feature management.

Under the whole farm section, annual payments are tiered (0-25 ha, £25 (36 €)/ha; 20-50 ha, £15 (22 €)/ha; 50-100 ha, £10 (15 €)/ha; 100-410 ha, £5 (7 €)/ha; over 410 ha, £0 (0 €)/ha), with a maximum payment of £3,000 per farm. The minimum size of farm accepted is 3 hectares.

Optional management of habitats and features involves following detailed prescriptions for land management, compliance with which becomes compulsory once they have been included in an agreement. This part of the scheme aims to contribute to restoring areas particularly affected by past agricultural intensification. Habitats identified as "priority habitats" include certain types of woodland and scrub, heathland, grasslands and wetlands. Payment rates vary according to grazing intensity, type of grassland, heath, etc. and range from £10 (15 €)/ha/year to £180 (261 €)/ha/year.

5.8.1.6.4 Special provisions for organic and integrated farmers

Entry to Tir Gofal is rationed by a points system – farmers need to obtain sufficient points to cross the eligibility threshold, with points allocated depending on the activities farmers are willing to undertake and the level of changes to the current system that would be involved. Currently organic farmers qualify automatically for 25 points towards the 100 point threshold, giving them some advantage over their conventional counterparts.

Apart from this, there is no special provision for organic farmers or organic farming within these schemes, but organic farmers can apply for them as long as there is no double payment for similar/identical activities, which may lead to payments being reduced. However, in specific instances, the management conditions of the schemes can be difficult to reconcile with organic farming standards – for example, restrictions on the use of clover in some schemes can be problematic for organic farmers who have little recourse to alternative sources of fertility available to conventional producers.

There are no schemes or special provisions targeted at integrated farmers, although they are arguably best placed to benefit from the arable stewardship scheme in England.

5.8.1.6.5 Natura 2000 and water catchment areas

There are no specific provisions for organic farmers in Natura 2000 areas – organic farmers, like conventional farmers, can apply for the support for higher tier ESA, Countryside Stewardship and Tir Gofal measures which address Natura 2000 objectives.

There are some examples of the now private sector water companies utilising organic management in water catchment areas. Perhaps the highest profile example is that of Lake Vyrnwy in Wales, an estate of over 10,000 ha belonging to Severn-Trent Water. The estate is managed by the Royal Society for the Protection of Birds as an organic farm and also as a habitat for birds, with the high public profile of the RSPB also being used in the marketing of the organic produce (beef and sheep). Other examples of organic management on behalf of water companies can be found in Kent and the Wessex Water region, but none are thought to involve a direct payment, area-based or otherwise, to farmers in the catchment area.

5.8.1.6.6 Less Favoured Areas

The Hill Livestock Compensatory Allowance (HLCA) headage payment scheme was the mechanism by which support was previously channelled to livestock farmers in Less Favoured Areas (LFAs). With the introduction of the area-based payment requirement in Council Regulation (EC) 1257/1999, these payments were converted to the Hill Farming Allowance scheme in England and Tir Mynydd in Wales, with differential rates for land in severely disadvantaged (SDAs) and disadvantaged areas (DAs).

In both England and Wales, a transitional scheme operated designed to reduced the income shocks inherent in transferring from a headage based to area based scheme, but the new system is now fully

implemented. In line with the sustainable farming requirement of the regulation, maximum stocking rates apply, to limit overgrazing, and top-up payments are available for a range of environmental activities, for example reduced stocking rates. These included an additional 10% payment for registration with an approved organic certification body, effectively an organic maintenance payment, although farmers receiving OFS payments were not eligible for this support for dual funding reasons.

The financial impacts of the change from headage to area based systems and the special provisions for organic farmers are considered in more detail using the LFA farm model below.

5.8.1.6.7 Woodland Grant, Farm Woodland and Energy Crops Schemes.

The woodland grant scheme was first implemented in 1988 to replace the tax allowances on investments in new woodlands, which promoted short rotation conifer plantations with limited economic and environmental benefits. The farm woodland scheme was also implemented in 1988 to encourage farmer diversification into forestry. The difference between the two schemes is that the woodland grant scheme was open to all landowners and tenants, and included urban areas and brown field sites.

All these schemes are available to be linked to the organic farming scheme as long as different portions of the farm area are being utilized, but there is no differentiation in support or eligibility between organic and conventional producers and it has not been possible to obtain data on the extent to which organic farmers have taken up this support compared with conventional. Organic producers can and do benefit from the provisions, and there are initiatives by organisations such as the Soil Association to certify organic woodland. The integration of trees within farming systems (as woodlands, agro-forestry, permaculture, orchards and other forms of perennial cropping, for food, timber and fuel production) can in general terms be seen as valuable in developing more biodiverse agri-ecosystems, and perhaps further consideration should be given to specific treatment of organic farming in this context.

The energy crops scheme like the woodland schemes has forestry benefits and rural employment as its stated goals, however, the overriding aim of the scheme is to supply carbon neutral energy and thus go some way to meeting the Kyoto protocol targets. Due to foot and mouth disease and lack of end point processors, uptake of the scheme had been poor, and no organic farmers have applied for the scheme.

5.8.1.6.8 Investments in Agricultural Holdings

In Wales, the Farm Improvement Grant aims to assist farmers to “adopt best practice, to make animal welfare, hygiene and product quality improvements and to enhance, protect and maintain the environment of the farm”, with the following categories of activities being eligible: a) preserving and improving the natural environment (especially suitable for farmers unable to qualify for Tir Gofal); b) pollution and waste management (activities must take the farm above existing statutory requirements, and include slurry storage, dirty water disposal, injection of slurry below soil surface, etc.); and c) animal welfare, stock and crop management (capital work required to meet retailers’ standards of

animal welfare and health, environmental protection). To be eligible for these grants, farmers must have completed a Farm Business Development Plan provided through Farming Connect (see below). The maximum rate of grant aid is 40% of total eligible costs (50% in Less Favoured Areas). For young farmers the maximum rate is 45% (55% in Less Favoured Areas).

Within the English and Welsh rural development plans, there are no specific provisions for special treatment of organic producers with respect to investment aids. Capital grants are in general terms targeted at investments likely to benefit the environment, and therefore are of interest to organic and conventional producers alike. However, in Scotland and Northern Ireland, proposals are being developed relating to targeting aid at investment in buildings etc. required as part of the conversion to organic farming. There has also been a debate concerning higher capital grants for manure and slurry storage in Nitrate Vulnerable Zones and whether organic producers should also qualify for the same level of support, given that Council Regulation (EC) 2092/91 imposes the same nitrogen use limits as the nitrates directive. This has not yet received a positive response and is unlikely to be acted on in the foreseeable future.

5.8.1.6.9 Processing and marketing

Processing and marketing grants (PMG) enable capital investments in processing and marketing of primary agricultural products. As well as encouraging new projects, the aim of the programme is also to improve already existing processing facilities. Producers marketing their products collaboratively or individual producers who wish to process and market their own produce are eligible for support.

In England, whilst small and medium enterprises are a specific target, there is a lower ceiling of project costs being over £70,000 (101,500 €) and a higher ceiling of total grant payment of £1.2 million (1.7 million euro). £44 million (64 million euro) has been made available over the period 2001 to 2006, in 2001 £4 million (6 million euro) is available rising to £8 million (12 million euro) in 2002.

In Wales, the PMG scheme funds up to 40% of eligible scheme costs in Objective 1 areas and 30% in non Objective 1 areas. In 2002, grants of £808,952 (1.2 million euro) were made to nine organic agri-food businesses in Wales.

While there are no specific additional funds for organic projects, and specific data is difficult to obtain for England, the uptake of processing and marketing grants by organic producers and processors would appear to be higher than the share of organic farming in agriculture as whole, indicating both a greater willingness on the part of organic producers and processors to apply for such funds, and a willingness on the part of the funders to support organic projects.

5.8.1.6.10 Vocational training

The vocational training schemes provides funding for training specifically aimed at improving workplace skills of farmers, those involved in farming and forestry and enhancing their opportunities for diversification.

In England, the aim of the scheme is to provide locally targeted training linked to other RDP schemes especially rural enterprise schemes. Applications for training are open from: individuals, businesses as well as groups of businesses, those in ERDP schemes or from areas such as ESAs. As part of the application, trainees provide a training needs assessment demonstrating how the training will enhance the performance of their business. Farmers and foresters do not qualify for the scheme if they are in an Objective 1 area. Training is to be provided by recognised trainers from pre-existing training organisations, with high priority skills areas including IT, traditional craft and countryside management skills, farm management and business development along with innovation and leadership skills and practical experience to underpin more formal types of education. Applicants are expected to fund a minimum of 25% of the training costs. A network of pilot and demonstration farms is also supported across England, including 2 organic farms.

In Wales, vocational training is provided through the Farming Connect service, which integrates the activities of the Welsh Assembly Government, ELWa, Lantra and the Welsh Development Agency as public bodies and a range of service providers. Farming Connect provides advice to farmers in the form of farm business development plans (which are a requirement for access to other financial support and include a training needs assessment), environmental and specialist technical advice and supports a network of demonstration farms and farmer discussion groups across Wales. Farming Connect also supports a range of training courses, currently mainly focused on IT, business and environmental management issues, but programmes to support training in other areas of identified need are currently under development. The funding is derived from a combination of Objective 1, 2, RDP and other resources.

Training courses, demonstration farms, discussion groups and other extension activities for organic farmers in Wales are supported as part of the Farming Connect Organic Development Programme, operated by Organic Centre Wales, which is relatively well resourced compared to the size of the sector in Wales. The organic programme had a total budget of £550,000 (0.8 million euro) for 2002 and 2003, but funding is likely to be reduced in coming years.

5.8.1.6.11 Rural Economy (Art. 33) schemes

Amongst the measures aimed at promoting the adaptation and development of rural areas are the marketing of quality agricultural products, diversification of agricultural activities and the protection of the environment in connection with agriculture as well as with the improvement of animal welfare. Rural economy schemes have as a central tenet the remit to diversify rural economies and present them with the opportunity to meet the demands of a changing consumer base.

In England, the Rural Enterprise Scheme covers a very broad range of eligible activities, ranging from ones that provide economic benefits through to those more beneficial in social and environmental terms. In 2001, 207 agreements were made to a value of £12.1 million (18 million euro). Although support for farmers is a primary aim, farmers, rural businesses, community groups as well as partnerships are all eligible. Support can also be given to bodies which promote and co-ordinate multiple applications related to specific themes or sectors, however, public sector organizations are prohibited. In total, the government has committed £152 million (220 million euro) for the 7 year period with the majority of funding being allocated to regional budgets.

In Wales, the Farm Enterprise Grant aims to assist activities directed at "diversification of and towards agriculture", such as new farm enterprises covering sectors/species currently not on the farm (including energy crops), setting up farm shops, direct sales and pick-your-own, and the Small Food Processors Grant aims to assist in the development of on-farm added value processing of agricultural products - e.g., assistance for the construction or conversion of buildings, purchase of equipment needed for processing, etc. (limited to projects costing less than £40,000 (58,000 €).

Whilst organic farming is included as being a specific beneficiary, it is not clear at this stage to what level that organic farming is being supported by such schemes.

5.8.2 Quantitative evaluation

The provisions aimed at maintaining or enhancing on-farm environmental quality present organic farmers with a clear opportunity to benefit from the schemes. It is not clear, in the absence of uptake data, to what extent (if any) organic farmers would benefit more or less from such schemes than conventional farmers.

A number of provisions dealing with diversification, training, and so on appear to be well-suited to meet the needs of organic producers and may provide conventional farmers with incentives for conversion. The focus on high quality, high value-added products and on encouraging farm enterprises to become more 'innovative' – which is evident throughout the Rural Development Plan – also seems potentially beneficial to organic farmers or those considering conversion.

The previous round of CAP Reform and the greater spending on the Organic Farming Scheme as compared to the previous Organic Aid Scheme saw an unheralded expansion of organic farming in England

with 10-fold increases in land area under organic practice in the period between 1998 -2000, especially in the South West of England which accounts for over 40% of the organically farmed area in England. High price premiums in 1999/2000, resulting from the fall in conventional prices following BSE and exchange rate changes, were a major factor in encouraging farmers to convert, so that the increase cannot be attributed directly to the higher support payments.

Other environmentally friendly land use schemes such as the regionally applicable Environmentally Sensitive Area Scheme (ESA) and the Countryside Stewardship Scheme (CSS) whilst more important in land area coverage that the organic scheme, (ESA 530,000 ha, CSS 263,000 ha. OFS 115,000 ha) 2000 figures, the expansion of the Organic Farm Scheme has been much greater than the comparable CSS which only increased two fold over the same period (1998-2000).

There is currently no up-to-date FADN type data for organic farming in the UK. Farm business performance was monitored by UWA from 1994/5 to 1998/9, but a new project at UWA, funded by DEFRA, has restarted survey work for 2001/02, with the intention to include other data collected as part of the normal FADN system.

For England and Wales, it is not possible to estimate directly the level of organic farming and other agri-environmental support that an organic farmer might qualify for compared with similar conventional farmers as in the other case studies (e.g. Austria, Table 5-9). The level of organic conversion support is tapered, with different farms at different stages of conversion, and no maintenance payments in the period under consideration, so there is no typical payment that can be applied to organic land area. In addition, other agri-environmental schemes are either zonal in approach, or are tailored closely to the circumstances of individual farms, so again there are no typical area payments that can be applied to eligible land. In most cases, both organic and conventional producers are normally eligible, there are no significant differences, other than dual-funding adjustments, to be expected.

As an alternative approach, model calculations prepared for DEFRA by UWA have compared the margins that might be generated from typical, comparable organic and conventional systems, and estimated the impacts of conversion, including the contribution of the Organic Farming Scheme, for different farm types at 2 yearly intervals since 1994. In general terms, these illustrate the impact of changes in output, prices for organic and conventional products, CMO support and direct organic farming support. Eligibility for other agri-environmental support is not shown for the reasons indicated above.

The main results are summarised in Table 5-55, indicating how relative performance has changed over time. Apart from some changes in support levels, the major differences are a consequence of changing prices, with conventional prices falling significantly in the late 1990s, while organic prices remained relatively stable, creating an apparent high price premium for organic products. With the recovery in conventional beef and sheep prices and the decline in organic dairy and crop prices in 2002, the gap between organic and conventional prices has narrowed. While the current premium levels still appear to give organic producers

an advantage, the premium is not guaranteed (as many as 25% of UK organic producers are believed to be marketing their produce conventionally), and many producers are unwilling to take the risk that prices may fall in the absence of maintenance payments in the UK. However, farmers who are already in other agri-environment schemes are still finding it attractive to convert to organic production, thereby obtaining the Organic Farming Scheme payments in addition, and opening up the possibility of marketing at premium prices.

Table 5-55: Whole farm gross margins, £/ha (€/ha), for modelled UK farm types, 1999-2002

	Conventional			Organic		
Farm type	1999	2001	2002	1999	2001	2002
Specialist dairy	1,192 (1,728)	1,109 (1,608)	1,098 (1,592)	1,796 (2,604)	1,754 (2,543)	1,336 (1,937)
Mainly dairy	829 (1,202)	772 (1,119)	782 (1,134)	1,306 (1,894)	1,337 (1,939)	1,102 (1,598)
Stockless arable	764 (1,108)	592 (858)	564 (818)	1,356 (1,966)	897 (1,301)	882 (1,279)
Mainly arable	507 (735)	473 (686)	512 (742)	592 (858)	562 (815)	524 (760)
Lowland livestock	401 (581)	365 (529)	457 (663)	569 (825)	555 (805)	490 (711)
Upland (LFA) livestock	279 (405)	247 (358)	259 (376)	450 (653)	429 (622)	314 (455)
Hill (LFA)livestock	274 (397)	190 (276)	219 (318)	288 (418)	235 (341)	229 (332)

Sterling rates converted at 1 £ = 1.45 €

Source: Lampkin (2003)

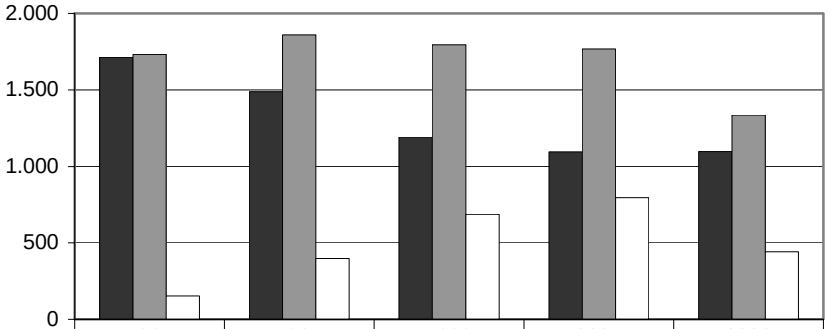
The following pages provide further detail behind the values in the above table. The first chart in each pair illustrates the implications of price changes over time – the element of the organic farm gross margin accounted for by the price premium is shown in the third column – if no premium is obtained, then the organic margin shown in the second column would be reduced by that amount.

The second chart in each pair shows the development of the main CMO support payments and the organic farming scheme payments, at 2002 prices, during the conversion from conventional to organic production. Two strategies are illustrated: a staged conversion, where a proportion of the farm is converted in successive years, and a crash conversion, where the whole farm is converted in a single step. A staged conversion may be preferable in terms of optimal entry point to the organic rotation, the learning process and risk spreading, but can result in livestock enterprises in particular taking much longer to achieve organic status. If premium prices are high, a crash conversion might be more attractive, and in fact many dairy, beef and sheep farmers have opted to do this despite the risks and higher yield penalties during conversion.

5.8.2.1 Specialist dairy

For specialist dairy farmers (Figure 5-11 and Figure 5-12), no market support payments are received, but if quota prices are high, then destocking during conversion can provide an opportunity to lease out quota and recover some losses. The organic farming scheme payments provide a limited contribution during the conversion, but become relatively more significant if no premium price is obtained soon after conversion.

Figure 5-11: Whole farm margins (£/ha) for conventional and organic specialist dairy farm models, UK, 1995-2002

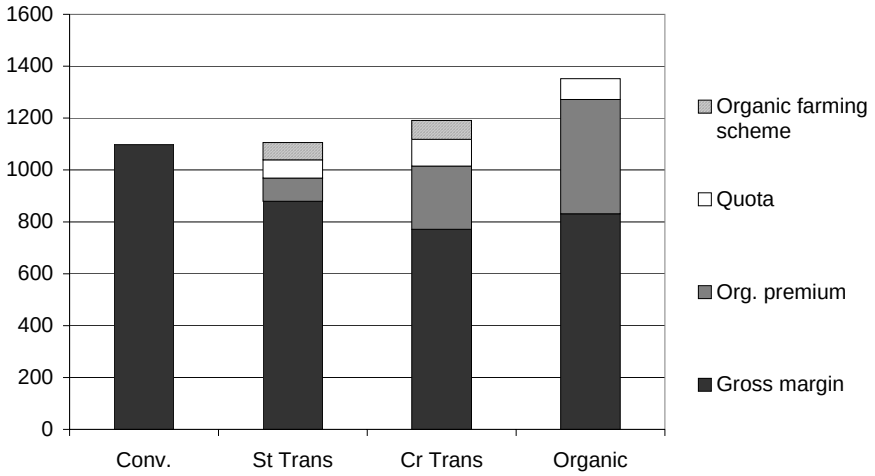


	1995	1997	1999	2001	2002
Conv	1714	1489	1192	1096	1098
Organic	1731	1860	1795	1767	1336
Premium	153	398	686	796	441

1 £ = 1.45 €

Source: Lampkin (2003)

Figure 5-12: Components of whole farm margins (£/ha) for conventional, staged and crash transition, and organic specialist dairy farm models, UK, 2002



1 £ = 1.45 €

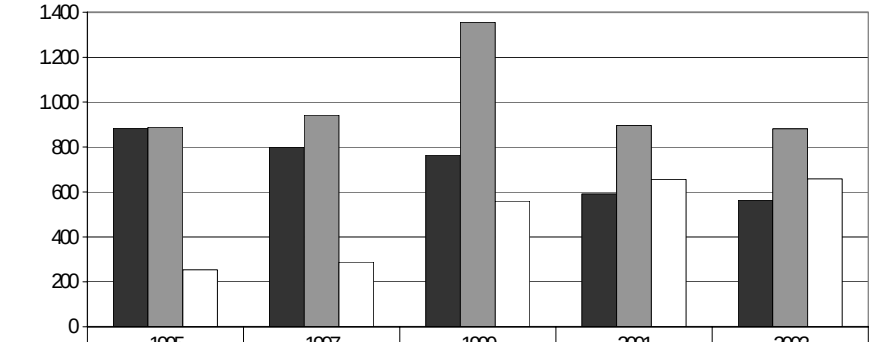
Source: Lampkin (2003)

With no maintenance payments, price is the only option to maintain incomes, but many organic dairy farmers are unable to find a premium market and are having to sell at conventional prices. They are therefore facing reduced incomes compared with the already reduced incomes of their conventional counterparts. If there is significant uncertainty about whether this premium can be obtained, then it is perhaps not surprising that very few dairy farmers are willing to start conversion at present. The new maintenance payment from June 2003 of £23 (€33)/ha for grassland in England needs to be seen in the context of the price premium worth £400 (€580)/ha, so that it has hardly any impact on the situation.

5.8.2.2 Specialist arable

Crop producers are also very highly reliant on the price premium to secure an equivalent income, which may explain why the arable sector has been least willing to convert in the absence of maintenance payments or other form of longer-term risk sharing. While various mechanisms, including the creative use of set-aside, can be found to maintain the income from market support payments, the premium remains the fundamental issue. Organic prices for crops fell significantly in 2002 due to increased availability of imports at lower prices. The effect of this would be to reduce margins to levels similar to conventional production. In this context, the organic farming scheme payments can be seen to make a small, but welcome contribution to maintaining incomes, but further reductions in prices could eliminate this benefit. Many producers would need to have more confidence that incomes could be sustained before taking the decision to convert.

Figure 5-13: Whole farm margins (£/ha) for conventional and organic specialist arable farm models, UK, 1995-2002

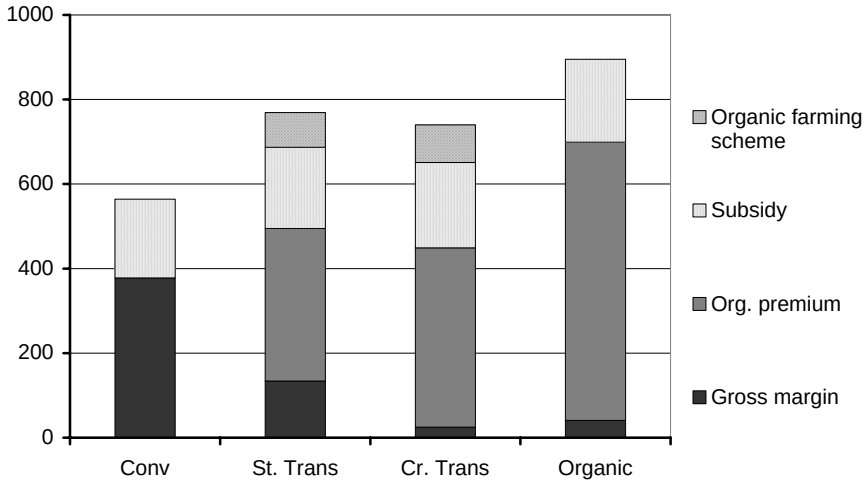


	1995	1997	1999	2001	2002
Conv	885	799	764	592	564
Organic	889	942	1356	897	882
Premium	254	288	560	656	658

1 £ = 1.45 €

Source: Lampkin (2003)

Figure 5-14: Components of whole farm margins (£/ha) for conventional, staged and crash transition, and organic specialist arable farm models, UK, 2002



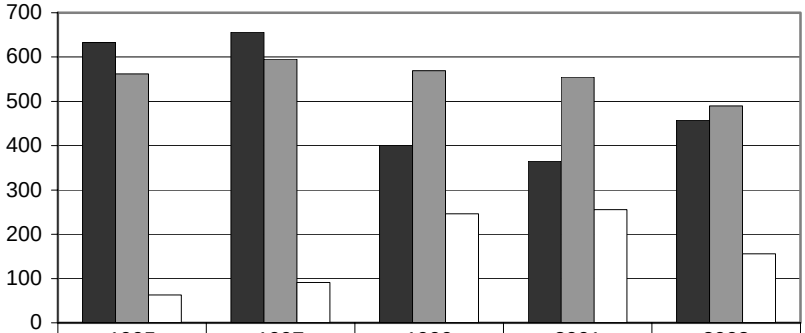
1 £ = 1.45 €

Source: Lampkin (2003)

5.8.2.3 Lowland livestock

Lowland livestock producers and mixed farms also benefit from the price premiums available for crops, beef and sheep, but these farms, due to the larger forage area for fertility maintenance, are less reliant on premium prices than specialist arable producers. With the premiums available in 2002, these farms had the potential to generate better returns than under conventional management, and it is perhaps not surprising that lowland livestock and mixed farms are the dominant type of lowland organic farm in the UK.

Figure 5-15: Whole farm margins (£/ha) for conventional and organic lowland livestock farm models, UK, 1995-2002

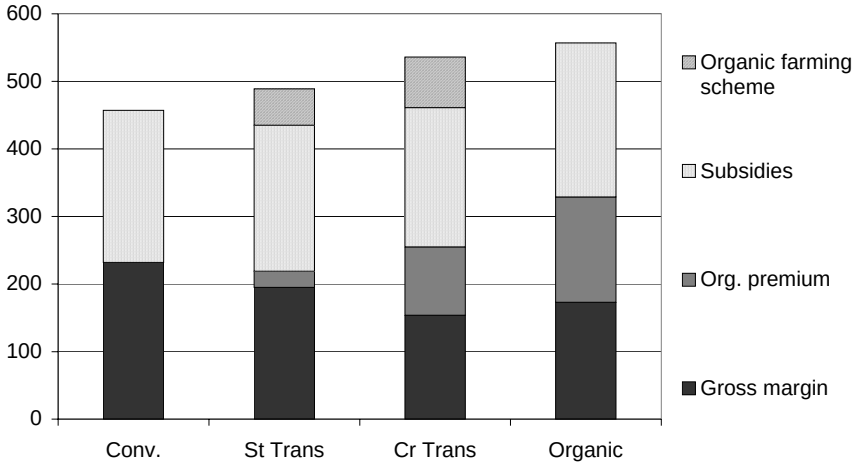


	1995	1997	1999	2001	2002
Conv	633	656	401	365	457
Organic	562	595	569	555	490
Premium	63	91	246	256	156

1 £ = 1.45 €

Source: Lampkin (2003)

Figure 5-16: Components of whole farm margins (£/ha) for conventional, staged and crash transition, and organic lowland livestock farm models, UK, 2002



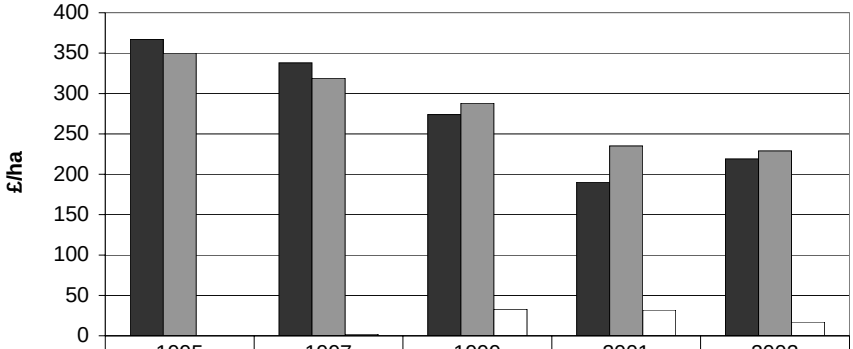
1 £ = 1.45 €

Source: Lampkin (2003)

5.8.2.4 LFA livestock

The situation is different for less-favoured area beef and sheep producers. The organic price premium is relatively much less important, and market support payments make a significant contribution to the farm margin. Because of lower stocking rates, the market support payment is reduced during conversion and subsequently on organic farms, but destocking and restructuring the enterprise balance can help improve the underlying performance of the system and the organic farming scheme payments, including the new maintenance payments, are relatively attractive. However, other problems such as limited land area for winter feed production, and lack of winter housing, may be more significant when reintroducing cattle, and these are not fully reflected in the model.

Figure 5-17: Whole farm margins (£/ha) for conventional and organic LFA livestock farm models, UK, 1995-2002

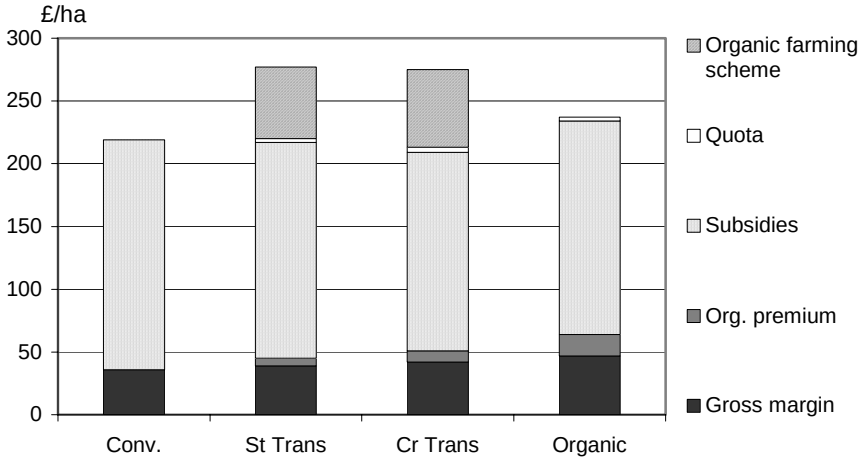


	1995	1997	1999	2001	2002
Conv	367	338	274	190	219
Organic	350	319	288	235	229
Premium	0	2	33	32	17

1 £ = 1.45 €

Source: Lampkin (2003)

Figure 5-18: Components of whole farm margins (£/ha) for conventional, staged and crash transition, and organic LFA livestock farm models, UK, 2002



1 £ = 1.45 €

Source: Lampkin (2003)

Of the non-organic support payments, LFA premiums (Hill Farming Allowance) amounted to £18 (26 €) per hectare on the conventional and £20 (29 €) per hectare on the organic models in 2002 – this is in marked contrast with the headage based approach in 1999, where the value of HLCA payments was £43 (62 €)/ha in the conventional and £32 (46 €)/ha in the organic models. This illustrates both how farmers in general may have lost out from the change to area based payments under Agenda 2000, but that the conversion to organic production is financially easier if payments are area rather than headage based.

For this group, the CAP Reform 2003 decoupling elements are likely to be most attractive as a basis for conversion, in terms of providing a secure income while permitting destocking and restructuring of the sheep/cattle balance.

5.8.3 Oganic Farming Scheme and Agri-Environmental Reform

5.8.3.1 Organic Farming Scheme Reform

Until 2003, payments were only made for farms in conversion. The reasoning for this lack of continued payment was that the price premiums that organic farmers were receiving for their products were considered to be inducement enough for continued organic management. Previous research into the economics of conversion and ongoing organic farming had indicated that although the greater number of farmers felt that they were worse off rather than better off in the conversion process, the position after conversion was that 50% felt better off as compared to conventional farming and only 18% worse off (Centre for Rural Economics Research 2002).

However, since 2001, the rapid increase in the number of organic producers has meant that in certain sectors such as dairy, beef and sheep, oversupply conditions were found and the price premium has been reduced to much lower levels – in the case of the milk sector, many farmers have had to market their milk at conventional prices, and there are increasing concerns over reversion back to conventional systems.

This has led to the introduction of ongoing maintenance payments (Table 5-56) from 2003 (June in England, Autumn in Wales). For the first time, producers who converted before conversion payments became available in 1994 will be eligible for support, and those who joined the previous 5-year OFS scheme will also be eligible for the maintenance payments.

Table 5-56: New OFS payment rates, £/ha (€/ha), from June 2003 in England, early 2004 in Wales

	Conversion						Maintenance	
	Y1	Y2	Y3	Y4	Y5	Total	Y1-5	Total
England								
Arable area payment land and cider apples	225 (326)	135 (196)	30 (44)	30 (44)	30 (44)	450 (653)	30 (44)	150 (218)
Top fruit (apples and pears)	600 (870)	600 (870)	600 (870)	30 (44)	30 (44)	1,860 (2,697)	30 (44)	150 (218)
Other improved land	175 (254)	105 (152)	23 (33)	23 (33)	23 (33)	349 (506)	23 (33)	115 (167)
Unimproved/rough grassland	25 (36)	10 (15)	5 (7)	5 (7)	5 (7)	50 (73)	5 (7)	25 (36)
Wales								
Arable area payment land and permanent crops	225 (326)	135 (196)	35 (51)	35 (51)	35 (51)	465 (674)	35 (51)	175 (254)
Other enclosed land	175 (254)	105 (152)	35 (51)	35 (51)	35 (51)	385 (558)	35 (51)	175 (254)
Unenclosed land	25 (36)	10 (15)	10 (15)	10 (15)	10 (15)	65 (94)	10 (15)	50 (73)

Sterling rates converted at 1 £ = 1.45 €

Source: DEFRA and Welsh Assembly Government (2000-2003)

Other changes in England include the introduction of a new land category for top fruit producers with higher aid rates and the end of reduced payments for farmers in the OFS who also get Countryside Stewardship and Environmentally Sensitive Area payments, although farmers already in a CSS or ESA agreement who then make an OFS application may receive reduced rates for certain activities such as in the case of fertiliser restrictions. A final significant change is that the whole farm must be converted, but that staged conversions, with parts of the farm converted in successive years, can be agreed.

5.8.3.2 Agri-environmental reform

A review of all agri-environmental schemes in England started in January 2002 with the intention of rolling out revised schemes in 2005. The process focuses specifically on reviewing the Environmentally Sensitive Area and Countryside Stewardship Schemes, following up the recommendations of the Curry report, especially the implementation of a broad and shallow (entry level) scheme with easier access to support for a larger number of producers. The suggestion is that the present agri-environment scheme arrangements are not flexible enough in meeting targets or local environmental needs. Already the government has piloted an entry scheme in four areas of England where-by applicants have to prescribe to up to 50 on-farm, environmentally improving practices each with certain points allocated for practices and amount of land or length of linear feature incorporated. Payment is then received dependant on the points gained. Later on in this review process a second more specific

programme will be developed with more detailed prescriptions and higher rates of payment, including specific provisions for a long term organic stewardship scheme, covering both conversion to and continued organic production.

In Wales, a similar review of agri-environment schemes is taking place, with proposals for integrating organic and conventional producers in an entry level scheme. Pilots for this are due to be run in 2004, following a consultation on the proposals. The current Welsh proposals do not involve the points system planned for England, at least for the entry level scheme, although aspects of the current Tir Gofal points system may be carried over into the higher level tiers.

In both Wales and England, the introduction of organic maintenance payments at a relatively low rate compared with other EU member states, is seen as an interim measure, pending the wider reforms currently being planned. The expectation is that producers will then be eligible for higher levels of support, but with some additional environmental requirements attached.

The changes are to be supported through modulation of Pillar 1 payments, and were a key focus of the UK government negotiations over the CAP Reform in Luxembourg. The UK has already implemented the voluntary modulation option as its spending levels for Pillar 2 measures were based on previously very low historical levels: 2% of the £3.4 (4.9 €) billion of CAP financing was previously directed towards agri-environmental measures. The current plan is to increase the modulation rate incrementally from 2.5% in 2001 through 3.5% in 2003 up to 4.5% in 2006. However, one of the key findings of the Curry report was that greater funding should be transferred from direct subsidy payments to Pillar II rural development with the suggested rate being 10% from 2004. The government position on modulation and funding for the new agri-environmental schemes following the Luxembourg agreement was not clear at the time of writing.

5.8.4 Summary and Conclusions

Organic farming is increasingly acknowledged as supplying environmental benefits in the UK and as a consequence the Organic Farming Schemes were accounting for approximately 15% of agri-environmental expenditure in 2001, a marked increase since 1997 when it was less than 1%. By 2002, 1,631 agreements covered 224,000 ha in England and Wales, at a total cost of £17.4 million (25.2 million euro).

However, until reforms in 2003/4, organic farming scheme payments were only made during the conversion period and whilst they are seen as important as an inducement to convert, it is clear that price premiums are a vital element for organic farm financial performance. Whilst maintenance payments have been introduced in England in 2003 and Wales in 2004, these are at a relatively low level and will remain so pending further agri-environmental reforms in 2005/6.

Support for organic farmers is essentially through direct payments for a five year conversion period with payments front-loaded to the first two

years when organic producers are unable to access premium prices. Conversion is further aided though the Organic Conversion Information Service (OCIS) which supplies 1.5 days free advice in preparation for conversion, and approximately 900 € per farm available for training and advice as part of the Organic Farming Scheme. In Wales there is a Organic Centre funded by Objective 1 and 2 and RDP and other sources, with a total budget of ca. 600,000 € per annum.

Under Rural Development Programming, organic farmers in Less Favoured Areas can receive specifically targeted supplementary payments provided they are not part of the Organic Farming Scheme. In Wales, organic food processors are being specifically targeted under the Small Processors Grant scheme under the rural economy measure (Art 33) but at this stage there is no data to indicate to what level organic farmers are being supported. Whilst there is evidence to suggest that organic farmers, when compared to conventional farmers, are better able or suited to attract other RDP measure payment such as processing and marketing grants, there is no specific targeting of organic farmers in the measures.

Whole farm gross margins have declined in both conventional and organic and all sectors over the period (1999- 2001), with the decline being more dramatic in the organic sector as conventional margins stabilised following previous serious declines in 1996-1998. However, based on the model calculations presented in this study, organic farming still presents higher per unit area whole farm gross margins that similar conventional farm types, provided that premiums prices can be achieved. The recently introduced maintenance payments make little impact to restoring relative financial performance if premium prices are not obtained.

Expansion of organic farming in the UK has been as a result of two main factors, increased payments under CAP Reform and changing consumer attitudes to food brought about by various food scares in the 1990s, culminating in the BSE crisis of 1996/7 and the consequent collapse in conventional prices. Much of the policy support for organic farming has been directed at increasing supply with far less of a specific focus on developing the demand for organic produce, although recently dialogue and initiatives are beginning to address this issue.

Previously, relatively high price premiums for organic produce were seen as sufficient financial support for farmers after the conversion period. However, the general decline in price premiums available, especially in the dairy sector with its over supply conditions, combined with a growing acceptance of the environmental benefits from organic farming, have led to a change in policy support to ongoing maintenance payments, bringing the UK into line with most of the rest of the EU. However, these maintenance payments are set at a low level and are very much a short-term measure with wider agri-environmental reforms and increasing funding through modulation of Pillar 1 payments possibly leading to greater support for organic farming.

In the longer term, there needs to be higher levels of support which are based on the environmental and other public good benefits of organic farming, and less directly linked to the market. It should not be assumed

that high price premiums can be obtained by all organic producers, and income foregone calculations should be based on the assumption of marketing at conventional prices or much lower organic price premiums than form the basis for the current rates. Where organic price premiums are obtained, these should be seen as a reward for the marketing activities undertaken by producers, and a reflection of the issues that are particularly valued by consumers, which are not necessarily the public good issues of importance to policy makers. This decoupling of the market from reward for public good activities could also help to avoid disruption to the market if many producers convert legitimately in response to the agri-environmental incentives that are available.

With respect to the demand side, local food initiatives, public procurement and healthier-food education are all developing areas in local and national policy arenas that are to some degree being used to encourage the further development of organic farming. These policies have significant potential and their more widespread application should be encouraged. With CAP Reform, there is a particular danger in the UK that the rural development quality policy initiatives foreseen in the Luxembourg CAP Reform 2003 agreement will not be implemented due to lack of resources. Given the strong potential of these measures to support the development of demand for organic products, there is a need to ensure that resources are found to enable the quality policy measures to be implemented.

5.9 Summary and Conclusions

This section provides synthesised conclusions based on all case studies and will point out potential modifications of the Rural Development Regulations which may contribute to the further development of organic farming. The analyses of the specific Rural Development Programmes (RDP) in 6 Member States (Austria, France, Germany, the United Kingdom, Italy and Spain) demonstrate that the main aims of all elaborated programmes are similar. However, implementation in each country depends on the national situation and emphasises different principles.

5.9.1 Attractiveness of Rural Development Programmes for organic farming

Most of the national RDPs have a considerable potential for supporting organic farming. In all countries organic farming is considered as one possible mechanism to achieve the sustainable development objectives and is addressed specifically in certain measures. Thus, the RDPs can generally be considered a positive environment for organic farming, not necessarily for the variety of specific support measures, but more in general for the emphasis put on the enhancement of product quality and on environmental protection. Nevertheless, most of these priority areas still bear the potential for a more targeted support of organic farming.

The UK, the Italian, the Austrian, the Spanish and the German case studies clearly emphasise the opportunity for organic farming to benefit from RDP because of well-suited provisions to meet part of the needs of organic producers and potential to provide conventional farmers with incentives for conversion.

5.9.1.1 Agri-environmental measures

The agri-environmental measures were recognised as the most relevant for organic production because they provided the most significant support for organic farming, although some of the other measures also specifically address organic farming in some countries. In quantitative terms, the overall level of support to organic farming is generally beneficial for organic farms compared to the conventional ones, with a positive relative advantage of most organic crops with the exception of olives, horticulture and viticulture in Italy.

However, the closest alternative to organic farming, e.g. integrated farming, in most countries may receive nearly as high payments and is an interesting alternative for farmers who do not want to comply with the tighter standards of the organic scheme.

In **Austria,** 12% of the ÖPUL budget or 69.5 million euro are expended on the organic farming measure, representing an average of 254 €/ha. However, similar budgets are spent on measures which apply only to conventional farms, i.e. the measures “Reduction of Agricultural Inputs” and “Abandonment of Agricultural Inputs”. However, at the farm level organic farming seem to have some benefit compared to conventional farming due to the possibility of combining measures and a higher ceiling of payments which applies to farms larger than 100 ha.

In **Spain**, although only 3% of contracts for RDP measures in year 2002 refer specifically to organic farming, the total amount of financial resources allocated to organic farming reaches 32% of the total budget. With an average payment for organic farming of about 200 €/ha, that may be integrated with payments from other agri-environmental measures, the organic sector may be considered adequately supported from a financial point of view. Organic livestock is mainly supported by per hectare payments for fodder, grass and meadows land with payments ranging from 126 to 180 €/ha. Substantial integration for livestock may come from other agri-environmental sub-measures, shifting the average

payment for organic grassland area to 330 €/ha. Given the average organic land use structure is strongly characterised by grassland, such results show high potential support for organic farming.

However, the closest alternative to organic farming measures, i.e. integrated farming, may be considered particularly attractive in terms of payments allowed. This is particularly relevant for horticulture and vine production where payments are respectively 83% and 78% of those for organic. Integrated farming and low-input farming measures appear more appealing to small, marginal farmers than the organic measures.

In **Marche (Italy),** the success of the agri-environmental measures in Marche's RDP is confirmed by the high number of applications for the organic farming measures: 1,028 application actually accepted for a total 48,612 ha, prevalently distributed in permanent pastures (45%) and annual crops (35%), with an average payment for organic farms of 188 €/ha. The Rural Development Plan has generally increased the level of per hectare payment compared to Council Regulation (EC) 2078/92, with the exception of sunflower, permanent pastures and alternated forage. The strongest increase (+106%) was observed for horticultural crops, which are nevertheless insufficient to cover the income loss compared to conventional horticulture. Similarly, organic vine and olive production are not sufficiently compensated, showing a potential income loss around 110 €/ha.

In **Baden-Württemberg (Germany)**, organic farms potentially receive higher payments from agri-environmental measures than conventional farms (70 €/ha) because payment levels for arable and grassland measures are higher for organic farming than for comparably restricting measures.

In **France**, support for organic farming was increased in 1998 and again under the Agenda 2000 reforms, with the period for support being extended from 2 to 5 years and the levels of payment for specific crops modified. This contributed to a significant increase in the number of producers converting compared with the situation before 1997 and the Riquois action plan, with organic farming accounting for about 10% of agri-environment agreements, 5% of land area, and 25% of expenditure in 2001. By the end of 2002, nearly 4,000 conversion agreements had been signed, representing only one third of organic farmers in France, so that most organic farming in France remains unsupported by direct payments for organic farming. Since August 2002, it has not been possible to register new agreements in France as all schemes have been subject to review.

This delay in implementing new schemes is causing serious concern among organic producer organisations in France. With the latest indication being that the new CADs will not be implemented before early 2004, this means that there will have been no conversion support for more than 18 months. This is particularly impacting on those producers who registered for conversion before the suspension of the CTEs and who farmed organically in the intervening period without financial compensation or with very low levels of compensation. Since the suspension of the CTEs, only a few producers have started conversion without support in the belief that the new system would be implemented

quickly. It is likely that many more are waiting for the situation to be resolved before starting conversion. This may lead to a rush of producers starting conversion together when the scheme is reopened, resulting in significant problems marketing the sudden increase in supply.

In the **England and Wales (UK)**, the Organic Farming Schemes were accounting for approximately 15% of agri-environmental expenditure in 2001, a marked increase since 1997 when it was less than 1%. By 2002, 1,631 agreements covered 224,000 ha in England and Wales, at a total cost of £17.4 millions (25.2 millions euro). However, until reforms in 2003/4, organic farming scheme payments were only made during the conversion period (5 years) and whilst they are seen as important as an inducement to convert, it is clear that price premiums remain a vital element for organic farm financial performance. Whilst maintenance payments have been introduced in England in 2003 and Wales in 2004, these are at a relatively low level and will remain so pending further agri-environmental reforms in 2005/6.

5.9.1.2 Investment aids

Only in one country, investment aids specifically target organic farming: In **Marche (Italy)** maximum support rates are 10% higher for organic farms, thus clearly benefiting organic farming. In **Austria, France,** and **England and Wales (UK)** this measure offers support which may be beneficial for organic farming because converting farmers more strongly depend on investments, e.g. for animal husbandry, although organic farming is not specifically mentioned. In **Baden-Würtemberg (Germany)** one of two sub-measures, "Regional development", provides for environmentally friendly farming and adequate housing systems, which can be of specific benefit for organic farms.

5.9.1.3 Processing and marketing

In some countries has attention been paid to the processing and marketing measures, however, only minor references to organic farming may be found. In **England and Wales** and in **Baden-Württemberg** no specific organic provision exists, but indirect benefits may result from the fact that organic farms more likely market directly and rely on such measures. In Marche, this measure prioritises investments in the processing and marketing of organic products but does not provide higher support for organic than for other high quality products.

5.9.1.4 Training

In some case study countries some support for vocational training of organic farmers is included in the RDP. In the **Italian** case support for training does not exist. In **France**, organic farming is not specifically addressed although training for agri-environmental issues is a clear emphasis and thus organic farming may indirectly benefit from this. In the **UK**, various educational projects are funded although no specific mention of organic farming is made in the measure. In **Austria**, no specific support measures exist although certain Bundesländer implement specific measures for vocational training for organic farmers.

5.9.1.5 Less Favoured Areas

In most countries, no specific payment for organic are considered in the Less Favoured Areas measure although organic farms tend to be located in Less Favoured Areas and thus may benefit indirectly from the LFA measure

In **Austria**, the measures "Less Favoured Areas" and "Areas with Specific Environmental Disadvantages" do not specifically provide for organic farming support but organic farm types tend to lie within these regions, thus, a large part of LFA payments end up being paid to organic farms.

Compared to agri-environmental payments, differences in average LFA payments to organic and conventional farms are only minor, suggesting that organic and conventional farms in LFA regions are very similar with regard the eligibility criteria for LFA payments and the changes requires in farm organisation to convert to organic farming.

Grazing livestock farms, milk and mixed farms seem to benefit most from these eligibility criteria for Less Favoured Area payments. In contrast, field crop farms receive very low average LFA payments because crop farms do not tend to lie in LFA areas although organic crop farms are more frequently found in LFA areas than conventional ones, while for the other farm types this differences in location seems to be less marked. Milk farms are most likely to be found in Less Favoured Areas. Milk and grazing livestock farms seem to particularly benefit from conversion to organic Less Favoured Mountain Areas. Due to high shares of grassland and forage area organic farms tend to benefit from grassland payments.

Only in the **UK**, organic farmers in Less Favoured Areas can receive specifically targeted supplementary payments provided they are not part of the Organic Farming Scheme. In Wales, organic food processors are being specifically targeted under the Small Processors Grant scheme under the rural economy measure but at this stage there is no data to indicate to what level organic farmers are being supported.

In **Spain**, LFA payments may not be considered as indirect support for organic farming, as they refer to 80% of Spanish territory, hence influencing the majority of farms, and no differentiation is available for organic.

In **Italy**, payments are not differentiated for organic and conventional farms but according to location. As organic farms lie proportionally more in mountain and internal areas, in many cases with large extensive livestock farm and thus may indirectly being favoured by LFA payments. Furthermore, LFA payments are only made to farms not relying on GMOs, which may present an indirect benefit for organic farms.

In **France**, no specific mention is made of organic farming in the LFA measure.

5.9.2 The impact of RDP measures on farms

In the year 2000, on average organic farms in the EU receive higher total CAP (First Pillar/ CMO and Second Pillar/RDP) payments per hectare than conventional farms, although the payment levels via the CMOs are lower for organic than for conventional farms (Table 5-57). These differences are also observed for all farm types except for permanent crop farms. However, payments received through the agri-environmental measures are significantly higher on organic farms and slightly higher through payments for Less Favoured Areas.

Table 5-57: Support to organic and comparable conventional farms: average of all countries covered by FADN in the year 2000 (€/ha)

	Arable		Horticult.		Permanent crops		Dairy		Grazing livestock		Mixed		All farms	
	OF	CF	OF	CF	OF	CF	OF	CF	OF	CF	OF	CF	OF	CF
CMO	202	240	100	88	155	248	103	154	195	214	193	238	163	199
AEP	156	48	164	12	87	58	225	115	168	109	171	71	185	86
LFA	32	32	9	3	4	6	79	76	113	101	51	53	66	59
AEP+ LFA	188	80	173	15	91	64	304	191	281	210	222	124	251	145
Total	390	320	272	103	246	313	407	345	476	423	414	362	414	344

OF = organic farming, CF = conventional farming, CMO = Common Market Organisation payments; AEP = Agri-environmental payments; LFA = Less Favoured Area payments.

Source: Offermann (2003a) based on FADN (2003);

Unfortunately, not for all countries FADN data or other quantitative information was available.

In **Austria**, quantitative analyses have shown, that on average and for all farm types, organic farms receive significantly higher agri-environmental payments (+200 €/ha) and significantly higher Less Favoured Area payments (+103 €/ha) than conventional farms. Mixed crop and livestock farms seem to benefit most from a conversion to organic farming in terms of agri-environmental payments (250 €/ha), while milk farms (33 €/ha) seem to benefit the least. Differences observed on field crop farms are 230 €/ha, on milk farms 163 €/ha, and 174 €/ha on grazing livestock farms.

In **Spain**, payments to organic farming were identified to not be sufficient to compensate for income losses due to conversion to organic farming. However, this might be compensated due to the fact that specific horizontal nature regulations for rural development allow farmers to integrate organic farming support with the other agri-environmental measures, and to obtain a cumulative effect on the total payment received.

In **Marche (Italy)**, the relevance of RDP payments for the economic sustainability of organic farming is confirmed by an analysis on FADN data showing that while the share of RDP payments with respect to net

income for conventional farms is 4%, it ranges between 9% for partially organic converted and in conversion farms and 43% for partially organic, in conversion farms.

In **France**, (and formerly the UK), a lack of maintenance payments for established organic producers means that they are entirely dependent on adequate prices being achieved to maintain their long-term viability and performance relative to conventional producers. There is clearly a risk that the market does not provide sufficient security to achieve this and that other mechanisms are needed to ensure that the provision of public goods is adequately rewarded in the long-term.

However, not just the levels of support and market demand are critical for the development of the sector, but administrative issues can have a major impact, with stop/start schemes potentially causing serious damage. Delay in implementing announced support measures may cause serious concern among organic producer. Farmers are likely to wait for the implementation of a programme before starting conversion. This may lead to a rush of producers starting conversion when the schemes are finally (re)opened, resulting in significant problems marketing the sudden increase in supply.

In the **UK (England and Wales)**, previously, relatively high price premiums for organic produce were seen as sufficient financial support for farmers after the conversion period. However, the general decline in price premiums available, especially in the dairy sector with its over supply conditions, combined with a growing acceptance of the environmental benefits from organic farming, have led to a change in policy support to ongoing maintenance payments, bringing the UK into line with most of the rest of the EU. However, these maintenance payments are set at a low level and are very much a short-term measure with wider agri-environmental reforms and increasing funding through modulation of Pillar 1 payments possibly leading to greater support for organic farming.

5.9.3 Recommendations for improving RDP measures for organic farming

While the general outline for the CAP Reform 2003 is clear, many details remain to be resolved, also in relation to the RDPs. In drawing up the new RDPs lessons learned from the analysis of the case study countries and regions in this study lead to the following recommendations. In most countries, the priorities and measures implemented within Rural Development Plans still bear the potential for a more targeted support of organic farming.

It is important to

- make sure that the organic premiums within the agri-environmental programs are sufficiently higher than the premiums for integrated production;
- continue the policy of organic maintenance payments; also attention should be given to a sufficient magnitude of these maintenance payments in comparison to the payments during the transitional phase;
- implement a minimum organic farming support in all agri-environmental programs in order to minimize interregional distortion of organic trade;
- include specific investment provisions for organic farmers into the investment programs of the RDPs, with higher support percentages for organic than for conventional investments,
- give more attention to the issues of marketing and processing of organic products, and to the possible link with typical products and rural tourism as additional vehicles for boosting organic products;
- in countries where the domestic market for organic products is still quite small and producers mainly rely on exports, (partially) support specific marketing institutions from the RDPs,
- to review the (environmental and socioeconomic) benefits of an increase of organic farming in Less Favoured Areas LFA and adapt provisions accordingly; most likely this would lead to an abolition of specific provisions for organic support in LFA but in turn to a promotion of organic farming as a preferred management option in regions of high nature value without restricting organic farming support to these areas,
- support more effectively specific extension services and technical assistance for organic farming including demonstration activities; in vocational training, standard curricula should include information on organic farming and specific training courses should be offered;
- give increased attention to demand support policies such as a local food initiatives, public procurement and healthier-food education,
- explore the potential of integration of the agri-environmental and rural development legislation as project based measures,
- improve administrative procedures as these can have a major impact, with stop/start schemes potentially causing serious damage.

6 The impact of the CAP Reform 2003 on environmentally sensitive farming systems, in particular organic farming

On 26 June 2003, EU agricultural ministers adopted a fundamental reform of the Common Agricultural Policy (CAP). The reform is expected to have a significant impact on conventional and organic agriculture in the European Union. In the following paragraphs, the key elements of the new, reformed CAP will be discussed with respect to their impact on organic farming.

Additionally, the impacts of the CAP Reform 2003 on organic in comparison to conventional farms for a region with traditionally small structured agriculture are illustrated by an excursus on Baden-Württemberg, Germany.

6.1 Effects of the key elements of the CAP Reform 2003

6.1.1 The single farm payment

The reform introduces a single decoupled income payment per farm, which integrates many of the existing direct payments a producer receives from various schemes into a single payment, determined on the basis of historical references. The option to make this payment on a flat-rate, regional basis also exists.

Such decoupling of payments should in general be beneficial for the relative competitiveness of extensive farming systems, including organic farming. The incentive for conversion should increase for a number of farms, as conversion will not any longer mean to forego part of the direct CMO payments (of which conventional farms usually get a higher amount than organic farms, see chapter 4), since the single farm payment is based on historical payment levels. However, new entrants that bring along high payment rights from their old business to a market with previously lower premium rights may have competitive advantages. This is more likely if few profitable alternative possibilities exist in the field of agriculture as a whole. Hardship provisions in the horizontal regulation explicitly provide for participants in agri-environment schemes, including organic farming, to choose an earlier reference period for historical payments – this will benefit countries like the UK where the majority of current organic farmers were in conversion during the main reference period.

A clear advantage for organic farming is the exemption from the mandatory set-aside obligation to grow certain legumes if the whole holding is farmed organically.

Not all payments are going to be decoupled. A 55.57 €/ha supplement for protein crops (field beans, peas and sweet lupines) will be retained. This will be helpful to organic producers both in terms of rotation design and in meeting the need of livestock producers for 100% organic rations after 2005, where access to suitable protein sources remains a major issue.

The final compromise reached on the reform gives member states considerable freedom to decide on the extent of decoupling in several sectors (partial decoupling). Economic reasoning suggests to decouple payments from production as far as possible, which should in general also benefit the relative competitiveness of extensive farming systems (Wissenschaftlicher Beirat 2003). On the one hand, full decoupling is expected to reduce administrative burdens substantially and to give full freedom to decide production priorities based on technical and business considerations. This means that the market, not government planning, determines the allocation of resources (in theory economically more efficient). However, the way the historic payment is implemented means that there are still sectors (pigs, poultry, horticulture) not eligible, and producers will lose the single farm payment on land they might put into potatoes, vegetables etc. so there are still some barriers to free determination of production enterprises. On the other hand, there is a widespread concern that production enterprises that are unprofitable without subsidies will be abandoned – this especially applies to beef and possibly sheep production in Less Favoured Areas (Dabbert 2003). This market-determined response may be economically rational (and may in due course lead to higher prices restoring viability if lost production is not simply substituted by imports), but in sheep dominated hill systems such as exist in much of the UK there are environmental reasons for wanting to maintain a high cattle to sheep ratio. For this reason, there is significant debate about the need to retain some form of support for beef production.

Member states can decide whether the height of the payment rights is calculated individually for each farming unit or in a regional approach. Accepting a regional uniform level of payments would lead to stronger redistribution of payments between farm types and regions. Organic farms, that received relatively few payments up to now may benefit although certain farm types may also suffer from the redistribution between farm types. The advantage of regional payments is that they would be independent of previous practice, and would remove discrimination between sectors previously supported and those not (pigs, poultry, horticulture) allowing for freedom for diversification and significantly reducing problems associated with land transfer and new entrants. The main disadvantage is the high number of potential losers, so the distributional effects are a main area of conflict. Any farm type receiving in the past less than average payments organic farming would actually benefit from a regional uniform payment.

There is also a new 'national envelope' provision for up to 10% of the resources for the single farm payment to be used to fund additional payments, at the national or regional level, for the purposes of encouraging specific types of farming which are "important for the protection or enhancement of the environment and of improving the quality and marketing of agricultural products". At face value, this would appear to duplicate the provisions of the rural development programme, with the possible advantage for some States of 100% funding from the Commission, but the full potential of this provision to support organic farming has yet to be explored.

An advantage of the decoupled payments could be the ending of the transfer of the payment as rent to land owners as a results of the tradability and relative scarcity of payment rights. As tenancy contracts are usually adapted slowly, transfer of payments to land-owners will continue as with the current area payments. However, the number of free eligible area is rather small (e.g. about 3% of UAA in Germany according to Isermeyer (2003)) and will be exhausted by non-agricultural purposes in a few years. This affects the conventional and the organic farms equally as they usually do not form a separate tenancy market. Nevertheless, organic farmers would benefit more from the lowering of land rental prices, as they usually hold more area. Apart from these arguments, the likely impacts are expected to be more complex. Any system of area related payments is likely to result in some transfer of benefit to land owners, but the historically based single farm payment would appear to be more transferable than a regional flat-rate payment, and therefore less likely to be incorporated in land values.

6.1.2 Cross-Compliance

The single farm payment will be linked to environmental, food safety, animal and plant health and animal welfare standards and occupational health and safety standards, as well as the requirement to keep all farmland in good agricultural and environmental condition ("cross-compliance"). Organic farming has some advantages out of cross-compliance, because it works already on an higher level in the fields concerned, e.g. the envisaged provisions concerning soil protection. Consequently, the risk of violating regulations and the need for adjustments is lower. Some authors see the potential danger of conventional farming gaining a such strong eco-image by cross-compliance that it will compete with organic farming (Stolze and Sanders 2003). However, this does not seem very likely, as the requirements specified by the cross-compliance rules are significantly less restrictive than the organic farming standards.

In the political discussion concerns are voiced about the impact cross compliance might have on some of the grassland support within agri-environmental programmes, especially the type of support which is in fact paid as a maintenance premium for grassland. This would be a relevant issue for organic farming, because it profits from such programmes more than conventional and an abolishment would thus be more disadvantageous for organic farming than for conventional. However, the intention of the legislation was not to introduce completely

new rules of good agricultural practice (except those mentioned in Annex IV to Council Regulation (EC) 1782/2003. While the issue does not seem completely resolved, it seems possible that grassland programmes of the aforementioned type might survive with minor adaptations which would mean that in this area no serious disadvantage for organic farming is to be expected, compared to the status quo.

6.1.3 A strengthened rural development policy

The rural development measures are strengthened by the reform, as the agreement increases the level of Community support for agri-environmental measures (to 85% in Object 1 areas and 60% in other areas), the budgets are increased by the funds from modulation and new elements of support like food quality measures, aids for meeting standards and animal welfare measures are introduced. These new measures, when nationally implemented, are slightly more beneficial for organic farming than for conventional farming, as they target similar aims as organic agriculture.

Organic producers may fully benefit from several new rural development provisions for:

- support to producer groups for consumer information initiatives (grant up to 70% of eligible costs);
- flexibility with respect to eligibility rules for processing and marketing grants to small processing units and new support for “innovative” approaches to food processing;
- up to 10,000 € assistance in adapting to new Community regulations;
- for the first-time, support of the cost of using farm advisory services (up to 80%, max 1,500 €);
- potentially, support for the adoption of high animal welfare systems, provided that the specific efforts of organic standards in this context are recognised.

However, a key issue in some countries (especially the UK and potentially other countries) is the historically low level of rural development funding. A stronger shift of money towards RDP as foreseen might in total result in higher co-financing needs by the regions, in spite of the decrease of the co-financing percentage required according to the new rules. The necessary increase in regional budgets are not everywhere possible, which might in total lead to an even more uneven application of RDP measures in different European regions than in the past. This might also affect organic farming, when support measures are poorly funded. Contrary to other measures of the RDP which affect other fields of agriculture this might affect the interregional competitiveness of organic farmers working in regions which do not or only very little support organic farming.

6.1.4 Modulation

Modulation will relate to the single farm payment, which is based on current arable area and headage payments. At present organic farms usually receive less payments than conventional farms (compare chapter 4), an average organic farm should in absolute values be less affected by modulation. In addition, the funds retained by modulation will be used to finance the new rural development policy, which offers the opportunity to promote environmentally friendly farming systems including organic farming.

6.1.5 Revisions of the market policy of the CAP

Asymmetric price cuts in the milk sector: The intervention price for butter will be reduced by 25% over four years, which is an additional price cut of 10% compared to Agenda 2000, for skimmed milk powder a 15% reduction over three years, as agreed in Agenda 2000, is retained. This may lead to a reduction of the conventional milk price. As in some countries the organic milk market is closely linked to the conventional one, a price reduction is also possible in the organic sector. Often, the agreements/contracts between farmers and dairies contain an absolute price premium which, if maintained constantly, would lead to a lower price cut than in the conventional sector. But the incentives to increase conversion to organic farming will probably lead to a further over-supply in the organic sector with a respective stronger price drop. This would only apply in some countries. In other countries the organic price seems to be decoupled from conventional prices and may not be affected by reductions in conventional price.

These cuts will be compensated by the introduction of a new premium for milk producers in 2004, which will be integrated with the single farm payment between 2005 and 2008 depending on decisions in individual countries. As the entitlement is determined by the quota owned in each year, this has resulted in very strong upward pressure in quota prices in the UK as producers seek to secure their position for when the payments are introduced next year. Organic farmers may be disadvantaged by already holding less quota as a result of conversion, and due to the difficult market for milk tend also to be financially not able to purchase additional quota. It also means that future income streams are being incorporated into quota values, with current sellers benefiting rather than the intended future recipients of the premium. However, this problem does only affect some EU countries. Others, where quotas are held by co-operatives rather than individual producers, or are otherwise less easily traded, are not affected.

Looking at the overall picture a decrease of milk prices received by organic farmers is likely as a consequence of the reform. Many organic farmers depend in a technical sense more strongly on ruminant animals for their farm organisation, because the integration between ruminants like dairy animals and plant production is a pivotal point of their farm organisation. This holds not only in grassland regions but also for farms with mixed arable and grassland. In these cases crop rotations are often

designed in a way that ruminants are needed. This implies a less flexible reaction of organic farms of this type to decreasing milk prices than for their conventional counterparts. In this respect the reform might effectively disadvantage organic farmers.

Reduction of the monthly increments in the cereals sector by half, with the current intervention price to be maintained. The influence on the organic sector of these regulations will be minor.

Reforms in the rice, durum wheat, nuts, starch potatoes and dried fodder sectors: In organic farming, fodder drying plants play a minor role, because their energy consumption contradicts the organic regulations of saving energy. Only farms that deliver their milk to some Emmental-cheese dairies make use of this process, as the ban of silage grass shortens the supply with protein feed. Partial decoupling of the payments will not have significant influence on this.

Following the general scheme of arable crops, intervention price reduction for rice is accompanied by the granting of direct payments, which are foreseen to maintain the production potential of the EU rice sector. Estimates of the drop in total EU rice production range between 1% and 29%. The effects for organic rice market may be expected mainly on the import-export side, where the fall in market prices would favour rice imports and reduce the competitiveness of EU organic rice producers. Nevertheless, the demand for rice varieties suitable for "risotto" (Arborio, Baldo, Carnaroli) – typically produced in the EU (mainly in Italy), is relatively inelastic: therefore the effects of the foreseen policy changes will simply be shifted into consumers by an increase in retail prices for organic "risotto" rice.

The general reduction of support for starch potatoes may produce negative effects in the profitability of the conventional production. Where the production conditions are favourable, this could lead to an increased opportunity for organic production of starch potatoes as the organic premium may be considered as a possible counterbalancing for the support reduction. Starch potatoes, in any case, play a minor role in organic farming.

A reduction of durum wheat support will concern the southern parts of the EU and in particular Italy, due to its high share in organic durum wheat production. All the scenarios presented by DG Agriculture in the Impact analyses of Mid Term Review of CAP (2002) consider a strong reduction of durum wheat land area between 90 and 76% by the year 2009, and a reduction in durum wheat production between 90.5 and 80.5%. The effects on organic farming in Italy could be particularly heavy. The organic durum wheat sector is already experiencing strong difficulties due to the phasing out of the derogation that allowed to use conventional seed if organic was not available. This is expected to increase production costs considerably in the short run and reduce profit margins.

The nuts sector is receiving specific payments on a per hectare basis, according to maximum guaranteed areas ceiling. No strong impacts on areas and production will probably occur, due to the sector's supply rigidity in the short-medium term. Nevertheless, indirect effects can be

imagined, in particular for farmers in LFAs, where nuts production can be an important income source: a stable payment for nuts production may be proportionally more in favour to farms with a highly diversified structure, and therefore may be considered indirectly beneficial to organic farming.

The abolition of the rye intervention is expected to lead to a drastic price cut in the conventional sector from approx. 110 €/t (ZMP 2002b) to 85 €/t (Uhlmann and Kleinhanß 2002). It is unclear how this is transformed to the organic sector, as the conventional rye market is dominated by feed and intervention while in organic rye market foodstuff consumption plays a major role. Thus, only minor drops in the price for organic rye is expected.

Excursus: The impacts of the CAP Reform 2003 in a region with mainly small structured agriculture (Baden-Württemberg)

In Baden-Württemberg, the conventional as well as the organic sector will face income losses due to the CAP Reform 2003 (Aurbacher 2003a, see also Annex 10.6). On the one hand, this is due to modulation, on the other to a reduction of the milk price as decided in Agenda 2000 and increased in the CAP Reform 2003. The impact of the Agenda 2000 dairy reform lies between 33 €/ha for conventional farms and 37 €/ha for organic farms whereas the additional loss of the CAP Reform 2003 dairy reform lies between 8 €/ha (conventional) and 10 €/ha (organic). The effect of modulation results in losses of 9 €/ha (conventional) and 8 €/ha (organic).

Before modulation conventional farms receive a higher total average of direct payments of 336 €/ha compared to average total payments of 308 €/ha on organic farms. Due to modulation conventional and organic farms loose a similar percentage of their payments. These losses do not affect all farms to the same extent: Small farms are less affected than larger farms. Organic farms smaller than 30 ha (in total 70% of all farms) receive on average less than 5,000 € CAP payments and are, therefore, not affected by modulation. Thus, as organic farms on average received less payments before modulation, their loss due to modulation is lower despite their higher average size.

The CAP Reform 2003 also offers the possibility to support special types of agriculture important for environmental purposes and quality production. To date it is not clear how these rules will be defined, however, organic farming could in principle benefit due to its environmental benefits.

In the dairy sector, significant losses result from the reduction of the milk price, as the newly introduced milk quota payment does not sufficiently compensate for income losses. However, this depends on the design of the national additional milk premium. In Germany, this could range from no additional premium to the maximum possible rate of 12.96 €/t. The loss in revenue (incl. modulation) ranges from –4.0% to –3.0% in the conventional sector, and from –3.5% to –2.8% in the organic sector. Even the maximum of the national additional dairy premium will not prevent an income loss of agriculture in Baden-Württemberg. These calculations neglect the possibilities of the farmers to adapt to the new situation. Thus, the total income situation most likely will be better than discussed, although adaptation possibilities in the dairy sector are minor and it is unlikely that milk producers can fully compensate their income loss. Thus, the reform will accelerate structural change in the dairy sector in particular. Small farms with few alternative farm branches and those with a high share of borrowed capital will close down first. Through different designs of the national dairy premium the income loss could be buffered to a certain extent. Conserving the current organic premium price for milk in absolute terms would reduce the impacts of the reform on the organic sector.

In summary, the combined effect of the CAP Reform 2003 should in general be beneficial for the relative competitiveness of organic farming in BadenWürttemberg. For existing organic farms however, the overall longterm impact of the reform may be quite different. Firstly, the level of profits may be reduced compared to today's situation or compared to a situation with fully implemented Agenda 2000 reforms only. Secondly, as the incentive for conversion increases for conventional farms, the resulting increase in the supply of organic products may exert a downward pressure on prices for organic products, further contributing to a loss of income of already existing organic farms. In comparison to other regions in Germany, agriculture in BadenWürttemberg may suffer less form the CAP Reform as it is a region with a very smallsized farm structure and most farmers are not affected by modulation at all. In other parts of Germany and the EU, where the farms are bigger, one can expect a bigger impact of the modulation and therefore a higher loss of income.

6.1.6 Future reforms

On Sept 23rd 2003 the Commission has submitted a communication on reform in the olive oil, tobacco and cotton sectors (EC 2003h). In view of the current production volumes, the impact of a reform of the olive oil sector is of special interest for this study.

The proposal foresees the conversion of the existing production-linked direct payments in the olive oil sector into direct income support, through the creation of new entitlements to the single farm payment for farmers, in addition to those arising from the June 2003 CAP Reform. It is proposed that 60% of the production-linked payments for the reference period, should be converted into entitlements to the single farm payment for holdings larger than 0.3 ha. Smaller holdings would have their payments completely decoupled. To prevent a possible disruption to olive tree maintenance, which in turn could lead to degradation of land cover and landscape or negative social impacts, Member States would retain the rest of the production-linked payments for the reference period, for the granting to producers of an additional olive grove payment, calculated on a per hectare or per tree basis, to ensure the permanence of olive trees in marginal areas or low-output olive groves.

These proposals should end the existing discrimination of organic olive growers (compare chapter 4), as support is largely decoupled from output. With 40% of the payments specifically earmarked for marginal areas or low-output olive groves, the proposed reform has the potential to provide a significant boost to organic olive production. However, for existing organic olive producers, there is the threat of increased competition from new entrants into organic olive production. For these farmers, it clearly be more favourable if the current output related support payments would first be converted to uniform per-hectare payments and had only afterwards been decoupled.

6.2 Summary and conclusion

The CAP Reform 2003 adopted by EU agricultural ministers in Luxembourg is a fundamental reform of agricultural policy. The decoupling of payments from production included in the reform generally favours more extensive farming systems and thus also benefits organic farming. The exemption from the mandatory set-aside obligation for organic farmers is an advantage, as long as mandatory set-aside is applied. Member states that opt for a regional approach to premium calculation will relatively favour organic farmers as compared to the individual farm approach. National envelopes provide a possible further (and potentially more reliable) source for support options partly similar to the RDPs. Currently the effects of the reforms on land prices are difficult to foresee. If lower land prices result this would relatively benefit organic farmers.

In general cross compliance provisions should be more easy to follow for organic farmers, compared to conventional. Whether concerns voiced in

the political discussion that cross compliance might make it necessary to phase out some of the grassland support within agri-environmental programmes are valid remains an open question. The abolishment of these programmes would be quite negative for organic farming. It seems possible that grassland programmes might survive with minor adaptations which would mean that in this area no serious disadvantage for organic farming is to be expected, compared to the status quo.

The new provision of the rural development policies provide a number of options potentially beneficial to organic farmers. The main concern here is whether regions will actually provide sufficient money for co-financing. There is a potential danger of increasing differences also in organic farming support between regions, with negative implications for a level playing field for interregional organic competition.

Organic farms receive less payments under the CMOs and should thus be less affected by modulation. On the other hand they should benefit from measures financed by modulation which makes in total modulation a measure beneficial for organic farming.

With respect to the market reforms the milk sector is of high importance for organic farming. A decrease of milk prices received by organic farmers is likely as a consequence of the reform. Many organic farmers depend in a technical sense more strongly on ruminant animals for their farm organisation, which implies a less flexible reaction of organic farms to decreasing milk prices than for their conventional counterparts. In this respect the reform might effectively disadvantage organic farmers. However, the actual effect will depend very much on the development of the premiums paid at the market for organic milk.

The future reform planned for the olive oil sector would - if the Commission proposals are adopted - be quite beneficial for organic farming.

The overall conclusion on the CAP Reform 2003 is that it the positive effects for organic farming seem to clearly outweigh some negative effects, so the reform has the potential of supporting a continued positive development of organic farming. However, to what extent this potential can be realised depends on many details (e.g. of the RDPs) not known at the time this report was written.

6.3 Recommendations

In the implementation of the CAP Reform 2003 it is of especial importance to monitor the dairy and beef sectors with care. This holds for the conventional but even more for the organic sector. Some observers fear that these sectors could be hit so hard that in some grassland regions productive agriculture might vanish and be substituted by landscape management without any productive connotation. This does not seem a desirable development and should be counteracted by RDP and national envelope measures if it takes place.

Some member states will use the option to decouple as little as possible - which is in parts a reaction to the concern voiced in the preceding

paragraph, but is also against the main idea of the reform. This will benefit their agricultural sectors in the medium run only if there is a roll-back to more coupled policies. The Commission should discourage am exaggerated use of the non-decoupling options and should abstain from any roll-back policies.

The development of the CAP Reform 2003 and the development of the European Organic action plan were largely seen as different policy areas. If any large-scale agricultural reforms in the future are planned they should jointly cover the area of conventional and organic agriculture. To that effect prospective impact analyses that are performed before any reform is adopted and that go into policy formulation should include organic farming from the outset. However, both for organic and conventional farmers it would be desirable to actually implement the current reform until the end date planned or even beyond - otherwise policy risk becomes a major factor.

While the general outline for the CAP Reform 2003 is clear many details remain to be resolved. In the coming concretisation of the policy outline two aspects seem to be of especial importance for organic farming:

- In order to minimize interregional distortion of organic trade a minimum implementation of organic farming support should be mandatory in agri-environmental programs
- Addressing the consumer by measures of information, increasing the efficiency of the organic certification and control system, and improving the organic supply chain in general should be priority areas of RDPs and of national envelopes.

7 Summary and conclusions

7.1 The organic farming sector in the EU

In contrast to other parts of European agriculture, organic farming is a growth sector. Although rapid growth has been observed in absolute terms, the organic farming sector is still quite small, covering only about four percent of total agricultural land area in the EU. However, large differences in the development stage of the organic sector exist between Member States and regions in part due to differences in the policy environment.

In the EU, in the year 2001, a total of 275 million euro was spent on organic farming within the agri-environmental measures of Council Regulations (EC) 2078/92 and 1257/99 with commitments of more than 18,000 holdings farming nearly 3 millions hectares.

Of 1.7 billion euro spent on agri-environmental measures via the agri-environmental measures of Council Regulation (EC) 1257/99 organic farming support makes up approx. 15% of expenditure, covering 7.5% of agri-environmental area, receiving an average of 186 €/ha (compared to 89 €/ha for conventional farms). Compared to average payments made (183 €/ha) under the agri-environmental measures of Council Regulation (EC) 2078/92 average payments have increased slightly. However, in several countries the average hectare payment to organic farms has decreased, i.e. in Denmark, France, Greece Italy, Netherlands and Portugal. In all countries, except Portugal and the UK, average payments per hectare are higher for organic than for the average of other measures.

Organic production methods tend to be more labour intensive than conventional methods, mainly due to changed pest and weed management strategies, intensive livestock activities, or changes in livestock densities. In nearly all EU Member states farms are larger in organic than in conventional farming. Organic farms tend to be more involved in non-agricultural activities such as processing or tourism which also influences the amount of labour required.

The EU market accounts for more than 40% of the world markets for organic food. Market shares do not always correspond to production areas due to varying production intensities and the importance of exports. Similarly, the importance of different market channels varies between countries.

7.2 Financial support within the CMO

Agriculture in the EU traditionally receives considerable support via the Common Agricultural Policy. In the ten EU countries analysed, organic farms on average receive approx. 18% fewer direct payments per hectare from the Common Market Organisations than comparable conventional farms.

Organic farms receive considerably fewer area payments for cereals, oilseeds and protein crops. Specifically the eligibility of maize for silage for these payments in many countries favours conventional farming. Total livestock related payments per hectare are higher on organic farms than in the conventional reference group. However, significant differences with respect to the different categories of payments exists. The conventional reference group receives more special premiums for bulls as well as slaughter premiums, as stocking rates are higher and fattening periods shorter. Organic farms profit from the second premium for steers, but these payments only have a very small share in total beef payments. Organic farms also receive a significantly higher amount of suckler cow premiums, reflecting the suitability of this activity in extensive farming systems. Extensification payments are twice as high in organic than in comparable conventional farms, a clear indication that organic farms can more easily comply with the stocking rate limits as required by the respective regulation.

With the exception of horticultural farms, where CMO payments play a less important role, the payments are lower in organic farms for all farm types. The difference is especially high for dairy and permanent crop farm samples, where organic farms get 33% to 38% fewer payments per hectare than the conventional reference farms. The sample of permanent crops farms consists mainly of farms in Portugal and Spain and the difference can be attributed to the much higher payments received by the conventional farms for olive growing. As production aid for olive growers is paid per tonne of olive oil delivered and is therefore linked to the actual output for all producers, extensive farms with lower yields receive fewer payments than comparable but more intensive farms.

Price support instruments, such as tariffs and export subsidies, play a major role within the Common Market Organisations. In the EU, this indirect support to farms still accounts for the main part (60%) of the Producer Support Estimate by the OECD. First estimates indicate that the benefit for organic farms from price support measures of the Common Agricultural Policy is 20-25% lower than for comparable conventional farms.

The CAP Reform of 1992 as well the subsequent reform, the Agenda 2000, have generally reduced the discrimination of extensive farming systems by reducing the level of price support for a number of products, compensating farms for losses of revenue via direct payments. Especially for arable crops, where the reforms introduced compensatory payments based on regional historical average yields, this has generally favoured extensive farming systems. The CAP Reform of 1992 also reduced price support for livestock products (mainly beef and sheep meat), but as

compensatory payments are paid per head, the benefit to extensive systems was small, if any. The Agenda 2000 has continued the trend of decoupling support payments in the livestock sector from production. As payments continue to be made per head, the linkage to production remains close and any extra benefit to extensive farms small.

A range of measures on exemptions or specific rules for organic farming systems implemented or discussed in member states have been identified. These included preferential access to quotas for organic producers, specific management requirements/exemptions for set-aside land and rotation of arable area payment eligible land. Furthermore, the development of action plans for organic farming can be seen as an implementation of special measures, although they usually build on the framework provided by the rural development and structural measures. Because examples of special provisions are not widespread, it is difficult to provide an overall assessment of their impacts. Of the examples cited, probably the flexibility with respect to set-aside management on organic farms has had the most impact, initially at the individual country level, then on an EU-wide basis since 2001.

7.3 Implementation of the Rural Development Regulation

This section provides synthesised conclusions based on all case studies and will point out potential modifications of the Rural Development Regulations which may contribute to the further development of organic farming. The analyses of the specific Rural Development Programmes (RDP) in 6 Member States (Austria, France, Germany, the United Kingdom, Italy and Spain) demonstrate that the main aims of all elaborated programmes are similar. However, implementation in each country depends on the national situation and emphasises different principles.

7.3.1 Attractiveness of Rural Development Programmes for organic farming

Most of the national RDPs have a considerable potential for supporting organic farming. In all countries organic farming is considered as one possible mechanism to achieve the sustainable development objectives and is addressed specifically in certain measures. Thus, the RDPs can generally be considered a positive environment for organic farming, not necessarily for the variety of specific support measures, but more in general for the emphasis put on the enhancement of product quality and on environmental protection. Nevertheless, most of these priority areas still bear the potential for a more targeted support of organic farming.

The UK, the Italian, the Austrian, the Spanish and the German case studies clearly emphasise the opportunity for organic farming to benefit from RDP because of well-suited provisions to meet part of the needs of organic producers and potential to provide conventional farmers with incentives for conversion.

7.3.1.1 Agri-environmental measures

The agri-environmental measures were recognised as the most relevant for organic production because they provided the most significant support for organic farming, although some of the other measures also specifically address organic farming in some countries. In quantitative terms, the overall level of support to organic farming is generally beneficial for organic farms compared to the conventional ones, with a positive relative advantage of most organic crops with the exception of olives, horticulture and viticulture in Italy.

However, the closest alternative to organic farming, e.g. integrated farming, in most countries may receive nearly as high payments and is an interesting alternative for farmers who do not want to comply with the tighter standards of the organic scheme.

In **Austria,** 12% of the ÖPUL budget or 69.5 million euro are expended on the organic farming measure, representing an average of 254 €/ha. However, similar budgets are spent on measures which apply only to conventional farms, i.e. the measures "Reduction of Agricultural Inputs" and "Abandonment of Agricultural Inputs". However, at the farm level organic farming seem to have some benefit compared to conventional farming due to the possibility of combining measures and a higher ceiling of payments which applies to farms larger than 100 ha.

In **Spain**, although only 3% of contracts for RDP measures in year 2002 refer specifically to organic farming, the total amount of financial resources allocated to organic farming reaches 32% of the total budget. With an average payment for organic farming of about 200 €/ha, that may be integrated with payments from other agri-environmental measures, the organic sector may be considered adequately supported from a financial point of view. Organic livestock is mainly supported by per hectare payments for fodder, grass and meadows land with payments ranging from 126 to 180 €/ha. Substantial integration for livestock may come from other agri-environmental sub-measures, shifting the average payment for organic grassland area to 330 €/ha. Given the average organic land use structure is strongly characterised by grassland, such results show high potential support for organic farming.

However, the closest alternative to organic farming measures, i.e. integrated farming, may be considered particularly attractive in terms of payments allowed. This is particularly relevant for horticulture and vine production where payments are respectively 83% and 78% of those for organic. Integrated farming and low-input farming measures appear more appealing to small, marginal farmers than the organic measures.

In **Marche (Italy),** the success of the agri-environmental measures in Marche's RDP is confirmed by the high number of applications for the organic farming measures: 1,028 application actually accepted for a total 48,612 ha, prevalently distributed in permanent pastures (45%) and annual crops (35%), with an average payment for organic farms of 188 €/ha. The Rural Development Plan has generally increased the level of per hectare payment compared to Council Regulation (EC) 2078/92, with the exception of sunflower, permanent pastures and alternated forage. The strongest increase (+106%) was observed for horticultural

crops, which are nevertheless insufficient to cover the income loss compared to conventional horticulture. Similarly, organic vine and olive production are not sufficiently compensated, showing a potential income loss around 110 €/ha.

In **Baden-Württemberg (Germany)**, organic farms potentially receive higher payments from agri-environmental measures than conventional farms (70 €/ha) because payment levels for arable and grassland measures are higher for organic farming than for comparably restricting measures.

In **France**, support for organic farming was increased in 1998 and again under the Agenda 2000 reforms, with the period for support being extended from 2 to 5 years and the levels of payment for specific crops modified. This contributed to a significant increase in the number of producers converting compared with the situation before 1997 and the Riquois action plan, with organic farming accounting for about 10% of agri-environment agreements, 5% of land area, and 25% of expenditure in 2001. By the end of 2002, nearly 4,000 conversion agreements had been signed, representing only one third of organic farmers in France, so that most organic farming in France remains unsupported by direct payments for organic farming. Since August 2002, it has not been possible to register new agreements in France as all schemes have been subject to review.

This delay in implementing new schemes is causing serious concern among organic producer organisations in France. With the latest indication being that the new CADs will not be implemented before early 2004, this means that there will have been no conversion support for more than 18 months. This is particularly impacting on those producers who registered for conversion before the suspension of the CTEs and who farmed organically in the intervening period without financial compensation or with very low levels of compensation. Since the suspension of the CTEs, only a few producers have started conversion without support in the belief that the new system would be implemented quickly. It is likely that many more are waiting for the situation to be resolved before starting conversion. This may lead to a rush of producers starting conversion together when the scheme is reopened, resulting in significant problems marketing the sudden increase in supply.

In the **England and Wales (UK)**, the Organic Farming Schemes were accounting for approximately 15% of agri-environmental expenditure in 2001, a marked increase since 1997 when it was less than 1%. By 2002, 1,631 agreements covered 224,000 ha in England and Wales, at a total cost of £17.4 million (25.2 million euro). However, until reforms in 2003/4, organic farming scheme payments were only made during the conversion period (5 years) and whilst they are seen as important as an inducement to convert, it is clear that price premiums remain a vital element for organic farm financial performance. Whilst maintenance payments have been introduced in England in 2003 and Wales in 2004, these are at a relatively low level and will remain so pending further agri-environmental reforms in 2005/6.

7.3.1.2 Investment aids

Only in one country, investment aids specifically target organic farming: In **Marche (Italy)** maximum support rates are 10% higher for organic farms, thus clearly benefiting organic farming. In **Austria, France,** and **England and Wales (UK)** this measure offers support which may be beneficial for organic farming because converting farmers more strongly depend on investments, e.g. for animal husbandry, although organic farming is not specifically mentioned. In **Baden-Würtemberg (Germany)** one of two sub-measures, "Regional development", provides for environmentally friendly farming and adequate housing systems, which can be of specific benefit for organic farms.

7.3.1.3 Processing and marketing

In some countries has attention been paid to the processing and marketing measures, however, only minor references to organic farming may be found. In **England and Wales** and in **Baden-Württemberg** no specific organic provision exists, but indirect benefits may result from the fact that organic farms more likely market directly and rely on such measures. In Marche, this measure prioritises investments in the processing and marketing of organic products but does not provide higher support for organic than for other high quality products.

7.3.1.4 Training

In some case study countries some support for vocational training of organic farmers is included in the RDP. In the **Italian** case support for training does not exist. In **France**, organic farming is not specifically addressed although training for agri-environmental issues is a clear emphasis and thus organic farming may indirectly benefit from this. In the **UK**, various educational projects are funded although no specific mention of organic farming is made in the measure. In **Austria**, no specific support measures exist although certain Bundesländer implement specific measures for vocational training for organic farmers.

7.3.1.5 Less Favoured Areas

In most countries, no specific payment for organic are considered in the Less Favoured Areas measure although organic farms tend to be located in Less Favoured Areas and thus may benefit indirectly from the LFA measure

In **Austria**, the measures "Less Favoured Areas" and "Areas with Specific Environmental Disadvantages" do not specifically provide for organic farming support but organic farm types tend to lie within these regions, thus, a large part of LFA payments end up being paid to organic farms.

Compared to agri-environmental payments, differences in average LFA payments to organic and conventional farms are only minor, suggesting that organic and conventional farms in LFA regions are very similar with regard the eligibility criteria for LFA payments and the changes requires in farm organisation to convert to organic farming.

Grazing livestock farms, milk and mixed farms seem to benefit most from these eligibility criteria for Less Favoured Area payments. In

contrast, field crop farms receive very low average LFA payments because crop farms do not tend to lie in LFA areas although organic crop farms are more frequently found in LFA areas than conventional ones, while for the other farm types this differences in location seems to be less marked. Milk farms are most likely to be found in Less Favoured Areas. Milk and grazing livestock farms seem to particularly benefit from conversion to organic Less Favoured Mountain Areas. Due to high shares of grassland and forage area organic farms tend to benefit from grassland payments.

Only in the **UK**, organic farmers in Less Favoured Areas can receive specifically targeted supplementary payments provided they are not part of the Organic Farming Scheme. In Wales, organic food processors are being specifically targeted under the Small Processors Grant scheme under the rural economy measure but at this stage there is no data to indicate to what level organic farmers are being supported.

In **Spain**, LFA payments may not be considered as indirect support for organic farming, as they refer to 80% of Spanish territory, hence influencing the majority of farms, and no differentiation is available for organic.

In **Italy**, payments are not differentiated for organic and conventional farms but according to location. As organic farms lie proportionally more in mountain and internal areas, in many cases with large extensive livestock farm and thus may indirectly being favoured by LFA payments. Furthermore, LFA payments are only made to farms not relying on GMOs, which may present an indirect benefit for organic farms.

In **France**, no specific mention is made of organic farming in the LFA measure.

7.3.2 The impact of RDP measures on farms

In the year 2000, on average organic farms in the EU receive 20% higher total CAP (First Pillar/ CMO and Second Pillar/RDP) payments per hectare than conventional farms, although the payment levels via the CMOs are lower for organic than for conventional farms. These differences are also observed for all farm types except for permanent crop farms. This results from the fact that, on average, organic farms receive more than 70% higher payments from the agri-environmental and LFA area payments than conventional farms. Organic horticultural and arable farms benefit most from agri-environmental and LFA payments compared the conventional farms, permanent crop and grazing livestock farms least.

Unfortunately, not for all countries FADN data or other quantitative information was available.

In **Austria**, quantitative analyses have shown, that on average and for all farm types, organic farms receive significantly higher agri-environmental payments (+200 €/ha) and significantly higher Less Favoured Area payments (+103 €/ha) than conventional farms. Mixed crop and livestock farms seem to benefit most from a conversion to organic farming in terms of agri-environmental payments (250 €/ha), while milk

farms (33 €/ha) seem to benefit the least. Differences observed on field crop farms are 230 €/ha, on milk farms 163 €/ha, and 174 €/ha on grazing livestock farms.

In **Spain**, payments to organic farming were identified to not be sufficient to compensate for income losses due to conversion to organic farming. However, this might be compensated due to the fact that specific horizontal nature regulations for rural development allow farmers to integrate organic farming support with the other agri-environmental measures, and to obtain a cumulative effect on the total payment received.

In **Marche (Italy)**, the relevance of RDP payments for the economic sustainability of organic farming is confirmed by an analysis on FADN data showing that while the share of RDP payments with respect to net income for conventional farms is 4%, it ranges between 9% for partially organic converted and in conversion farms and 43% for partially organic, in conversion farms.

In **France**, (and formerly the UK), a lack of maintenance payments for established organic producers means that they are entirely dependent on adequate prices being achieved to maintain their long-term viability and performance relative to conventional producers. There is clearly a risk that the market does not provide sufficient security to achieve this and that other mechanisms are needed to ensure that the provision of public goods is adequately rewarded in the long-term.

However, not just the levels of support and market demand are critical for the development of the sector, but administrative issues can have a major impact, with stop/start schemes potentially causing serious damage. Delay in implementing announced support measures may cause serious concern among organic producer. Farmers are likely to wait for the implementation of a programme before starting conversion. This may lead to a rush of producers starting conversion when the schemes are finally (re)opened, resulting in significant problems marketing the sudden increase in supply.

In the **UK (England and Wales)**, previously, relatively high price premiums for organic produce were seen as sufficient financial support for farmers after the conversion period. However, the general decline in price premiums available, especially in the dairy sector with its over supply conditions, combined with a growing acceptance of the environmental benefits from organic farming, have led to a change in policy support to ongoing maintenance payments, bringing the UK into line with most of the rest of the EU. However, these maintenance payments are set at a low level and are very much a short-term measure with wider agri-environmental reforms and increasing funding through modulation of Pillar 1 payments possibly leading to greater support for organic farming.

7.4 The CAP Reform 2003

The CAP Reform 2003 adopted by EU agricultural ministers in Luxembourg is a fundamental reform of agricultural policy. The

decoupling of payments from production included in the reform generally favours more extensive farming systems and thus also benefits organic farming. The exemption from the mandatory set-aside obligation for organic farmers is an advantage, as long as mandatory set-aside is applied. Member states that opt for a regional approach to premium calculation will relatively favour organic farmers as compared to the individual farm approach. National envelopes provide a possible further (and potentially more reliable) source for support options partly similar to the RDPs. Currently the effects of the reforms on land prices are difficult to foresee. If lower land prices result this would relatively benefit organic farmers.

In general cross compliance provisions should be more easy to follow for organic farmers, compared to conventional. Whether concerns voiced in the political discussion that cross compliance might make it necessary to phase out some of the grassland support within agri-environmental programmes are valid remains an open question. The abolishment of these programmes would be quite negative for organic farming. It seems possible that grassland programmes might survive with minor adaptations which would mean that in this area no serious disadvantage for organic farming is to be expected, compared to the status quo.

The new provision of the rural development policies provide a number of options potentially beneficial to organic farmers. The main concern here is whether regions will actually provide sufficient money for co-financing. There is a potential danger of increasing differences also in organic farming support between regions, with negative implications for a level playing field for interregional organic competition.

Organic farms receive less payments under the CMOs and should thus be less affected by modulation. On the other hand they should benefit from measures financed by modulation which makes in total modulation a measure beneficial for organic farming.

With respect to the market reforms the milk sector is of high importance for organic farming. A decrease of milk prices received by organic farmers is likely as a consequence of the reform. Many organic farmers depend in a technical sense more strongly on ruminant animals for their farm organisation, which implies a less flexible reaction of organic farms to decreasing milk prices than for their conventional counterparts. In this respect the reform might effectively disadvantage organic farmers. However, the actual effect will depend very much on the development of the premiums paid at the market for organic milk.

The future reform planned for the olive oil sector would - if the Commission proposals are adopted - be quite beneficial for organic farming.

The overall conclusion on the CAP Reform 2003 is that it the positive effects for organic farming seem to clearly outweigh some negative effects, so the reform has the potential of supporting a continued positive development of organic farming. However, to what extent this potential can be realised depends on many details (e.g. of the RDPs) not known at the time this report was written.

8 Recommendations

At the European Union level, a strategic focus for policy support for organic agriculture is needed, given its potential significance in coming years. Although the implementation of measures to support organic farming is primarily a matter for member states and regions, it is important that the enabling regulatory framework is adequate to provide the right policy mix, including the minimisation of conflicts between individual measures and initiatives. In the following, recommendations on first and second pillar measures are listed and in a third section recommendations that go beyond this are made and refer to the European action plan for organic farming.

8.1 First pillar measures (CMO)

The results of the analysis of the situation before the CAP Reform 2003 done in this study have shown that the design of the CMOs did disadvantage organic farms compared to conventional. The CAP Reform 2003 decisions have the potential to improve the situation for organic farming. In order to maximise the positive effects on organic farming it is important to

- encourage member states to opt for a regional approach to premium calculation because this will relatively favour organic farmers as compared to the individual farm approach;
- encourage member states to implement the CAP Reform 2003 as quickly as possible;
- point to the potential of national envelopes as a source for support options beneficial for organic farming partly similar to the RDPs;
- regularly monitor the effect of CMOs on organic and other environmentally friendly farming systems, carefully monitor especially the dairy and beef sectors as both the conventional and the organic sector could be hit hard by the CAP Reform 2003, thus provide a basis for reaction if in some grassland regions productive agriculture should vanish;
- explicitly take account of the characteristics of organic and other environmentally friendly farming systems when designing, reforming and implementing CMO directives and regulations;
- quickly eliminate the existing disadvantages as far as not already occurred as part of the CAP Reform 2003 (compare Chapter 6), e.g. in the olive CMO as a step towards completing the process of shifting from commodity support to rural development and payment for public goods and services provided by agriculture;

- discourage any exaggerated use of the non-decoupling options and abstain (in the medium to long-run) from any roll-back policies towards coupling support. Some member states will use the option to decouple as little as possible - which is in parts a reaction to the concern that production might vanish from some landscapes;
- thoroughly analyse how import rules of Council Regulation (EC) 2092/91, currently requiring the substantial use of Member States' and third country exporters' resources, can be adapted to reduce the related transactions costs especially for developing countries while at the same time ensuring that the high standards are maintained.

8.2 Second pillar measures (RDP)

While the general outline for the CAP Reform 2003 is clear, many details remain to be resolved, also in relation to the RDPs. In drawing up the new RDPs lessons learned from the analysis of the case study countries and regions in this study lead to the following recommendations: It is important to

- make sure that the organic premiums within the agri-environmental programmes are sufficiently higher than the premiums for integrated production to cover for the additional constraints and costs of organic production, which are reflected in additional environmental benefits;
- continue the policy of organic maintenance payments; also attention should be given to a sufficient magnitude of these maintenance payments in comparison to the payments during the transitional phase;
- implement a minimum organic farming support in all agri-environmental programs in order to minimize interregional distortion of organic trade;
- include specific investment provisions for organic farmers into the investment programs of the RDPs, with higher support percentages for organic than for conventional investments;
- give more attention to the issues of marketing and processing of organic products, and to the possible link with typical products and rural tourism as additional vehicles for boosting organic products;
- in countries where the domestic market for organic products is still quite small and producers mainly rely on exports, (partially) support specific marketing institutions from the RDPs;
- to review the (environmental and socioeconomic) benefits of an increase of organic farming in Less Favoured Areas LFA and adapt provisions accordingly; most likely this would lead to an abolition of specific provisions for organic support in LFA but in turn to a promotion of organic farming as a preferred management option in regions of high nature value without restricting organic farming support to these areas;

- support more effectively specific extension services and technical assistance for organic farming including demonstration activities; in vocational training, standard curricula should include information on organic farming and specific training courses should be offered;
- give increased attention to demand support policies such as a local food initiatives, public procurement and healthier-food education;
- explore the potential of integration of the agri-environmental and rural development legislation as project based measures;
- improve administrative procedures as these can have a major impact, with stop/start schemes potentially causing serious damage.

8.3 Beyond First and Second Pillar: The European Action Plan for Organic Farming

A pivotal point for the attempts to integrate all policies affecting organic farming is the European action plan for organic farming. The development of a European action plan was initiated by the European conference on organic farming held in Copenhagen in May 2001 (Danish Ministry of Food, Agriculture and Fisheries 2001), and subsequently supported by the Council of Agricultural Ministers in June 2001. A working document from the EU Commission was presented to the Council of Ministers in December 2002 (EC 2002) and submitted to public consultation in March 2003. This process is expected to lead to detailed proposals for a European Action Plan in 2004.

The final action plan document should

- provide a strategic view of the role of organic farming within the context of agricultural policy;
- suggest a comprehensive and coherent set of actions;
- contain proposals for the adaptation of the regulatory framework for supporting organic farming,;
- ensure that any large-scale agricultural reforms in the future should jointly cover the area of conventional and organic agriculture; to that effect prospective impact analyses that are performed before any reform is adopted and that go into policy formulation should include organic farming from the outset;
- provide a basis for continued review of the impacts of existing policy measures and tax laws on organic farming to identify and eliminate unintended conflicts;
- give specific consideration to organic farming at all levels of policy formulation;

- encourage risk-sharing approaches with other parts of the supply chain that do not require the full risk of conversion to and continued organic production to be borne by the producer, and to assist the producer in obtaining a fair price;
- stress the importance of the organic food chain, with emphasis being on the improvement of information, education, technology development, research and extension for organic farming and its process chain;
- either set a global target for organic production or develop some consensus on the longer-term potential size of the sector;
- address the issue of certification and control and consider the necessity to build up a "certification system for the certifiers", that assures the necessary competence and independence of the certification bodies,
- relate the European activities to the member states organic action plans, so as to provide the best opportunities to support local solutions to local problems;
- stress the fact that the European action plan for organic farming is rather an ongoing process between policy makers and stakeholders than a one-time document.

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10 Annex A: Additional information

10.1 Data sources

10.1.1 Statistical data by Eurostat

National statistical data was supplemented by statistical data on organic farming provided by Eurostat (2003) at a combined NUTS1 and NUTS2 level wich covers all organic farms certified according to Council Regulation (EC) No. 2092/91. According to this regulation farms may convert only part of the farm. Data presented, therefore, includes also farms which are only partially organic and thus overestimates total organically cultivated land area and farms.

10.1.2 Other data sources

Data is presented which has been collected within the EU project “Effects of the CAP-reform and possible further developments on organic farming in the EU” (FAIR3-CT96-1794). Additionally, information from the “European Information System on Organic Markets” a European Concerted Action (CA), and the project “Further development of Organic Farming Policy in Europe, with Particular Emphasis on EU Enlargement” (QLK5-CT-2002-00917) has been added. Information on markets has been compiled within the EU project “Organic Marketing Initiatives and Rural Development” (QLK5-2000-01124).

Furthermore, data and information has been collected specifically for this study. This information was particularly relevant for Chapter 5.

FADN farm accounting data was used in Chapter 4 and 5. For methodological details, aggregation levels and reference years see the relevant sections in these chapters.

10.1.3 Data presentation

A GIS was used for visualisation of the regional distribution of data. If aggregated results are presented for greater European regions the following classification is used).

Table 10-1: Classification of Greater European Regions

Region	Countries
Southern Europe	Greece, Italy, Portugal, Spain
Central Europe	Austria, Belgium, France, Germany, Ireland, Luxembourg, Netherlands, UK,
Northern Europe	Denmark, Sweden, Finland

Data provided by Eurostat (2003) was aggregated in the following cropping categories (Table 10-2):

Table 10-2: Allocation of crops and activities to categories

Crops	
Cereals	All cereals, including maize for grain production
Pulses	Pulses for grain production, incl. seeds, and mixtures of pulses and cereals, incl. peas and beans
Root crops	Potatoes, sugar beet, and fodder beet
Vegetables	Fresh vegetables, Melons, Strawberries
Forage, Leys etc.	Forage plants, temporary grass, green maize, other green fodder, leguminous plants
Perm. grassland	Permanent grassland and meadow
Fruit and berries	Fruit and berry plantations
Citrus	Citrus plantations
Olives	Olive plantations
Wine	Vineyards, total
Other	Nurseries, other permanent crops and permanent crops under glass
Livestock	
Cattle	All cattle, excl. dairy cows
Dairy cows	Dairy cows
Sheep	Sheep total
Goats	Goats total
Pigs & Piglets <20kg	Piglets <20kg, breeding sows > 50kg, and other pigs
Poultry	Broilers and laying hens, excluding other poultry

Livestock units and manure units were calculated according to Table 10-3. In this classification one livestock unit is equivalent to approximately 500 kg live weight, and one manure unit is equivalent to approx. 80 kg Nitrogen and 70 kg P_2O_5.

Table 10-3: Manure units and livestock

	Livestock units	Manure units
Cattle	0.7	0.5
Dairy Cows	1	0.7
Sheep	0.1	0.05
Goats	0.1	0.05
Piglets <20kg	0.03	
Sows	0.3	0.33
other pigs	0.14	0.14
Broiler	0.0004	0.005
Hens	0.004	0.01

Source: Häring (2003) based on Anonymous (2003b)

10.2 National organic farming statistics provided by Eurostat

Table 10-4: Organic and conventional land use by country in the year 2000

		Holdings (No.)	UAA (ha)	Cereals (ha)	Pulses (ha)	Root crops (ha)	Vege-tables* (ha)	Forage, Leys etc.(ha)	Perm. grassland (ha)	Fruit and berries (ha)	Citrus (ha)	Olives (ha)	Wine (ha)	Other
AUT	Org.	18,880	378,110	26,400	3,900	1,810	800	21,990	314,350	840	0	0	680	30
	Conv.	180,590	3,010,130	786,580	45,330	70,060	12,130	182,890	1,601,890	16,550	0	0	50,520	2010
BEL	Org.	580	24,930	2,800	140	880	510	4,730	15,000	300	0	0	0	90
	Conv.	61,130	1,368,850	310,690	2,070	163,160	36,700	280,030	491,950	15,890	0	0	0	4450
DEU	Org.	9,570	489,090	123,900	19,260	7,970	6,440	48,200	229,100	4,020	0	0	2,260	690
	Conv.	462,390	16,662,460	6,510,780	192,940	805,550	95,430	1,660,640	4,884,690	65,340	0	0	97,550	37830
DNK	Org.	2,520	141,120	41,770	4,580	1,760	980	63,540	16,160	220	0	0	0	10
	Conv.	55,320	2,503,470	1,405,980	61,180	122,000	10,470	346,930	144,860	6,470	0	0	0	2930
ESP	Org.	17,160	688,710	103,830	10,980	2,180	5,230	13,520	385,220	21,230	4,110	59,090	15,470	1170
	Conv.	1,270,260	25,469,700	6,885,580	354,270	217,160	279,830	770,720	8,983,170	838,800	269,070	2,161,180	994,610	57390
GRC	Org.	1,380	6,830	2,210	40	90	180	320	810	280	160	1,370	450	0
	Conv.	812,620	3,568,490	1,125,570	11,930	53,000	60,350	136,760	602,850	113,790	46,990	730,910	96,690	5470
FRA	Org.	7,060	331,180	66,790	6,970	2,540	4,890	66,280	135,710	6,520	190	530	13,250	170
	Conv.	656,750	27,525,130	8,960,290	468,420	587,050	242,890	4,595,470	8,180,360	188,720	2,190	13,710	870,410	25340
FIN	Org.	4,900	153,900	56,160	6,930	970	860	62,020	3,020	650	0	0	0	20
	Conv.	76,290	2,064,770	1,111,710	3,740	63,420	14,000	618,410	23,130	2,950	0	0	0	720

Table 11-4 (continued): Organic and conventional land use by country in the year 2000

		Holdings (No.)	UAA (ha)	Cereals (ha)	Pulses (ha)	Root crops (ha)	Vege-tables* (ha)	Forage, Leys etc.(ha)	Perm. grassland (ha)	Fruit and berries (ha)	Citrus (ha)	Olives (ha)	Wine (ha)	Other#
ITA	Org.	45,710	823,580	159,950	6,440	5,900	8,710	199,990	256,760	35,680	11,200	67,400	28,400	950
	Conv.	2,108,020	12,238,680	3,883,020	59,930	260,770	250,580	1,328,730	3,162,320	450,810	116,680	922,760	684,460	28430
IRL	Org.	1,560	41,800	740	50	180	140	6,380	34,010	20	0	0	0	10
	Conv.	139,970	4,402,170	278,300	1,460	53,710	4,090	740,940	3,299,020	1,200	0	0	0	350
LUX	Org.	20	1,030	240	10	10	0	220	500	0	0	0	0	0
	Conv.	2,790	126,480	27,360	550	930	0	26,470	63,890	40	0	0	1,260	80
NLD	Org.	710	21,790	1,590	70	900	1,850	2,110	14,390	260	0	0	0	10
	Conv.	100,830	2,006,010	182,520	4,020	299,640	78,790	326,330	970,280	21,770	0	0	0	11550
PRT	Org.	810	118,130	16,600	580	240	540	8,960	46,100	2,770	200	16,020	2,780	0
	Conv.	415,160	3,744,960	567,230	21,680	57,240	46,390	381,400	1,343,750	133,060	23,260	319,010	212,260	2230
SWE	Org.	9,040	464,960	128,980	7,630	7,600	2,230	194,820	72,910	310	0	0	0	20
	Conv.	72,360	2,608,230	1,024,200	23,300	85,100	17,080	785,400	300,200	2,580	0	0	0	660
GBR	Org.	1,690	375,270	37,930	3,050	5,610	4,400	27,840	281,060	400	0	0	20	20
	Conv.	231,560	15,423,230	3,306,060	204,450	373,550	118,350	1,292,560	9,077,050	31,780	0	0	730	4960

* incl. Melons and Strawberries

Tree and vine nurseries, other and greenhouse perennials

Table 10-5: Organic and conventional livestock by country in the year 2000

		Livestock Units	Cattle	Dairy cows	Sheep	Goats	Piglets <20 kg	Sows >50 kg	Other pigs	Broiler (1000)	Hens (1000)
AUT	Org.	275,590	326,830	107,240	78,620	11,870	6,310	2,300	27,750	70	250
	Conv.	2,398,340	1,824,510	590,080	260,640	38,940	856,370	330,510	2,202,210	6,940	6,390
BEL	Org.	34,600	37,000	7,990	11,480	1,630	3,930	1,840	11,140	90	100
	Conv.	4,324,730	3,004,570	607,870	148,970	14,620	2,080,920	718,330	4,552,390	24,410	15,320
DEU	Org.	337,700	370,690	85,250	164,690	nd	26,070	10,700	80,290	190	790
	Conv.	18,988,500	14,525,120	4,679,880	2,558,970	nd	6,617,890	2,670,260	16,695,820	49,140	57,540
DNK	Org.	155,850	164,080	66,570	25,910	0	25,470	8,310	48,370	120	660
	Conv.	4,205,920	1,722,980	573,620	116,970	0	3,556,620	1,276,140	6,711,150	14,810	4,350
ESP	Org.	339,040	187,950	13,110	588,540	64,750	99,930	62,840	230,690	1,240	1,360
	Conv.	14,655,180	6,158,520	1,229,200	20,338,230	2,659,870	5,360,370	3,202,780	13,058,430	103,840	55,510
GRC	Org.	5,440	1,560	480	9,830	9,250	150	160	460	0	100
	Conv.	2,530,830	650,790	153,310	8,722,330	5,308,120	264,270	129,150	575,300	26,070	12,100
FRA	Org.	255,110	206,190	46,620	160,740	31,120	20,240	5,600	41,480	2,140	2,320
	Conv.	23,637,120	20,052,740	4,146,650	9,255,500	1,170,820	5,406,390	1,410,470	7,985,550	124,160	74,750
FIN	Org.	62,000	62,650	15,520	24,300	1,140	12,520	1,380	25,430	480	180
	Conv.	1,125,520	993,830	348,600	75,240	7,420	399,220	35,860	821,390	7,440	4,230
ITA	Org.	521,460	334,930	87,150	1,197,800	79,270	28,400	20,600	119,950	2,630	1,850
	Conv.	9,448,100	5,896,210	1,808,900	5,610,520	843,390	1,556,320	694,470	6,215,180	93,840	42,620

Table 11-5 (continued): Organic and conventional livestock by country in the year 2000

		Livestock Units	Cattle	Dairy cows	Sheep	Goats	Piglets <20 kg	Sows >50 kg	Other pigs	Broiler (1000)	Hens (1000)
IRL	Org.	39,220	38,960	2,950	79,910	1,280	990	280	1,010	190	20
	Org.	6,405,080	6,997,050	1,174,500	6,811,620	6,820	525,490	176,570	1,017,770	10,600	1,910
LUX	Org.	1,050	1,170	260	0	0	0	0	0	0	0
	Conv.	171,200	206,770	44,890	7,510	260	32,650	9,730	43,370	10	50
NLD	Org.	29,670	27,720	12,030	15,800	12,250	8,300	1,940	7,340	0	80
	Conv.	7,318,360	4,177,970	1,637,710	1,384,850	140,540	5,230,450	1,370,900	6,947,890	53,230	51,440
PRT	Org.	26,190	20,390	570	87,740	2,570	2,010	1,200	3,260	10	30
	Conv.	2,525,130	1,394,800	355,160	2,842,030	534,670	700,470	332,940	1,378,550	25,920	11,950
SWE	Org.	286,720	289,420	68,680	126,670	0	51,660	20,230	109,340	510	810
	Conv.	1,692,830	1,423,580	379,840	310,700	0	599,750	199,990	1,134,360	5,350	7,040
GBR	Org.	283,420	139,820	32,380	750,900	910	26,590	10,870	56,840	1,610	4,920
	Conv.	15,533,380	10,950,860	2,302,470	41,147,990	67,590	1,653,100	673,270	4,022,060	103,690	42,890

Source: Häring (2003) based on Eurostat (2003)

Table 10-6: On-farm labour use and involvement in non-agricultural activities on organic and conventional farms 2000

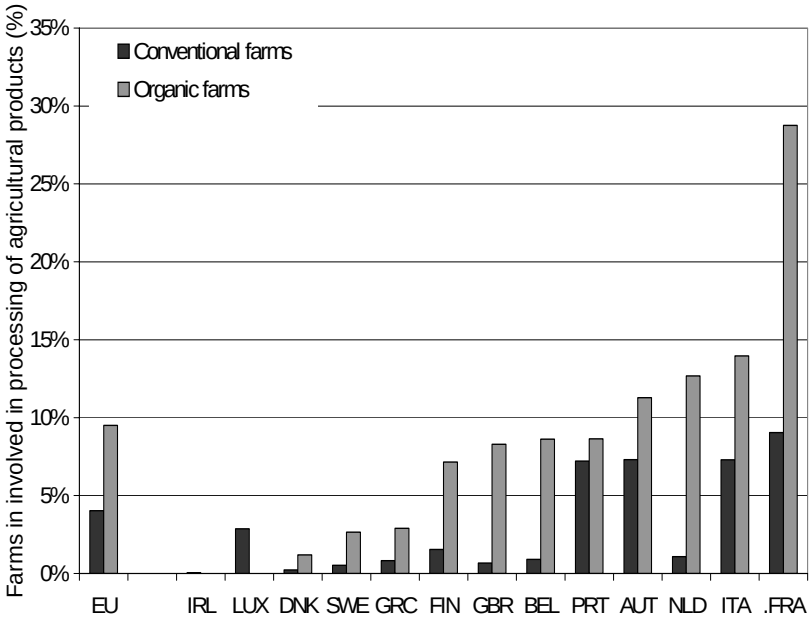
		AWU per 100 ha	Standard gross margin per AWU	Processing of agricultural produce	Tourism	Craftsman-ship	Wood processing	Aquaculture	Renewable resources	Contract work	Other
AUT	Org.	5.66	9,785	11.3%	19.2%	0.6%	1.3%	0.5%	1.1%	4.0%	2.1%
	Conv.	5.33	15,660	7.3%	5.0%	0.3%	0.5%	0.3%	0.4%	2.0%	1.5%
BEL	Org.	3.81	44,821	8.6%	5.2%	1.7%	0.0%	0.0%	0.0%	0.0%	3.4%
	Conv.	5.34	52,991	0.9%	0.6%	0.2%	0.0%	0.0%	0.0%	0.8%	0.8%
DEU	Org.	3.38	27,737	0.0%	0.0%	nd	0.0%	0.0%	0.0%	0.0%	0.0%
	Conv.	3.61	37,556	0.0%	0.0%	nd	0.0%	0.0%	0.0%	0.0%	0.0%
DNK	Org.	2.32	56,989	1.2%	2.0%	1.2%	0.0%	0.0%	2.0%	3.6%	10.3%
	Conv.	2.52	64,891	0.2%	0.5%	0.9%	0.0%	0.0%	1.0%	5.1%	5.0%
ESP	Org.	2.86	17,609	0.0%	0.0%	nd	0.0%	0.0%	0.0%	0.0%	0.0%
	Conv.	4.15	17,049	0.0%	0.0%	nd	0.0%	0.0%	0.0%	0.0%	0.0%
GRC	Org.	18.01	10,850	2.9%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%
	Conv.	16.37	10,463	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.1%
FRA	Org.	4.78	25,432	28.8%	7.4%	0.6%	1.4%	0.1%	0.1%	3.8%	48.2%
	Conv.	3.39	36,609	9.0%	2.0%	0.1%	0.9%	0.1%	0.0%	3.0%	15.4%
FIN	Org.	3.90	21,063	7.1%	6.1%	1.0%	3.1%	0.4%	3.7%	14.1%	12.7%
	Conv.	4.68	22,145	1.5%	2.7%	0.4%	1.8%	0.2%	1.9%	12.3%	6.5%
ITA	Org.	6.54	19,505	14.0%	0.7%	0.2%	0.2%	0.1%	0.0%	2.1%	0.7%
	Conv.	10.70	16,646	7.3%	0.1%	0.0%	0.0%	0.0%	0.0%	1.2%	0.1%

Table 11-6 (cntinued): On-farm labour and involvement in non-agricultural activities on organic and and conventional farms (2000)

		AWU per 100 ha	Standard gross margin per AWU	Processing of agricultural produce	Tourism	Craftsman-ship	Wood processing	Aquaculture	Renewable resources	Contract work	Other
IRL	Org.	4.26	10,902	0.0%	3.2%	1.9%	0.0%	0.0%	0.0%	0.0%	7.1%
	Conv.	3.79	20,962	0.0%	0.9%	0.1%	0.0%	0.0%	0.0%	0.3%	2.3%
LUX	Org.	3.88	18,579	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Conv.	3.49	27,267	2.9%	1.8%	0.0%	1.1%	0.0%	0.4%	1.8%	0.4%
NLD	Org.	7.25	43,069	12.7%	21.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Conv.	10.14	53,321	1.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PRT	Org.	2.77	13,148	8.6%	3.7%	0.0%	0.0%	0.0%	0.0%	1.2%	2.5%
	Conv.	13.91	6,020	7.2%	0.1%	0.1%	0.2%	0.0%	0.0%	0.5%	0.2%
SWE	Org.	2.18	34,672	2.7%	3.8%	1.0%	1.3%	0.3%	0.6%	6.3%	2.1%
	Conv.	2.46	34,404	0.5%	1.2%	0.3%	0.5%	0.1%	0.2%	3.3%	1.0%
GBR	Org.	1.38	38,551	8.3%	18.9%	1.2%	1.2%	1.8%	0.6%	5.9%	19.5%
	Conv.	2.13	39,672	0.7%	8.9%	0.3%	0.3%	0.8%	0.1%	5.1%	5.1%

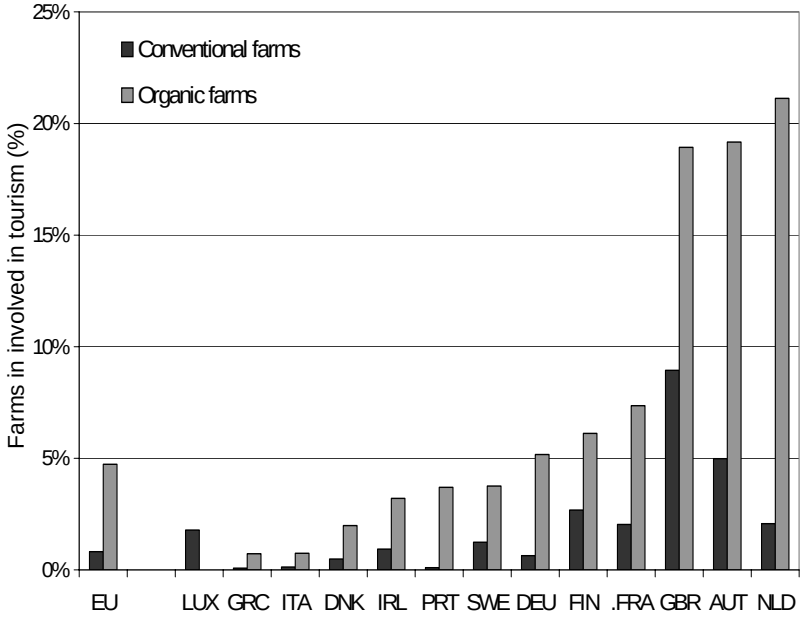
Source: Häring (2003) based on Eurostat (2003)

Figure 10-1 Organic and conventional farms involved in processing of agricultural products in the EU



Source: Häring (2003) based on Eurostat (2003)

Figure 10-2 Organic and conventional farms involved in tourism in the EU



Source: Häring (2003) based on Eurostat (2003)

Table 10-7: Land use of average organic and conventional farms (2000)

		UAA (ha)	Cereals (ha)	Pulses (ha)	Root crops (ha)	Vegetables* (ha)	Arable Forage, etc. (ha)	Perm. grass-land (ha)	Fruit and berries (ha)	Citrus (ha)	Olives (ha)	Wine (ha)	Other#
AUT	Org.	20.03	1.40	0.21	0.10	0.04	1.16	16.65	0.04	0.00	0.00	0.04	0.00
	Conv.	16.67	4.36	0.25	0.39	0.07	1.01	8.87	0.09	0.00	0.00	0.28	0.01
BEL	Org.	42.98	4.83	0.24	1.52	0.88	8.16	25.86	0.52	0.00	0.00	0.00	0.16
	Conv.	22.39	5.08	0.03	2.67	0.60	4.58	8.05	0.26	0.00	0.00	0.00	0.07
DEU	Org.	51.11	12.95	2.01	0.83	0.67	5.04	23.94	0.42	0.00	0.00	0.24	0.07
	Conv.	36.04	14.08	0.42	1.74	0.21	3.59	10.56	0.14	0.00	0.00	0.21	0.08
DNK	Org.	56.00	16.58	1.82	0.70	0.39	25.21	6.41	0.09	0.00	0.00	0.00	0.00
	Conv.	45.25	25.42	1.11	2.21	0.19	6.27	2.62	0.12	0.00	0.00	0.00	0.05
ESP	Org.	40.13	6.05	0.64	0.13	0.30	0.79	22.45	1.24	0.24	3.44	0.90	0.07
	Conv.	20.05	5.42	0.28	0.17	0.22	0.61	7.07	0.66	0.21	1.70	0.78	0.05
GRC	Org.	4.95	1.60	0.03	0.07	0.13	0.23	0.59	0.20	0.12	0.99	0.33	0.00
	Conv.	4.39	1.39	0.01	0.07	0.07	0.17	0.74	0.14	0.06	0.90	0.12	0.01
FRA	Org.	46.91	9.46	0.99	0.36	0.69	9.39	19.22	0.92	0.03	0.08	1.88	0.02
	Conv.	41.91	13.64	0.71	0.89	0.37	7.00	12.46	0.29	0.00	0.02	1.33	0.04
FIN	Org.	31.41	11.46	1.41	0.20	0.18	12.66	0.62	0.13	0.00	0.00	0.00	0.00
	Conv.	27.06	14.57	0.05	0.83	0.18	8.11	0.30	0.04	0.00	0.00	0.00	0.01
ITA	Org.	18.02	3.50	0.14	0.13	0.19	4.38	5.60	0.78	0.25	1.47	0.62	0.02
	Conv.	5.81	1.84	0.03	0.12	0.12	0.63	1.50	0.21	0.06	0.44	0.32	0.01

Table 10-7 (continued): Land use of average organic and conventional farms (2000)

		UAA (ha)	Cereals (ha)	Pulses (ha)	Root crops (ha)	Vegetables* (ha)	Arable Forage, etc.(ha)	Perm. grass-land (ha)	Fruit and berries (ha)	Citrus (ha)	Olives (ha)	Wine (ha)	Other#
IRL	Org.	26.79	0.47	0.03	0.12	0.09	4.09	21.80	0.01	0.00	0.00	0.00	0.01
	Conv.	31.45	1.99	0.01	0.38	0.03	5.29	23.57	0.01	0.00	0.00	0.00	0.00
LUX	Org.	51.50	12.00	0.50	0.50	0.00	11.00	25.00	0.00	0.00	0.00	0.00	0.00
	Conv.	45.33	9.81	0.20	0.33	0.00	9.49	22.90	0.01	0.00	0.00	0.45	0.03
NLD	Org.	30.69	2.24	0.10	1.27	2.61	2.97	20.27	0.37	0.00	0.00	0.00	0.01
	Conv.	19.89	1.81	0.04	2.97	0.78	3.24	9.62	0.22	0.00	0.00	0.00	0.11
PRT	Org.	145.84	20.49	0.72	0.30	0.67	11.06	56.91	3.42	0.25	19.78	3.43	0.00
	Conv.	9.02	1.37	0.05	0.14	0.11	0.92	3.24	0.32	0.06	0.77	0.51	0.01
SWE	Org.	51.43	14.27	0.84	0.84	0.25	21.55	8.07	0.03	0.00	0.00	0.00	0.00
	Conv.	36.05	14.15	0.32	1.18	0.24	10.85	4.15	0.04	0.00	0.00	0.00	0.01
GBR	Org.	222.05	22.44	1.80	3.32	2.60	16.47	166.31	0.24	0.00	0.00	0.01	0.01
	Conv.	66.61	14.28	0.88	1.61	0.51	5.58	39.20	0.14	0.00	0.00	0.00	0.02

* incl. Melons and Strawberries

\# Tree and vine nurseries, other and greenhouse perennials

Source: Häring (2003) based on Eurostat (2003)

Table 10-8: Livestock husbandry of average organic and conventional farms (2000)

		LU/ha	Cattle	Dairy cows	Sheep	Goats	Piglets <20 kg	Sows >50 kg	Other pigs	Broiler (1000)	Hens (1000)
AUT	Org.	0.73	17.31	5.68	4.16	0.63	0.33	0.12	1.47	0.00	0.01
	Conv.	0.80	10.10	3.27	1.44	0.22	4.74	1.83	12.19	0.04	0.04
BEL	Org.	1.39	63.79	13.78	19.79	2.81	6.78	3.17	19.21	0.16	0.17
	Conv.	3.16	49.15	9.94	2.44	0.24	34.04	11.75	74.47	0.40	0.25
DEU	Org.	0.69	38.73	8.91	17.21	0.00	2.72	1.12	8.39	0.02	0.08
	Conv.	1.14	31.41	10.12	5.53	0.00	14.31	5.77	36.11	0.11	0.12
DNK	Org.	1.10	65.11	26.42	10.28	0.00	10.11	3.30	19.19	0.05	0.26
	Conv.	1.68	31.15	10.37	2.11	0.00	64.29	23.07	121.32	0.27	0.08
ESP	Org.	0.49	10.95	0.76	34.30	3.77	5.82	3.66	13.44	0.07	0.08
	Conv.	0.58	4.85	0.97	16.01	2.09	4.22	2.52	10.28	0.08	0.04
GRC	Org.	0.80	1.13	0.35	7.12	6.70	0.11	0.12	0.33	0.00	0.07
	Conv.	0.71	0.80	0.19	10.73	6.53	0.33	0.16	0.71	0.03	0.01
FRA	Org.	0.77	29.21	6.60	22.77	4.41	2.87	0.79	5.88	0.30	0.33
	Conv.	0.86	30.53	6.31	14.09	1.78	8.23	2.15	12.16	0.19	0.11
FIN	Org.	0.40	12.79	3.17	4.96	0.23	2.56	0.28	5.19	0.10	0.04
	Conv.	0.55	13.03	4.57	0.99	0.10	5.23	0.47	10.77	0.10	0.06
ITA	Org.	0.63	7.33	1.91	26.21	1.73	0.62	0.45	2.62	0.06	0.04
	Conv.	0.77	2.80	0.86	2.66	0.40	0.74	0.33	2.94	0.04	0.02

Table 10-8 (continued): Livestock husbandry of average organic and conventional farms (2000)

		LU/ha	Cattle	Dairy cows	Sheep	Goats	Piglets <20 kg	Sows >50 kg	Other pigs	Broiler (1000)	Hens (1000)
IRL	Org.	0.94	24.97	1.89	51.22	0.82	0.63	0.18	0.65	0.12	0.01
	Conv.	1.45	49.99	8.39	48.66	0.05	3.75	1.26	7.27	0.08	0.01
LUX	Org.	1.02	58.50	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Conv.	1.35	74.11	16.09	2.69	0.09	11.70	3.49	15.54	0.00	0.02
NLD	Org.	1.36	39.04	16.94	22.25	17.25	11.69	2.73	10.34	0.00	0.11
	Conv.	3.65	41.44	16.24	13.73	1.39	51.87	13.60	68.91	0.53	0.51
PRT	Org.	0.22	25.17	0.70	108.32	3.17	2.48	1.48	4.02	0.01	0.04
	Conv.	0.67	3.36	0.86	6.85	1.29	1.69	0.80	3.32	0.06	0.03
SWE	Org.	0.62	32.02	7.60	14.01	0.00	5.71	2.24	12.10	0.06	0.09
	Conv.	0.65	19.67	5.25	4.29	0.00	8.29	2.76	15.68	0.07	0.10
GBR	Org.	0.76	82.73	19.16	444.32	0.54	15.73	6.43	33.63	0.95	2.91
	Conv.	1.01	47.29	9.94	177.70	0.29	7.14	2.91	17.37	0.45	0.19

Source: Häring (2003) based on Eurostat (2003)

10.3 Farm typology in the FADN

A detailed typology has been created for use by various bodies at European Union level. It is sufficiently broad to encompass the many different types of farming that are found in the European Union. This typology is described in Commission Decision 85/377/EEC of 7 June 1985. It identifies the principal types of farming, which are then further broken down. How are farms allocated to a specific type? In other words, what are the definitions of different types of farming?

Types of farming are defined in terms of the relative importance of the different enterprises on the farm. Relative importance is itself measured quantitatively as a proportion of each enterprise's SGM to the farms' total SGM.

Example of classification of a farm according to European Union typology:

Assume: a farm with 50 dairy cows and 10 breeding sows

Two principal types of farming would appear to be suitable descriptions of this farm:

41 specialist dairing

71 mixed livestock, maily grazing livestock

To which type of farming does this farm belong?

Enterprise	SGM	Size of enterprise	Enterprise SGM	Enterprise SGM as proportion of& farm's total SGM
Dairying	700	50 dairy cows	35.000	92%
Breeding sows	300	10 breeding sows	3.000	8%
		Farm's total SGM	38.000	100%

The definition of the two closest principal types of farming are as follows:

41	specialist dairying	dairy cattle contribute > 2/3 of farm's total SGM
71	mixed livestock, mainly grazing livestock	grazing livestock contribute between 1/3 and 2/3 of farm's total SGM

Since dairying contributes > 2/3 of farm's total SGM, this farm is classified as "specialist dairying" for principal type of farming.

10.4 Excursus: Market access for organic products

An important aspect with respect to the EU market for organic products are the potential market opportunities for developing countries, many of which see organic products as a high-value and environmentally sound means of export diversification (Hallam 2003). However, market access for agricultural (including organic) products is often restricted, and developing countries face a number of obstacles in trying to penetrate the EU market. While international negotiations have in the past focused on tariff-trade barriers and their reduction, non-tariff trade barriers are increasingly being discussed as an impediment to trade. With respect to market access for organic products, little is known about the effects special import arrangements, such as opening the European market to similar products from developing countries. Some related aspects shall be discussed here.

The restriction of market access by tariff and other related market price support measures as a consequence of the design of the CMO's of the EU applies to both conventional and organic products. Granting preferential market access for developing countries by exempting organic products from import tariffs and quotas could therefore in principal contribute to an expansion of exports of organically produced products from developing countries.[a] However, the effectiveness as well as the rationale of such a step seem questionable:

Firstly, an unilateral reduction of price support measures for organic products could lead to a significant discrimination of organic production methods in the EU and increase the relative competitiveness of conventional farming systems.

Secondly, the effect on trade of such a measure may well be marginal, as non-tariff trade barriers rather than tariffs are generally seen as the main obstacle to international trade of organic products (compare e.g. Hallam 2003, Bowen 2003, Giovannucci 2003). The main problems faced by developing countries exporting organic products include (Bowen 2003, Aebi 2003):

- import discrimination whereby compliance is required with standards not always suitable to the agri-ecological conditions of exporting countries;
- multiple accreditation of certification bodies and multiple certification of organic producers in order to access the three main organic agriculture markets (Europe, Japan and USA);
- difficulties for traders, due to different interpretation of rules by certification bodies;

- extremely difficult and time-consuming equivalence assessment by some countries, differences in interpretation of the WTO-enshrined concept of "equivalence", enormous workload (and delays) for authorities in negotiating bilateral equivalency;
- private bodies may discriminate imports from other contries by imposing supplementary requirements.

With respect to the EU market, specifically the rules of Council Regulation (EC) 2092/91 governing imports from third countries often pose a significant barrier for developing countries. Imports into the EU are currently approved according to two different systems[b] (European Commission 2002):

- the EU accepts the requirements in the export country as equivalent to the EU system (Article 11(1) in the EU regulation);
- Member States can until 31 December 2005 authorise imports on a case-by-case basis (Article 11(6) in the EU regulation).

An extensive discussion of the effects of these rules governing imports from third countries to the EU on developing countries has been published by the Swedish National Board of Trade (Kommerskollegium 2003). So far, the EU has only approved eight countries according to Article 11(1), of which only two are developing countries. As imports are being carried out from more than 90 different countries, this means that Member States deal with the bulk of the import authorisations on a case-by-case basis according to Article 11(6) and that basically all developing country exports of organic products currently go through this system. This requires the substantial use of Member States' and third country exporters' resources. The great challenge for adapting the import rules of Council Regulation (EC) 2092/91 lies in reducing the related transactions costs especially for developing countries while at the same time ensure that the high standards are maintained and the already fragile consumer trust in the authenticity of certified imported products is not further eroded.

[a] It should be noted that the least developed countries as well as the ACP countries already benefit from extensive preferential market access to the EU (e.g. Everything but Arms initiative for the least developed countries).

[b] In principle, a third option exists, which allows for individual inspection bodies in third countries to be approved at the request of an EU member state. To date, only one single example of such an approved body has been granted (Kommerskollegium 2003).

10.5 Additional information on the Rural Development Programme in Austria

Figure 10-3: Grassland share as% of UAA per district (BMLFUW 2003)

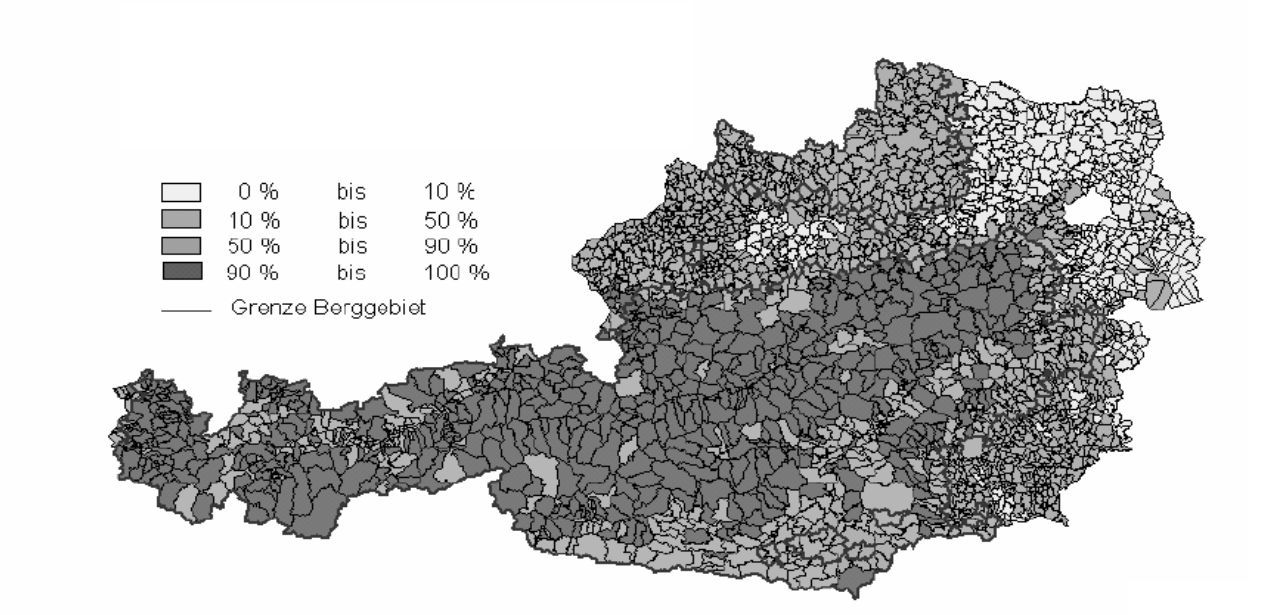
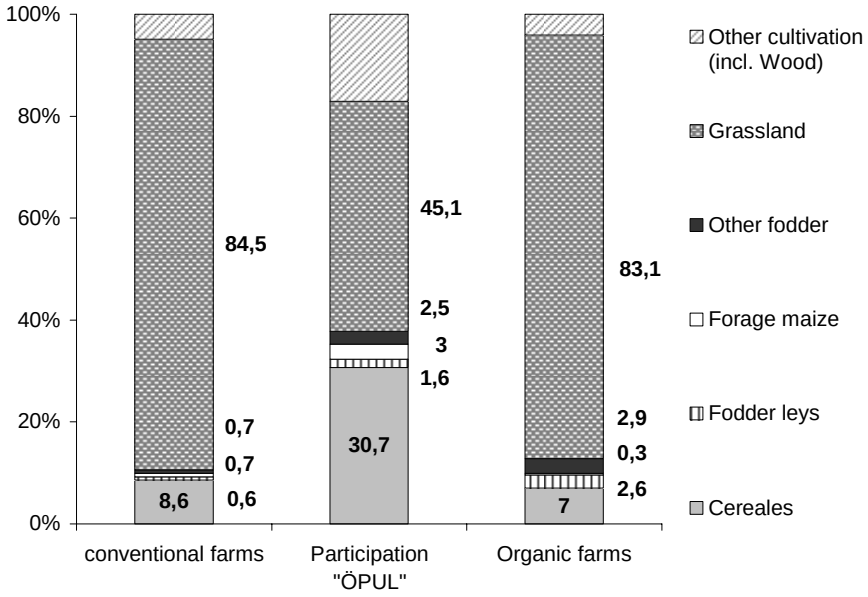


Figure 10-4: Land use of conventional, organic and ÖPUL farms



Source: Eichert and Häring (2003) based Eurostat (2003)

Table 10-9: Land use (ha) in Austrian NUTS1 regions taking the five most important land uses into consideration

	Eastern Austria	Southern Austria	Western Austria	Austria total
Cereals	7,74	1,97	2,51	4,08
Fodder ley	1,36	0,09	0,36	0,61
Forage maize	0,44	0,32	0,40	0,39
Other fodder	0,67	0,53	0,71	0,64
Permanent grassland	3,46	9,40	15,58	9,61
Other uses (incl. forestry)	3,64	0,78	0,60	1,67
Total land area	17,32	13,09	20,15	16,98

Source: Eichert and Häring (2003) based on Eurostat (2003)

Table 10-10: Natura 2000 measures implemented within ÖPUL in Austria

Measure	Total	Burgenland	Kärnten	Nieder-österreich	Ober-österreich	Salzburg	Steiermark	Tirol	Vorarlberg	Wien
Land area (ha)										
Conservation of small structured landscapes	4.729	-	-	3.214	-	1.207	205	55	49	-
Maintenance of ecologically valuable areas	38.347	9.430	5.140	9.354	3.696	1.903	3.060	460	5.266	39
Establishment of landscape elements	5.693	104	179	4.842	74		494	-	-	-
Compilation of nature protection plan	1.897	-	174	1.657	-	67	-	-	-	-
Farms participating										
Conservation of small structured landscapes	1.298	-	-	642	-	545	40	43	28	-
Maintenance of ecologically valuable areas	17.615	3.205	1.724	3.237	3.479	994	2.412	291	2.268	5
Establishment of landscape elements	3.088	98	99	2.426	87	-	378	-	-	-
Compilation of nature protection plan	485	-	25	435	-	25	-	-	-	-
Expenditure within ÖPUL (in 1000 €)										
Conservation of small structured landscapes	415	-	-	232	-	142	30	7	4	-
Maintenance of ecologically valuable areas	15.220	3.945	1.640	3.851	1.255	638	1.258	226	2.391	15
Establishment of landscape elements	3.163	54	116	2.637	46	-	309	-	-	-
Compilation of nature protection plan	166	-	5	155	-	6	-	-	-	-

Source: BMLFUW (2003)

Table 10-11: Water conservation measures implemented within ÖPUL in Austria in 2001 (UAA, farms, expenditure)

Projects of water conservation	Total	Distribution according to Federal States				
		Burgenland	Kärnten	Oberösterreich	Steiermark	Wien
Land area (ha)	121.382	25.791	1.132	80.364	12.245	1.850
Participating farms	2.740	175	18	1.877	654	16
Expenditure (1000 €)	8.790	813	45	3.686	4.184	62

Source: BMLFUW (2003)

10.6 Impacts of the CAP Reform 2003 on organic and conventional agriculture in Baden-Württemberg

10.6.1 Methodology

To quantify the impact of the CAP Reform 2003, model calculations at a sector level were made based on the following data sources and assumptions:

1. Detailed information about land use and livestock numbers and the size of the organic sector was taken from the last agricultural census data in 1999 (Statistisches Landesamt Baden-Württemberg 2001, 2003; and Statistisches Bundesamt 2003).
2. Due to a lack of data in the organic sector, only the most important cropping and livestock activities were taken into account: cereal, oilseed, maize and protein cropping systems and dairy, beef, pork, sheep, poultry and egg production systems and valued based on Schmelzle et al. (2000)
3. Data on market prices refer to the years 2001/2002 (ZMP 2001, 2002a, 2002b, 2002c, 2002d, 2002e, 2003).
4. The numbers of slaughtered animals and production of eggs and poultry refer to the year 1999 (poultry year 1998) (ZMP 2000a, 2000b).
5. The organic milk price premium was set according to Anonymous (2003a) to 6 Cent/kg.
6. Direct payments were taken from the original regulations (EC 1999, 2001) or other official ministry publications (BMVEL 2002a, 2002b; MLR 2000, EC 2003b).
7. The outcome of the CAP Reform 2003 derives from the EU Press Release (EC 2003c), the Presidency Compromise paper (EC 2003d) and from the Legislative proposals (EC 2003e, 2003f).

8. Data on organic yields have been taken from Offermann and Nieberg (2000). The price of organic oilseed was set at 150% of conventional oilseed (Offermann 2003b).

9. Milk quota of the organic dairy sector was estimated, using the total quota of Baden-Württemberg multiplied with the ratio of organic versus conventional dairy cows multiplied with the ratio of organic versus conventional milk yield (Over 2002).

For figures were no statistics were available estimates had to be built. This concerns mainly the number of the different types of cattle, as only the total number of cattle and the number of dairy cows was available:

In Baden-Württemberg, the number of dairy cows in relation to the total number of cattle is quite high. Therefore, the number of suckler cows was set lower than the national average, as it is unlikely to find above average numbers of suckler cows as well as dairy cows in one region. It is unlikely that the organic sector of Baden-Württemberg exports so much more young cattle that the number of cows could be much higher than federal average. It is more likely that a constant number of female young cattle is used more for dairy farming than for suckler cows in Baden-Württemberg.

The number of male fattening cattle was assumed to be 40% of the number of cows, where the number of castrates was estimated to be 10% of the bulls.

The number of slaughtered pigs, poultry and sheep cannot be found in the statistics, although there are numbers on organic livestock units in the organic sector of Baden-Württemberg for each animal type. Thus, the number of slaughtered animals was estimated using the same ratio of slaughtered animals vs. total animals as in conventional farming.

Price reductions in the conventional sector were set according to the intervention price cut, the prices in the organic sector are assumed to drop by the same ratio. This implies a constant organic premium ratio (but not a constant absolute price premium) as before. All sales prices include 9% VAT.

The net effect of the impact of the mid-term-review was calculated as follows:

$$\Delta I = \sum_{C} A \cdot \left[Y \cdot (P_{New} - P_{Old}) + DP_{New} - DP_{Old} \right]$$

with

ΔI = Change in Income

A = Area of specific Crop

Y = Yield

P = Price

DP = Direct Payments

C = Index of Crops

This term was also applied to the livestock production systems, where A represents the number of slaughtered animals per year and Y the average slaughter weight.

In calculating the sum of the suckler cows and ewes, the number of slaughtered ewes diverges from the numbers of animals eligible for headage payments. Therefore, it was assumed that suckler cows lived 7 years and the share of ewes of total sheep is 55%.

Possible farm adaptations to the new situation as well as counter reactions of the market have been neglected. Total direct payments expended were calculated.

The newly introduced **modulation scheme** was estimated based on five different size categories specified in the statistics of Baden-Württemberg. Based on new average payment rates per land area and animal numbers the average payment level was calculated for each farm category. Income changes are set into relation to the former total gross revenues (taking into account the production methods mentioned above, only) including organic area payments and a fix sum of revenues from agri-environmental programmes in the conventional sector according to Nieberg (2003). The income change was also calculated on an area base.

10.6.2 Scenarios

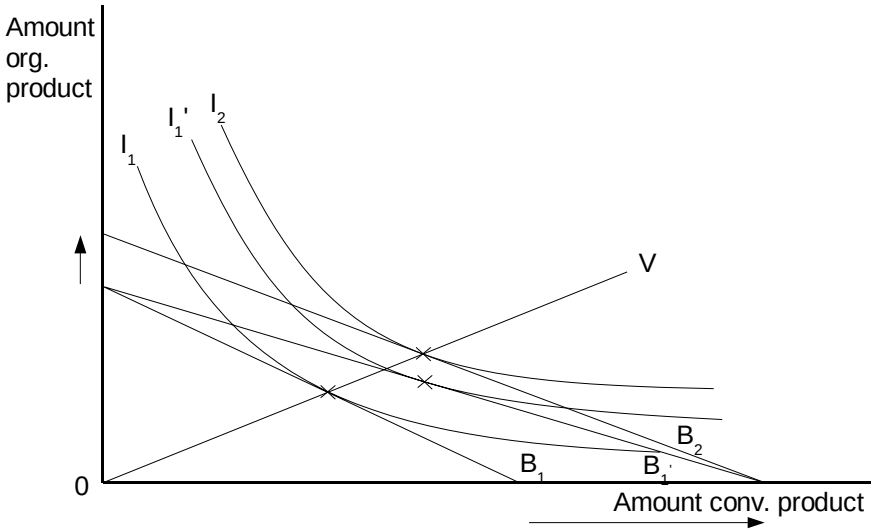
The Agenda 2000 outcome without the dairy reform is taken as the baseline scenario. This has the advantage, that the effects of the Agenda 2000 dairy reform can be compared to the new CAP Reform 2003 dairy regulations and to the other reform components.

Price developments are difficult to predict. In the conventional sector it is assumed, that market prices will follow the reduction of the intervention prices. For the organic prices, there are according to Offermann (2003b, p. 104f) principally three possibilities of linkage

between conventional and organic prices: total independency (a), stay of an absolute constant price premium (b) or maintenance of an relative price premium (c). In general, it is very unlikely, that organic and conventional prices are fully independent, because the two sectors are closely linked on the input as well as on the output side. A consumer can switch easily to the other product group, when the price ratio shifts.

Figure 10-5 shows how organic and conventional prices are linked by the demand structure of the demanders. The indifference curves I show the utility structure of the households. The lines B describe the budget limitation at a given level of income, where the slope of that lines corresponds to the (inverse) ratio of the prices of the two goods. The point of the budget line, that touches the highest reachable indifference curve, should ideally be realized (consumption point).

Figure 10-5: Link between conventional and organic prices through the structure of indifference curves of the consumers



Source: Aurbacher (2003a)

A reduction of the conventional price leads to a turn of the budget line and the consumption point lies aside the former ratio of consumed amounts (V). If the ratio of amounts has to stay constant in the short run, maybe because the supply structure cannot be adapted so fast (is partially inelastic), the organic price hast to fall as well, so that the new budget line B_2 and the maximum indifference curve I_2 touch on ratio V. The new budget line B_2 can be parallel to the old one B_1, but does not have to, because the exact position of the indifference curves is unknown. But if the income effect can be neglected, for example because part of the income that is spent for food forms only a small part of the total income, one can state that the two budget lines are almost parallel. This implies a constant percental price reduction both in conventional and in organic prices, as the slope oft the budget lines correspond to the (inverse) ratio of prices (Henze, 1994, S. 186f).

Due to this considerations, the following calculations have been carried out with a constant percental reduction in prices of organic products as in conventional ones (variant c). As comparison, in the field of milk prices, a variant with an absolute constant price premium was calculated, because the treaties of organic farmers with their dairies normally contain a fix price premium.

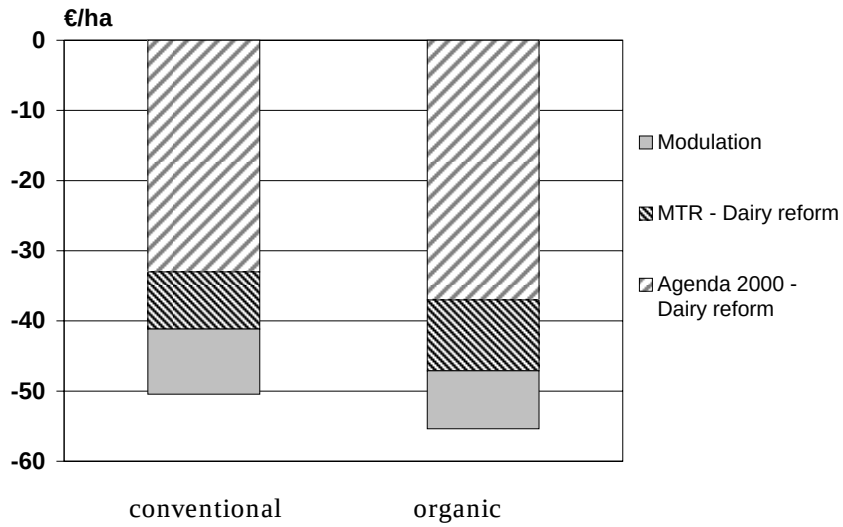
All calculations assume a total decoupling of the direct payments in spite of the possibility of the member states to keep certain parts of the payments coupled.

10.6.3 Results

In Baden-Württemberg, the conventional as well as the organic sector loose income due to the Mid Term Review (see Figure 10-6). This is due to modulation as well as to reduction of the milk price as already decided in Agenda 2000 and increased in the CAP Reform 2003.

The impact of the Agenda 2000 – dairy reform lies between 33 €/ha (conv.) and 37 €/ha (organic) whereas the additional loss of the CAP Reform 2003 dairy reform lies between 8 €/ha (conv.) and 10 €/ha (organic). The effect of modulation causes losses of 9 €/ha (conv.) and 8 €/ha (organic). The results are explained in detail in the following chapters.

Figure 10-6: Incomes losses due to CAP Reform 2003 in Baden-Württemberg

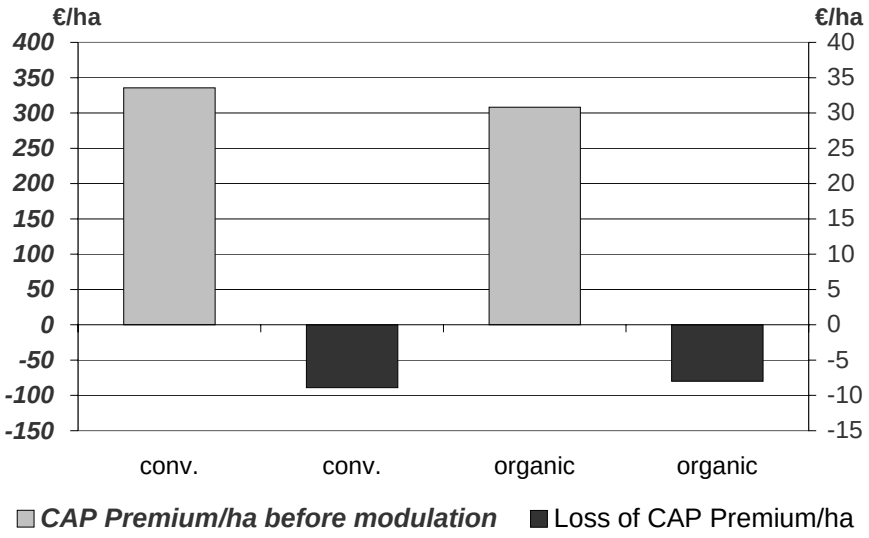


Source: Aurbacher (2003a)

10.6.3.1 Effect of modulation and national envelope

Before modulation conventional farms receive higher total average of direct payments of 336 €/ha compared to average total payments of 308 €/ha of organic farms. Due to this modulation conventional farms will loose 2.7% of their premiums (or 8.9 €/ha) while organic ones only loose 2.6% (or 8.0 €/ha) (seeFigure 11-7).

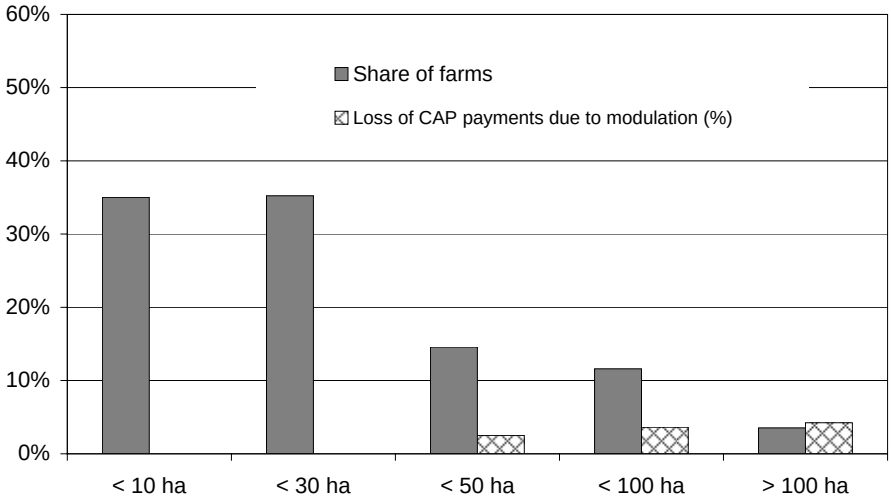
Figure 10-7: Loss of CAP premium due to Modulation in Baden-Württemberg



Source: Aurbacher (2003a)

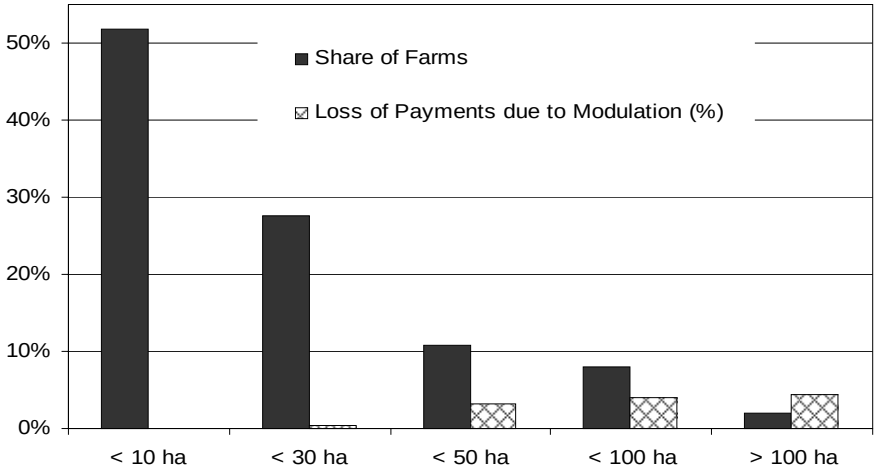
However, losses due to modulation do not affect all farms to the same extent. Small farms are less affected than larger farms (Figure 10-8 and Figure 10-9). The two smallest farm size classes (2-10 ha and 10-30 ha) of organic farms (in total 70% of all farms) receive on average less than 5,000 € CAP payments and, therefore, are not concerned by modulation. On the conventional side 78% of all farms loose less than 0.5% of their CAP payment by modulation. Thus, organic farms are less affected due to modulation than conventional farms: the initial CAP payment level was lower despite the higher average size of organic farms (Figure 10-8 and Figure 10-9).

Figure 10-8: Loss of CAP premium due to modulation in relation to farm size: Organic farms



Source: Aurbacher (2003a)

Figure 10-9: Loss of CAP premium due to modulation in relation to farm size: Conventional farms

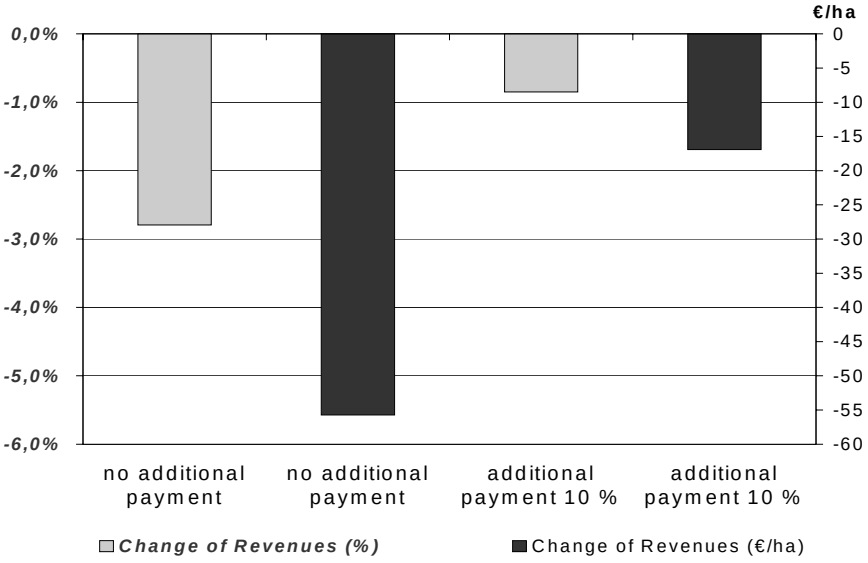


Source: Aurbacher (2003a)

10.6.3.2 National 10% envelope provision

However, some special rules affecting only organic farming may chance the picture. The conclusion of the CAP Reform 2003 offers the possibility to support special types of agriculture important for environmental purposes and quality production. To date it is not clear how these rules will look like in the end, but to estimate their possible influence on organic farming we have assumed that organic farming gets an additional payment of 10% of the sum without that rule. The impact is shown in Figure 10-10

Figure 10-10: Income changes in organic farming with an additional payment of 10% of total CAP payments



Source: Aurbacher (2003b)

Such an additional 10% payment increase for organic farming significantly influences the sectoral revenue. The fall of revenues would be drastically reduced to only 1.0% or approx. 15 €/ha, without taking adaptation effects into account. This would also promote profitability of organic farming in relation to the conventional sector as the payment goes only to organic farms. The conventional farms might even loose slightly, as the total sum of direct payments would probably stay the same.

10.6.3.3 Effect of Dairy Policy

Even bigger losses result from the reduction of the milk price. The newly introduced milk quota payment does not compensate for income losses. However, this depends on the design of the national additional milk premium. This could range from no additional premium to the maximum possible rate of 12.96 €/t for Germany. The impact of different additional premia is given in Table 10-12.

Table 10-12: Influence of the national additional premium on revenues

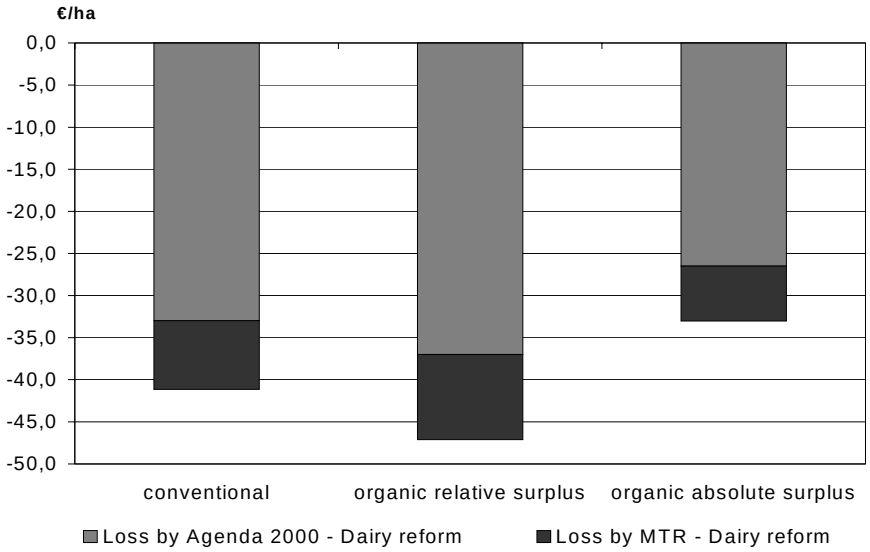
		No National Premium (Premium total 22.5 €/t)	National Premium 12.96 €/t (Premium total 35.5 €/t)
Conventional Sector	%	-4.0%	-3.0%
	€/ha	-68	-51
Organic Sector	%	-3.5%	-2.8%
	€/ha	-70	-56

Source: Aurbacher (2003b)

The revenue loss (incl. modulation) of the conventional sector ranges from –4.0% to –3.0% of the former revenues. This is –68 € to –51 €/ha. The organic sector looses about the same, from –3.5% to –2.8% of the revenues which counts –70 € to –56 €/ha. Even with the maximum of the national additional dairy premium, the income loss of agriculture in Baden-Württemberg can not be avoided.

In addition to the standard case, where the former organic price premium is reduced from 6 C/kg to 4,8 C/kg), a reduction of the organic milk price by the same absolute value as conventional is considered. The results are shown in Figure 10-11.

Figure 10-11: Income losses in spite of a price surplus for organic milk of 6 €/100kg



Source: Aurbacher (2003a)

The calculated income loss is reduced from –1.2% to –1.0% (that is from -24 to -20 €/ha), if the organic milk premium price can be kept in absolute terms at 6 C/kg. Considering a conservation of the organic premium price in absolute terms, organic farming in Baden-Württemberg suffers less from the price reduction than conventional farming (only -20 €/ha versus -24 €/ha conventionally). This complies with the theory discussed by Offermann (2003b, p 104f). Despite these differences, organic farming is affected by the reform in general in a similar way as the conventional sector although the neglected effects of adaptation may be higher than the difference in calculated results above.