Working Group Report
Ministry of Agriculture and Forestry 2001:16b

Strategy for Finnish Agriculture

Final Report of the Steering Group

Helsinki 2001

TO THE MINISTRY OF ARICULTURE AND FORESTRY

The Ministry of Agriculture and Forestry launched a strategy project and appointed a Steering Group for the project on 30 June 2000 to prepare a strategy for the development of the Common Agricultural Policy of the EU and national agricultural policy measures in 2000-2010.

The chairman of the Steering Group was Minister of Agriculture and Forestry Kalevi Hemilä, the vice-chairman was Secretary General Jarmo Vaittinen from the Ministry of Agriculture and Forestry, and the members were Director-General Ilkka Ruska and Director-General Veli-Pekka Talvela from the Ministry of Agriculture ad Forestry, Deputy Director-General Vesa Himanen from the Ministry for Foreign Affairs, Deputy Director-General Heimo Hanhilahti, Director Antero Tuominen, Agricultural Counsellor Matti Hannula and Agricultural Counsellor Carl-Gustav Mikander from the Ministry of Agriculture and Forestry, Budget Counsellor Kati Suihkonen from the Ministry of Finance and Counsellor Aulikki Hulmi from the Prime Minister's Office. Permanent experts to the Steering group were Chairman Esa Härmälä from the Central Union of Agricultural Producers and Forest Owners and Chairman Holger Falck from the Central Union of Swedish-Speaking Agricultural Producers. The secretaries were Senior Officer Jarmo Salonen and Senior Officer Kari Valonen from the Ministry of Agriculture and Forestry. On 16 March 2001 the Steering Group was complemented by Members of Parliament Nils-Anders Granvik from the Swedish People's Party, Matti Kangas from the Left Alliance, Jari Koskinen from the National Coalition Party, Erkki Pulliainen from the Green League of Finland and Kari Rajamäki from the Finnish Social Democratic Party.

The Steering Group was to complete its mid-term report by 28 February 2001 and final report by 1 October 2001.

After successfully completing its work, the Steering Group submits this final report to the Ministry of Agriculture and Forestry.

Helsinki 25 October 2001

SUMMARY

The Ministry of Agriculture and Forestry launched a strategy project for agriculture on 30 June 2000 to prepare a strategy for the development of the common agricultural policy of the European Union and national agricultural policy measures in 2000-2010. This final report of the Steering Group presents a summary of the current state of Finnish agriculture and challenges to be faced during the present decade.

Most recently the common agricultural policy was reformed by Agenda 2000, where decisions were also made concerning the monitoring of the implementation of measures and continuation of reforms. At the moment it seems that the common agricultural policy will be reviewed in 2002 and 2003 for the part of, in particular, arable crops, milk, beef, sugar and olive oil sectors as well as financing of the common agricultural policy. At the same time Finland will be negotiating with the Commission on the continuation of the national aid system based on Article 141 of the Accession Treaty.

The operating environment of Finnish agriculture and food sector has changed considerably in the past ten years. The membership in the European Union changed the very core of our agricultural policy as the national policy and protected market were replaced by the common agricultural policy and internal market. During the present decade the EU is going to enlarge further and new rules for the international agricultural and food trade will be negotiated in the WTO. Through the changes in the common agricultural policy and in the competitive situation on international markets these processes are going to influence the position of Finnish agriculture in a number of ways.

This final report summarises the current state and future challenges of the most important product sectors from the Finnish perspective, rural development policy of the EU as well as the national aids and structural policy measures implemented in Finland. The report also looks into the problems related to the financing of the common agricultural policy and pressures to change this.

Based on the current state of Finnish agriculture and to respond to the changes and challenges in the operating environment of agricultural policy, the Steering Group of the strategy project arrived at the following national objectives for Finnish agricultural policy in the present decade:

- Reinforcing consumer-oriented action in the whole food chain
- Securing the profitability and operating conditions of agriculture
- Developing more equitable and socially, economically and ecologically sustainable common agricultural policy
- Increasing interaction between agricultural and rural policy
- Promoting structural development in agriculture
- Improving the functioning of markets

The last chapter of the report outlines the Finnish positions in response to the international and national challenges of agricultural policy and proposes concrete measures to implement the positions in practice. The positions are based on the combination of the proposed agricultural policy objectives to the most important changes in the operating environment in order to maintain and improve the competitiveness of Finnish agriculture and viability of the rural areas. The main objective is to make sure that Finnish agriculture will continue to provide safe and diverse high-quality products to the Finnish consumers and to meet the various kinds of other expectations directed at agriculture in modern societies.

CONTENTS

ABBREVIATIONS

ACP	=	African, Caribbean and Pacific
BSE	=	Bovine spongiform encephalopathy
CAP	=	Common Agricultural Policy
EU	=	European Union
OJ	=	Official Journal
GMO	=	Genetically modified organism
GNP	=	Gross National Product
CEE	=	Central and Eastern Europe
LDC	=	Least developed countries
Mela	=	Farmers' Pension Institute
MTTL	=	Agricultural Economics Research Institute
MYEL	=	Farmers' Pension Act
OECD	=	Organisation for Economic Co-operation and Development
WTO	=	World Trade Organization

1. INTRODUCTION

1.1 Starting points for the strategy project

The common agricultural policy of the European Union (CAP) was reformed by the Agenda 2000 decisions. The implementation of the decisions is still underway, but they lay down the foundations for the operating environment of agricultural policy in 2000-2006 and for milk even until 2008. In Agenda 2000 decisions were also made concerning the monitoring of the implementation process and, if necessary, continuation of reforms. Certain sectors of the CAP will be evaluated in 2002-2003 based on the mid-term review clauses of Agenda 2000. The reforms to be implemented in connection with the mid-term review might concern, *inter alia*, the arable crops, milk, beef, sugar and olive oil sectors as well as the financing of the CAP. Further reforms may be needed due to the EU enlargement and WTO negotiations. At the same time Finland will also negotiate with the Commission on the continuation of national aid measures applied on the basis of Article 141 of the Accession Treaty.

The continuous changes and reform processes in the CAP pose a major challenge especially for the small Member States with rather limited resources. Preparing for the upcoming negotiations will be the most important task of the Finnish agricultural administration in the next few years. Continuous and extensive analysis of the future challenges and opportunities in the agricultural and food sectors will be needed in order to find appropriate solutions in the negotiations which will serve the Finnish interests as well as to influence the content of the CAP in the long run.

To prepare for the negotiations Ministry of Agriculture and Forestry launched a project on 30 June 2000 to draft a strategy for agriculture and set a Steering Group to lead the project. This final report of the Steering Group presents a summary of the current state of Finnish agriculture and the challenges which will be faced during this decade.

1.2 Purpose and objectives of the strategy project

The Finnish agricultural and food sector differs in a number of ways from the mainstream agriculture of the European Union. Finland is located far up in the north and the climatic conditions are quite exceptional, which increases the production and marketing costs. Owing to its particular history and development, the common agricultural policy does not take account of the specific conditions of Finland in its measures.

The strategic outlines aimed at securing the future of the Finnish agricultural and food sector must respond to the following general questions:

- How is the competitive position of Finland going to develop on the internal market of the EU? What are our weaknesses and strengths?
- What will be the impact of the upcoming WTO-round on the operating environment of the agricultural and food sector?
- What are the threats and opportunities which the EU enlargement brings for the Finnish food chain?
- How are the trends on the world market going to influence the competitive position of Finland?
- How can the expenditure of the agricultural budget of the EU be kept in balance and what are the impacts of the financing arrangements of the CAP on the EU agricultural policy and on the position of Finland?
- How can the specific conditions in Finland be taken into account in the future reforms of the CAP?

- What kind of national support systems will be needed in the future, and how can their application be secured in the long term?
- How can a fair and just economic and social position for the farming population be guaranteed?
- What should the structural development in Finland be like in order to meet the future challenges?

The purpose of the strategy project is to analyse the changes and challenges that agriculture will be facing and outline strategies for appropriate action to be taken in different situations. In addition to a thorough analysis of the pressures for change in the CAP, the outlines prepared during the strategy project may also serve as guidelines for the administration and in contacts to other parties involved, both in Finland and in international contexts.

The strategy must be based on a thorough understanding of the current state of agriculture and the historical and other reasons for this. Thus the project started with an initial analysis of the current situation and future challenges in each sector prepared in a number of sub-groups. Various kinds of research projects were also launched, which will support the formulation of the Finnish positions on the most important problem areas and provide background information for the negotiations.

The material produced during the strategy project lays the foundations for the formulation and co-ordination of the Finnish positions on agriculture and agricultural policy.

1.3 Organisation of the strategy project

In August 2000 the Steering Group of the strategy project appointed a number of sub-groups to deal with the main problem areas in terms of the future challenges, i.e. WTO, enlargement, market development, Community policies, structure of agriculture and national support policy. The task of the sub-groups was to analyse the situation in Finland and the future challenges and opportunities in their own field. In the sub-groups there were representatives from the different ministries, research institutes, producer organisations as well as other interest groups in the agricultural and food sector.

During autumn 2000 the sub-groups drew up reports on their own theme, including a preliminary analysis of the challenges and future prospects in the sector. Based on the reports of the sub-groups the Steering Group drafted its own mid-term report in February 2001, summarising the main points of the work done in sub-groups and introducing six preliminary objectives for agricultural policy in order to meet the future challenges.

In March 2001 members of the Finnish Parliament representing all the different governmental party groups were invited to join the Steering Group. The sub-groups continued their work in the spring and summer of 2001. The final reports submitted in summer 2001 provided a more in depth analysis of the future problems and outlined the most important challenges for Finland and issues to be negotiated.

This final report of the enlarged Steering Group was drawn up on the basis of the reports of the sub-groups and discussions in the Steering Group. The report presents a summary of the development of Finnish agriculture during the EU membership and the most important challenges for Finnish agriculture in the next few years, sets the main objectives for agricultural policy, and outlines the basic Finnish positions on issues to be discussed in the upcoming negotiations.

2. DEVELOPMENT OF FINNISH AGRICULTURE AND ITS POSITION ON THE INTERNAL MARKET

The operating environment of the agro- food sector changed considerably during the previous decade. The EU membership from the beginning of 1995 caused a number of significant changes in Finnish agriculture and, in particular, agricultural policy. National agricultural policy and protected market were replaced by the common agricultural policy and internal market. Since then we have operated under the common agricultural policy, where the national latitude is limited and, even when it does exist, subject to approval by the Commission.

EU membership and common internal market increased the international competition on the agricultural and food markets, and adjusting to this was a major challenge for the whole food chain. Direct impacts were felt the most clearly on the farm level as the producer prices fell dramatically and the support systems were reorganised. Food industry had to adjust to tightening competition when border protection between the domestic market and the common internal market of 15 Member States ceased to exist. For the consumers the EU membership brought along more than 10 per cent lower food prices, and since then increase in food prices has also been slower than the average inflation. Between 1995 and 2000 the consumer price index rose by 8%, while in the case of foodstuffs the increase was only 2 per cent. In the past few months, however, food prices have risen more than the prices on average. In the first eight months of 2001 the prices of food and non-alcoholic beverages rose by 2.7 percentage points, while the whole consumer price index rose by only 2.2 percentage points.

The following paragraphs present the development of agriculture mainly during the past decade. The main topics are the development of agriculture and product prices as well as incomes, profitability and structure, followed by the competitiveness and position of Finnish agriculture on the internal market.

2.1 Development of agriculture in 1990-2000

The position of agriculture and food industry in the national economy can be expressed through their share in the GNP, investments and employment. This has been done below on the basis of the national accounting. The development of the GNP, investments and employment in the whole national economy as well as in agriculture and food industry is presented in Annex 1.

In 2000 the GNP of the whole national economy at basic price was FIM 680.4 billion and that of agriculture was FIM 7.9 billion. In 1999 the total GNP of agriculture and food industry at basic price was FIM 18.7 billion and the GNP of the whole national economy was FIM 623.2 billion. In recent years the share of the agricultural and food sector in the Finnish GNP has been a little over three per cent, while in 1991 it was still six per cent. The share of agriculture in the GNP has fallen from three per cent in the beginning of the decade to 1.2 per cent, and from the beginning of the EU membership the share of agriculture has fallen by 0.8 percentage points. In the beginning of the 1990s the GNP of agriculture was more than FIM 14 billion and at the end of the decade it was only FIM 7 billion. The main reason for the dramatic fall in the GNP of agriculture is that only agricultural supports tied to the production volumes are included in the GNP. Another reason for the decrease in the share of agriculture in the GNP is the rapid growth in the national GNP since 1994, i.e. after the depression. In 1999 the GNP share of the food industry was 1.8 per cent. During the whole decade this fell by one percentage point and during the EU membership by 0.7 percentage points. In monetary terms the GNP of the food industry has been around FIM 12 billion all through the decade.

The share of agriculture in the investments in the whole national economy varied between 3.0 and 3.9 per cent and that of food industry between 1.5 and 3.1 per cent during past decade. Before the EU membership the farm investments fell below FIM 3 billion, but since then the annual investments have steadily increased to a little over FIM 5 billion. The investments in food industry per year were around FIM 2 billion almost all through the last decade. Today the share of agriculture in the investments is much larger than its share in the GNP, but the share of food industry in the investments is slightly smaller than its GNP share.

In 1999 the number of people employed in agriculture and food industry was close to 163,000, while in the beginning the decade it was about 228,000. In 1999 the share of the agricultural and food sector in the employed labour force was 7.3 percent, and in 1991 it was 2.5 per cent higher, i.e. 9.8 per cent. The fall in the share of agriculture in the labour force by 2.1 percentage points has taken place during the EU membership, while the share of the food industry fell all through the decade by altogether 0.4 percentage points. Despite the considerable decrease in the share of agriculture in the labour force, it is still an important source of employment. In 1999 the share of agriculture in the employed labour force was 5.3 per cent, which is clearly higher than its share in the investments and GNP. In particular, the significance of agriculture as a source of employment is in certain regions far greater than its average share: in South Ostrobothnia almost 12 per cent of the employed labour force works in agriculture. In 1999 the share of the food industry in the employed labour force was 2.0 per cent, which is slightly higher than its GNP share.

2.1.1 Agricultural production and prices

The membership in the EU did not lead to any dramatic changes in the development of the production volumes during the past decade (Table 2.1.). In the first years in the EU milk production stayed around the level of 2,300 million litres, which had been reached before Finland joined the EU. In recent years there has been some growth in the volume, and the production has even exceeded the national milk production quota. Before the EU membership egg production was more than 70 million kg per year, and since then it has fallen to about 60 million kg.

In 2000 meat production totalled 327 million kg, which is about 10 million kg less than in 1990. During the period concerned the total meat production was the lowest in the mid-1990s, when it was about 310 million kg per year. Even if the total meat production volume has stayed at about the same level, its structure has changed considerably. In 1990-2000 beef production fell by about 30 million kg to 90 million kg, while the production of poultry meat has grown very strongly. In 1990 poultry meat production totalled 33 million kg, but in the peak year 1998 it was as high as 66 million kg. The annual production of pigmeat has varied around 170-180 million kg. Finland produces very little sheepmeat. In 2000 the production was 0.6 million kg, which is one million kg less than in 1995. The production of horsemeat is at about the same level as that of sheepmeat.

The volumes of crop production are very much dependent on the weather conditions. The cereal crop of 2000 amounted to more than 4.0 billion kg, which was the highest during the past decade. In 1998 and 1999 there were serious crop damages and the total cereal yield was less than 3 million kg. Most of the cereals cultivated in Finland are fodder cereals, and in normal years the yield of these totals a little over 3 million kg. Wheat is the most important bread cereal. Due to the considerable variation in yields from one year to another it is very difficult to assess the impacts of the EU membership on the cereal production volumes, but the area under cereals has grown. However, the growth in the area under cereals has not necessarily increased the volumes, because the lower prices and environmental requirements have lowered the production intensity, which has reduced the yield level.

The oilseed production fell considerably in 1995-2000. In 2000 oilseed production totalled 71 million kg, while in the early years of the 1990s the annual production was more than 120 million kg. In 2001 the production is estimated at around 117 million kg. The production of sugar beets varies considerably from one year to another, and during the EU membership no major changes have occurred in the area under sugar beets.

Table 2.1 Development of production volumes in agriculture (million kg) in 1990-2000.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Milk, mill. l	2 600	2 345	2 274	2 264	2 316	2 296	2 261	2 301	2 294	2 325	2 371
Beef	118	122	117	106	107	96	96	99	93	90	90
Pigmeat	187	177	176	169	171	168	172	180	185	182	172
Sheepmeat	1.1	1.1	1.2	1.3	1.5	1.6	1.4	1.3	1.2	0.9	0.6
Poultry meat	33	37	36	35	39	43	49	53	61	66	64
Horsemeat	0.7	0.8	1.1	1.0	0.9	0.4	0.5	0.4	0.5	0.4	0.4
Meat, total	338	336	329	311	318	306	318	332	340	339	328
Eggs	76	67	68	70	72	75	71	67	64	59	59
Wheat	627	431	212	359	317	380	460	464	397	254	538
Rye	244	28	27	63	22	58	87	47	49	24	108
Barley	1 720	1 779	1 331	1 679	1 858	1 764	1 860	2 004	1 316	1 568	1 985
Oats	1 662	1 155	998	1 202	1 150	1 097	1 261	1 243	975	990	1 413
Cereals, total	4 253	3 392	2 567	3 303	3 325	3 298	3 667	3 758	2 738	2 836	4 044
Oilseeds	117	95	133	127	108	128	89	93	64	88	71
Sugar beets	1 125	1 043	1 049	996	1 097	1 110	897	1 360	892	1 172	1 046

Source: Information Centre of the Ministry of Agriculture and Forestry

Market prices of agricultural products fell dramatically as a result of the EU membership (Table 2.2.). Depending on the product, the decrease in the market prices in Finland between 1994 and 1995 varied from a little over 30 per cent to almost 70 per cent. Egg prices fell the most, but these have also risen proportionally the most during the EU membership, by more than 70 per cent. In spite of this the price in 2000 was 43 per cent lower than in 1994. The producer price of milk fell by a little over 31 per cent, and since then there has been some increase. The prices for pigmeat and poultry meat fell by about 50 per cent when Finland joined the EU. Pigmeat prices have varied around the new level. Poultry meat prices have increased by 11 per cent during the EU membership, but in 2000 they were still 44 per cent lower than in 1994. Beef prices fell by almost 41 per cent, and since then they have decreased further by 15 per cent.

Market prices for bread cereals fell by about 60 per cent and the fodder cereal prices decreased to about half of the earlier level. During the EU membership the cereal prices have continued to fall, and especially in 2000 when the intervention prices were lowered as a result of the Agenda 2000 reform.

Table 2.2. Changes in the prices of agricultural products as a result of and during the EU membership.

	Market prices, FIM/kg			Change, %		
	1994	1995	2000	1994/1995	1994/2000	1995/2000
Livestock production						
Milk, FIM/l	2.84	1.95	2.01	-31.3	-29.2	3.1
Beef	24.40	14.42	12.25	-40.9	-49.8	-15.0
Pigmeat	16.05	7.91	7.68	-50.7	-52.1	-2.9
Poultry meat	12.07	6.07	6.76	-49.7	-44.0	11.4
Eggs	8.54	2.83	4.85	-66.9	-43.2	71.4
Crop production						
Wheat	2.13	0.87	0.80	-59.2	-62.4	-8.0
Rye	2.52	0.89	0.78	-64.7	-69.0	-12.4
Malting barley	1.82	0.85	0.78	-53.3	-57.1	-8.2
Fodder barley	1.57	0.73	0.71	-53.5	-54.8	-2.7
Fodder oats	1.48	0.70	0.70	-52.7	-52.7	0.0

Source: Information Centre of the Ministry of Agriculture and Forestry

2.1.2 Incomes, profitability and productivity in agriculture and horticulture

Before the EU membership the total return of agriculture and horticulture was a little over FIM 25 billion (Table 2.3.). In the first years in the EU the total return fell to around FIM 22 billion, in 1998-1999 it was less than FIM 21 billion, and in 2000 it was FIM 22.3 billion. In addition to the decrease in the total return by about 3 billion the EU membership also changed the structure of the return. Before the EU membership market return accounted for about 80 per cent of the total return, but after Finland joined the EU the share of market return has been around 50 per cent. The decrease in market return from FIM 20 billion to FIM 12 billion has been compensated through an increase in agricultural support. Before the EU membership the share of agricultural support in the total calculation was FIM 4.4 billion, while in 2000 the amount of support totalled FIM 9.7 billion.

Table 2.3. Total calculation of agriculture and horticulture in 1992-2000.

	92-94 average	1995	1996	1997	1998	1999	2000e
Total return, FIM bill.							
- market return	20.4	11.4	12.0	12.2	11.8	11.7	12.0
- support	4.4	10.6	9.3	8.8	8.5	8.5	9.7
- other return	0.6	0.4	0.4	0.4	0.4	0.7	0.6
Total	25.4	22.4	21.7	21.5	20.7	20.9	22.3
Costs, FIM bill.							
- depreciation, rents, interests	6.5	5.6	5.5	5.3	5.4	5.3	5.6
- other costs	11.2	9.3	9.7	9.8	10.1	10.0	10.6
Total	17.7	15.0	15.2	15.1	15.4	15.3	16.2
Agricultural income, FIM bill.	7.7	7.4	6.5	6.3	5.3	5.6	6.1

Source: Agricultural Economics Research Institute

Before joining the EU the total costs of agriculture were a little less than FIM 18 billion. The membership reduced the costs by FIM 2.7 billion, and thus the costs fell FIM 300 million less than the returns. From the beginning of the EU membership in 1995 till 1999 the costs grew from FIM 15 billion to 15.3 billion, and between 1999 and 2000 the costs rose by FIM 850 million to FIM

16.2 billion. The rapid increase in the cost level was mainly due to the rise in the prices for fuel, concentrated feedingstuffs and the interest rate level.

According to the total calculation, agricultural income before the EU membership totalled a little less than FIM 8 billion, and it fell gradually during the first years in the EU. The bottom, FIM 5.3 billion, was reached in 1998, when there were serious crop damages. Agricultural income in 2000 is estimated at FIM 6.1 billion. The total income increased despite the considerable increase also in the costs as the market returns reached the same level as before the two years of crop damages (1998 and 1999) and as the Agenda 2000 reforms raised agricultural support by more than FIM 1 billion.

The total calculation of agriculture and horticulture shows the significant role of support in the income formation. EU membership changed the structure of the support in a number of ways as the supports based on the Common Agricultural Policy started to be applied in Finland, complemented by national aids allowed by the Accession Treaty. In terms of financing sources the current support system consists of three main parts. These are the direct payments financed in full by the EU, which in the early years of the EU membership amounted to about FIM 1.3 billion and last year to about FIM 2.3 billion (Table 2.4.), supports part-financed by the EU, in particular, environmental support and compensatory allowances, and national aids, which totalled almost FIM 3.4 billion in 2000. In the first years in the EU the national aids were particularly significant owing to the transitional aids. In 1995-1999 the supports financed in full or partly by the EU (FIM 3 billion) accounted for about a third of agricultural support. The EU contribution to the support is on the increase, and it is estimated to account for 42 per cent of the support for Finnish agriculture in 2002.

Table 2.4. Support for agriculture and horticulture per calendar year in 1995-2000 (FIM million).

	1995	1996	1997	1998	1999	2000
Direct CAP payments	1 255	1 629	1 580	1 621	1 638	2 305
Environmental support	1 410	1 536	1 587	1 638	1 608	1 638
Compensatory allowance	1 615	1 592	1 604	1 641	1 760	2 466
National aids	6 306	4 704	4 038	3 545	3 528	3 352
Support, total	10 586	9 461	8 809	8 445	8 534	9 761
EU support	2 441	2 834	2 811	2 885	3 042	3 974

Source: Ministry of Agriculture and Forestry

The total calculation of agriculture and horticulture shows the development of incomes at the total level. No direct conclusions can be made on the income development at the level of holdings, because their number is changing as a result of structural development. It should also be noted that on individual holdings the share of agricultural income in the total income of the holding depends on various factors, primarily on the production line, as well as the size of the holding and whether farming is practised full-time or part-time. On livestock farms the share of agricultural income is larger than on crop farms or diversified farms, and the share of agricultural income is obviously larger if farming is practised full-time.

A study of the development of the total agricultural income on farm level 1986-1997 showed that in real terms the average agricultural income stayed at the same level even if the size of the holding had increased by eight hectares. The average income level on full-time farms changed hardly at all during this ten-year period, while on part-time farms the average income level grew mainly as a result of the rise in wage income. In all production lines the total income of full-time farms was lower than that of part-time farms. The differences in the income development of full-time and part-time farms have increased during the EU membership. One indicator for the income development

outside agriculture is the earnings level index for wage earners, which rose by 17.9 per cent from 1995 till 2000.

Profitability is the economic precondition for continuing business activity. The following paragraphs deal with the development of profitability on dairy, pig and cereal farms as well as in horticulture from 1992/94 until 1997 based on the actual results from bookkeeping farms and further until 2000 based on calculations, taking account of the changes in prices and support. The results have been weighted to represent all farms. The development of profitability is examined by means of a profitability coefficient, which shows the compensation the farm family gets for its labour and capital invested in agriculture. If the profitability coefficient is less than one, the compensation is below the set target level. The compensation demand is based on the hourly wages, which varied from FIM 38 in 1992 to FIM 44 in 2000. For return on capital the interest-rate level set is 5 per cent during the whole period.

In 1992/94 the average profitability was the lowest on dairy farms (profitability coefficient 0.52-0.74), which are very labour intensive. On cereal farms the coefficient was 0.68-1.00, and the highest profitability was reached on pig farms, where the coefficient was 0.85-1.30. On beef farms the coefficients were close to those on dairy farms while on poultry farms they were close to pig farms. On farms producing vegetables in the open the profitability coefficient was 0.70-1.05 and on greenhouse farms 0.60-1.15.

The calculated development of prices and support weakened slightly the profitability of dairy and cereal farms from 1997 till 1998-1999, but the changes in the prices and support affected the profitability of pig farms even more. The increase in support in 2000 improved the profitability especially on pig and cereal farms, but also on dairy farms. The profitability of vegetable production in the open until 2000 was quite steady, but the profitability of greenhouse production deteriorated.

The efficiency of agriculture can be examined through the concept of productivity. Improved productivity means that production inputs are converted into output more efficiently than before. The productivity of a whole sector may improve as a result of increased efficiency in most of the individual enterprises, or through the exit of the least efficient ones. Productivity reflects only the physical efficiency of the production, and it gives no direct indications of the development of profitability, which apart from physical efficiency depends on the development of the relative prices of inputs and outputs. Thus increased efficiency in the production will not necessarily improve the profitability of a sector or enterprises operating in it if the price relations develop in an unfavourable direction.

Based on the total calculation the productivity of Finnish agriculture in 1987-1997 improved, on average, by 2.9 per cent a year (Table 2.5.). In the early 1990s the productivity developed quite slowly, but then it started to improve more rapidly. During the EU membership the development of productivity has accelerated in most production lines, except for cereal production, where the productivity has even weakened. This may be due to the relatively slow structural development, the fact that less productive land has been taken into cultivation as well as the fact that support is tied to the cultivated area instead of production volumes.

Table 2.5. Development of the productivity of agriculture in the whole sector and in different production lines (%).

	1987-1997	1990-1995	1990-1997	1994-1997	1995-1997	1994-2000
Whole sector	2.92	-0.17	1.21	1.32	4.75	1.18
Cereal farms	2.18	0.24	-1.08	-1.69	-4.31	-
Pig farms	1.47	-0.77	0.19	0.51	2.61	-
Beef farms	2.90	1.46	2.02	3.41	3.44	-
Dairy farms	1.28	-1.22	0.34	2.10	4.34	-

Source: Agrifood Research Finland, Economic Research

2.1.3 Structural development in agriculture

In 2000 there were 79,783 active farms in Finland (Table 2.6.). In 1990-2000 the number of active farms fell by 38 per cent: of the 129,114 active farms in 1990 more than 49,000 farms had quitted agricultural production by 2000. The number of farms fell the most in the very beginning of the EU membership, and in recent years the decrease has slowed down. Most of the farms that have discontinued their production during the EU membership have been livestock farms. In 1995-2000 altogether more than 20,000 active farms closed down and almost 17,000 of these were livestock farms, i.e. a large number of especially livestock farms have discontinued production since Finland joined the EU, while the number of cereal farms giving up production has been smaller than earlier. One reason for this is that farms giving up livestock production may continue as crop producers for some time before completely giving up agriculture.

Table 2.6. Number of farms in 1990-2000.

	Number of farms			Change, %		
	1990	1995	2000	90/95	95/00	90/00
Livestock production						
Dairy cattle	43 564	32 480	22 913	-25.4	-29.5	-47.4
Other cattle	11 500	9 394	5 349	-18.3	-43.1	-53.5
Pig husbandry	7 081	6 249	4 316	-11.7	-30.9	-39.0
Poultry	2 552	2 239	1 231	-12.8	-45.0	-51.8
Other livestock farms	2 237	3 383	2 970	51.2	-12.2	32.8
Livestock farms, total	*66 934*	*53 745*	*36 779*	*-19.7*	*-31.6*	*-45.1*
Crop production						
Cereal production	35 218	29 294	27 510	-16.8	-6.1	-21.9
Horticulture	3 525	3 281	2 361	-6.9	-28.0	-33.0
Other crop production	8 739	9 712	9 015	11.1	-7.2	3.2
Crop production, total	*47 482*	*42 287*	*38 886*	*-10.9*	*-8.0*	*-18.1*
Other farms	14 698	3 932	4 118	-73.2	4.7	-72.0
Active farms, total	129 114	99 964	79 783	-22.6	-20.2	-38.2

Source: Information Centre of the Ministry of Agriculture and Forestry

The production structure of agriculture has changed considerably during the EU membership (Table 2.7.). The share of livestock farms of all farms has decreased and the share of crop farms has grown. In 2000 46 per cent of the active farms were livestock farms and close to 49 per cent practised crop production, while in 1990 52 per cent of the farms raised livestock and 37 per cent were crop farms. The proportional share of livestock farms grew until 1995, when these accounted for 54 per cent of

active farms, and thus the decrease has mainly occurred during the EU membership. Most of the 12 per cent increase in the share of crop farms has also occurred after Finland joined the EU.

Table 2.7. Shares of livestock farms, crop farms and other farms in 1990-2000 (%).

	1990	1995	2000
Livesock production	51.8	53.8	46.1
Crop production	36.8	42.3	48.7
Other	11.4	3.9	5.2
Total	10.,0	100.0	100.0

Source: Information Centre of the Ministry of Agriculture and Forestry, Farm Register

The average arable area of active farms grew from 17.3 hectares in 1990 to 28.0 hectares in 2000 (Figure 2.1.), i.e. almost 62 per cent. The EU membership accelerated the growth in the farm size especially on pig, poultry and dairy farms. The average size of cereal farms grew rapidly in the very beginning of the EU membership, but after the first years this has slowed down. In 1990 cereal farms were 0.5 hectares larger than dairy farms, but in 2000 dairy farms were, on average, 5 hectares larger than cereal farms.

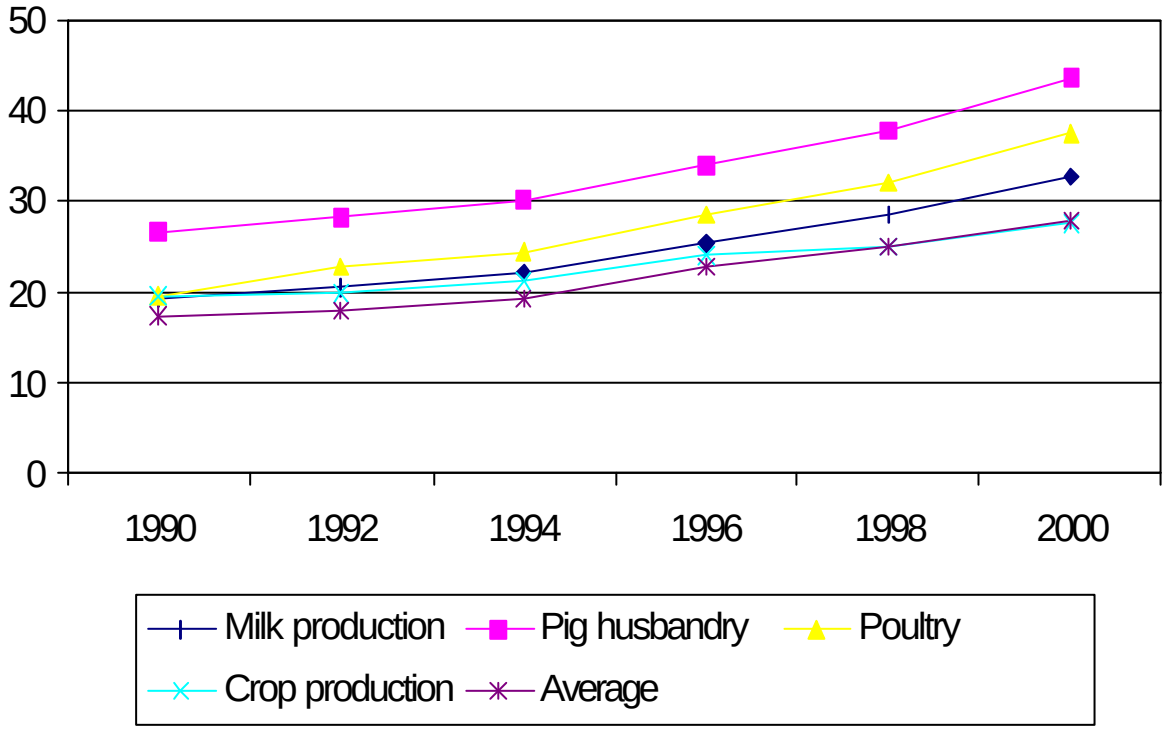


Figure 2.1. Average arable area of active farms (ha) in different production lines in 1990-2000. (Source: Information Centre of the Ministry of Agriculture and Forestry)

Despite the structural development most of the Finnish farms are still relatively very small: more than half of active farms have less than 20 hectares arable land, and on only about 10 per cent of farms the arable area is more than 50 hectares. The cultivated area has increased mainly through leasing instead of purchases of additional land. In 1995-1998 the share of leased land of the cultivated arable area of active farms grew from 22 per cent to 27 per cent, i.e. from 480,000 hectares to 600,000 hectares.

There are no statistics of the total number of farms transferred to the next generation in Finland, but this can be estimated on the basis of the number of farms receiving start-up aid for young farmers and from the statistics of the Farmers' Pension Institute. The data shows that the number of transfers collapsed during the 1990s. In the early part of the decade about 3,000 farms were transferred each year, but in recent years their number has been 1,000 each year.

The average age of farmers has also increased. The average age of farmers insured under the Farmers' Pension Act was 44.4 years in 1990 and 46.1 years in 2000. In the age distribution most farmers are 50 to 55 years old, which is the age class where the baby boom generation born right after the war now belong (see Annex 2a and 2b). The younger age classes get smaller year by year. The sex distribution of persons insured under the Pension Act is clearly distorted: at present the share of women is 38 per cent and that of men 62 per cent. In the next few years the large age groups are going to reach the retirement age, which should be taken into account in the structural policy measures.

During the EU membership agricultural production has concentrated both regionally and at the farm level. Agricultural production has moved towards the south and west. The magnitude and pace of the changes varies according to the products concerned, and production is also concentrated within the regions. Agricultural production moves away from the remote rural areas, both nationally and regionally, and thus the number of farms has fallen the most rapidly in the eastern and northern parts of the country. Production is also concentrating to larger farms, and the share of large units has increased especially in pig meat, egg and poultry production.

2.1.4 Self-sufficiency and utilisation rate of quotas

The most notable change in self-sufficiency has been the reduction in the self-sufficiency in beef from 110 per cent in the beginning of the 1990s to only 90 per cent in recent years (Table 2.8.). On the contrary, the domestic pigmeat production meets the consumption quite well.

In milk products the self-sufficiency in both liquid milk and fat fell during the 1990s, but there is still 10 per cent overproduction in liquid milk and almost 30 per cent in fat. Oversupply in eggs has also diminished, but it is still around 15 per cent.

The self-sufficiency in bread cereals varies considerable from one year to another. In recent years there has been shortage of rye even when the conditions have been favourable. In good years the self-sufficiency in wheat has risen to 80-90 per cent, and sugar production has corresponded to about 70 per cent of the consumption.

Table 2.8. Self-sufficiency in agricultural products (%) in Finland in 1990-1999.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Milk (liquid)	122	113	109	109	112	111	106	109	108	108
Milk (fat)	143	128	123	124	129	125	126	128	127	128
Beef	109	114	118	111	111	99	98	100	95	93
Pigmeat	114	108	108	109	113	101	102	109	105	103
Eggs	136	123	120	124	130	124	125	124	120	115
Wheat	157	98	50	89	86	74	78	79	68	42
Rye	249	30	28	71	25	62	88	48	45	26
Sugar	91	74	70	65	68	74	75	76	70	71
Source: Food Facts										

The production and support quotas are important instruments of the Common Agricultural Policy of the EU. The utilisation rate of the quotas indicates to what extent the production possibilities have been realised (Table 2.9.). The national production and support quotas granted to Finland for the part sugar and milk quotas have been utilised up to almost 100 per cent during the EU membership. Until 1999 a little over 10 per cent of the base area for arable crops was not used, but in 2000 all the base area was used after silage grass became eligible for support. In 2001 there was a slight overshoot of the base area for the first time. The quotas for oilseeds and starch were utilised in full in the first years in the EU. Towards the end of the decade they were under-utilised, and now they are again used to the maximum. The oilseed area of about 73,000 ha in 2001 clearly exceeds the quota.

In meat production the quotas are clearly under-utilised. In recent years the utilisation rate of the quotas for special premium has been under 80 per cent, and in the case of suckler cow and ewe premium quotas the utilisation rate is even lower. In recent years these have been 55-57 per cent and 57 per cent, respectively.

Table 2.9. Utilisation rate of agricultural production and support quotas (%) in 1995-2000.

	Quota	1995	1996	1997	1998	1999	2000e
Crop production							
Base area, arable crops, 1 000 ha	1 591.0	79	83	87	87	88	98
Oilseed area, 1 000 ha	63.0	127	93	99	98	95	84
Sugar quota (A+B), mill. kg	146.8	100	93	100	86	100	100
Starch quota, mill. kg	54.8	100	100	100	84	92	101
Livestock production							
Dairy quota for milk, mill. kg	2 397.7	99	97	100	98	101	101
Direct milk sales, mill. kg	8.9	37	34	24	26	32	30
Special premium, 1 000	250		86	78	77	74	74
Suckler cow premium, 1 000	50	50	55	57	55	51	57
Ewe premium, 1 000	80	79	82	78	66	58	57

Source: Information Centre of the Ministry of Agriculture and Forestry

2.2 Competitiveness of Finnish agriculture on the internal market

The very short growing and pasture seasons in the north combined with the low cereal and grass yields lead to high production costs per hectare and livestock unit, and thus they constitute a permanent competitive disadvantage for agriculture in northern regions. In addition to the handicap due to the climate, the small and scattered arable land parcels, efficient machinery needed because of the short sowing and harvesting periods as well as drying of hay and cereals for storage raise the production costs in Finnish agriculture. Sparse population and remote location, lack of local markets and long transport distances of both inputs and products also cause additional costs.

The competitive disadvantage due to the climatic conditions is a serious handicap for Finnish agriculture on the internal market. However, Finnish agriculture also possesses a number of traditional strengths, and it would be of primary importance to take the maximum advantage of these in the future. These are the pure and environmentally-friendly production processes and products, traceability and high production ethics. Serious animal and plant diseases are extremely rare in Finland and production animals are treated well.

Further reductions in the producer prices would cause serious problems for Finnish agriculture. There is no incentive to produce and the spirit of enterprise is lost if the producer prices do not cover even the variable production costs. In a country where the cost level is high and productivity low there is a risk of 'virtual farming'. The producer price level depends on decisions made under the Common Agricultural Policy, as well as the competitiveness of food industry on the internal market and development of the world market.

If the basic profitability of agricultural production is weak, it is not possible to pay back the capital invested in agriculture. Investment aid has been crucial for launching investments in Finnish agriculture. Studies have shown, however, that long-term investments must be complemented by direct income support in order to balance the income level during the repayment period of investment. Direct payments are thus a prerequisite for balanced structural development.

The strict rules for environmental and animal protection increase the production costs of agriculture, but demanding environmental provisions can also been seen as an opportunity: Finnish foodstuffs are pure. The relatively large arable land area per livestock unit may also turn out to be s strength for Finnish livestock production if more extensive production methods receive more support as a result of the BSE crisis. This involves the problem that in the other parts of Europe the forage area is in most cases pasture, while in the north forage area is also needed for the production of fodder for the long indoor feeding period.

In spite of the considerable investments the productivity of Finnish agriculture has developed more slowly than in the major agricultural countries of the EU. Efficiency and productivity are expected to increase quite rapidly in Europe, but the tightening provisions and restrictions concerning the environment are going to influence the development at least in the most intensive livestock production regions. In the densely populated Central Europe the costs related to animal manure may be higher than in Finland, where there is a larger arable land area available for spreading. For instance, in the Netherlands the new production quotas for pig husbandry and environmental rules have raised the production costs of pig meat by about FIM 0.50/kg.

The competitiveness of food industry depends among other things on the price of the domestic raw material and quality factors. The competitiveness is obviously weakened if the prices paid by our food industry to the producers are clearly higher due to the natural conditions than in the competing countries. On the other hand, there may be significant advantages in using domestic raw material in the processing industry, even at a higher price. Studies show that Finnish consumers do prefer domestic foodstuffs, but the prices should not be very much higher.

In 1998 56 per cent of the land area used in farming in Europe was classified as less favoured. Only a small share of European agriculture would be capable of competing with the most efficient production regions and countries on the world market. The less favoured areas in Europe also differ considerably from each other in terms of their location and the severity of the natural handicap, which increases the higher from the sea level or up in the north, or the further to the south the area is located.

The average size of Finnish farms is close to the European average. In 1997 the average farm size in the EU was 18.4 hectares and in Finland it was 23.7 hectares. However, compared to the nearest competitors the average farm size in Finland is much smaller: in 1997 the average farms size in Sweden was 34.7 hectares, in Denmark 42.6 hectares and in Germany 32.1 hectares.

The average farm size in the EU is small due to the fact that in Southern Europe the farms are very small. In 1997 the average farm size in Greece was only 4.3 hectares, in Italy it was 6.4 hectares and in Portugal 9.2 hectares. However, the handicap due to the small unit size is not too severe in

those countries because of the large share of fruit and vegetables as well as wine and olives in the production. These products have the return per hectare usually much higher than in the case of the so-called northern products, i.e. milk, cereals and meat. What is problematic for Finland is that we produce these northern products, which are the same ones produced by our nearest neighbours where the structure and conditions for farming are far more favourable. In Finland the farm structure is quite homogenous and the number of large farms is small.

2.3 Special characteristics of Finnish agriculture on the internal market

The northern location and natural conditions cause permanent handicaps to agriculture in all parts of Finland. Finnish agriculture is practised in very exceptional conditions compared to the other EU Member States and the other less-favoured areas. The following paragraphs deal with the disadvantages due to the climate in the different production lines. These are summarised in Annex 3.

2.3.1 Natural conditions and crop production

In the Finnish climate the winter is very long and the growing period is short. In winter the ground is covered by a thick layer of snow, which according to long-term averages is about 20-30 cm thick even in Southern Finland in mid-March, when spring sowing is already getting started in the more southern Member States. Frost in the ground also causes difficulties in arable farming in Nordic Member Staes. The yield levels are low in Finland and the production costs are high due to the unfavourable natural conditions and production structure dominated by small farms.

In Central Europe the growing season is 260 and in Southern Europe 300 days, but in Finland it is only 170-180 days. The production conditions of agriculture weaken towards the north, and in Northern Finland the growing season is only 110-130 days. In Finland the effective temperature sum of the growing season is 400-1,300 degrees, while in Central Europe it is between 1,600-2,000 degrees.

Due to the short growing season and harsh winter high-yielding species and varieties do not survive in the Finnish conditions, which can be seen in the structure of crop production and yield levels. The sowing and harvesting periods are also much shorter than in Central and Southern Europe. The machine capacity must be adjusted according to the peaks in farm work in order to allow the optimal timing of cultivation measures. As the working season is short and cultivation areas are small, the use of the machinery per year remains relatively low. Considering the low yield level, the machine cost per unit produced is obviously quite high. Fragmented parcel structure and long distances increase the transportation costs and restrict the use of farming technology, as well as make it more difficult to use jointly owned machines or machine contracting.

The Finnish soil is acid and rocky, and thus it is not naturally very well suited for arable farming. The productivity of the soil can be maintained and even improved through certain cultivation measures (drainage, removing stones, liming and fertilisation). Maintaining the productivity calls for regular liming. Freezing of the ground lifts rocks and stones towards the soil surface, and they have to be removed before sowing.

The yield level is clearly below the EU average. Between 1992-1997 the yield of our most important cereal, barley, was 3.4 tonnes/ha, while the average yield in the other EU countries was 4.2 tonnes/ha. In the case of wheat the difference in the average yield is even greater: in 1992-1998 the average wheat yield in Finland was 3.4 tonnes/ha, but in the other EU countries its was 5.4 tonnes/ha, and in the best regions it was more than 9 tonnes/ha. In Finland a larger amount of seed is also needed to produce a successful crop.

Crops other than cereals, such as oilseed crops, protein crops and flax, suffer from the same problems. The yield level of sugar beets is low and the variation in yield from one year to another is the greatest in Europe.

2.3.2 Natural conditions and livestock production

The long, cold winter increases the costs of livestock production through the need for proper buildings, feed supply for the winter and storage of manure. Pig and poultry buildings must be heated, and this is also done in many cattle buildings. Owing to the cold climate the ventilation of livestock buildings is highly important. Manure stores must accommodate the whole amount of animal manure produced during the indoor feeding period, which raises the building costs.

The pasture season is short, only 120-130 days, and thus the possibility to utilise grazing is much more limited than in the other EU countries. Thus also the costs are higher than in the competing countries. In Finland the indoor feeding period is 8 months, and the production and storage of feedingstuffs for this period requires much more human labour and machinery than grazing. Due to the short growing period and long indoor feeding period a large area of arable land is needed for fodder production. All these factors combined lead to significantly higher production costs of the feedingstuffs for winter compared to countries where grazing all year round or at least most of the year is possible.

The long distances between farms and from farms to population centres where the consumers are weaken the competitive position of Finnish livestock production. The long distances to the market increase the transportation costs and push down the producer prices. The transportation costs are further increased by the scattered location of farms and centralisation of the processing industries, and the transports of e.g. slaughter animals take a longer time. Long distances between farms also affect their possibilities for co-operation.

2.3.3 Natural conditions and horticulture

The short growing period weakens the competitiveness of Finnish greenhouse production as well. In Finland the growing season starts 3-4 weeks later and ends 3-4 weeks earlier than in Central Europe. The yield per production area remains lower and the costs per unit produced are high. The buildings costs are high due to the special constructions needed because of the climate (more efficient heating equipment, insulation, snow load). The energy costs are higher than those of a similar cultivation programme in Central Europe.

Horticultural production in the open suffers from the short growing period in the same way as other crop production. A further problem is the storage of the products. In many countries storage is only used to balance the supply, but in Finland this is also needed due to the climate. Harvesting period is short, the crop must be in before the ground is frozen and the snow falls. The storage period of many products is long and the storage facilities must be technically well-equipped, which increases the costs. Heating is also often necessary. Losses during the long storage period reduce the quantity of marketable crop.

3. PRESSURES FOR CHANGE IN AGRICULTURAL POLICY

Many of the changes in Finnish agriculture in the past few years are a more or less direct consequence of the EU membership. However, many changes are also related to the broader international pressures for change, which would have influenced Finland outside the EU as well.

The membership in the EU has mainly accelerated and strengthened the impacts of these and their significance to the agriculture.

The changes on the world market and in the international agricultural and trade policies shape the operating conditions for agriculture. The market and policy trends must be taken into account in the planning of the Common Agricultural Policy and they influence its implementation. The EU is a major actor on the international agricultural market, and thus also the EU policies affect very strongly the world markets.

The following paragraphs outline the market development prospects of agricultural products and trends on the food market. In the changes concerning international trade and agricultural policies the main emphasis will be on the international agricultural trade negotiations within the WTO and the EU enlargement. Understanding the changes and trends in the markets and policies is highly important to be able to estimate the future trends in agricultural policy and design the national policy measures accordingly.

3.1 Market outlook of agricultural products

3.1.1 Development of the world market

The outlook for the world market in agricultural products in the next few years is quite favourable for the agriculture and food industry of the European Union. The decreasing trend in the prices of many agricultural products seems to be coming to an end and the prices can be expected to turn into an increase. This will, however, not be enough to raise the real price level. From the Finnish perspective this trend on the world market means that the import pressure from the internal market should not grow in any significant way.

In order for the favourable market outlook to be realised three basic assumption should be fulfilled. First of all, from the European point of view the strong world market prices are largely due to the weak euro relative to the US dollar. Should the value of the euro again reach the level of spring 1999, the competitiveness of European agriculture would be considerably weakened and exports from the internal market would become more difficult. Secondly, the favourable development of the internal market depends on consumer confidence, which should not be risked in any way. The third assumption behind the forecasts is that no significant changes will occur in the policies, which means, that, for example, the measures to restrict the production will continue to apply.

The world market price for wheat is expected to rise above the intervention price of the EU in the coming years, and gradual increase is also expected in the world market prices for fodder cereals. In the season 1999-2000 the world market prices for sugar fell to half of the level of 1995. Now some increase is expected, but due to the large stocks and market imbalance this is going to be very slow. The growing demand for feedingstuffs and ban on the use of meat-and-bone meal are expected to increase the price for oilseeds. The decrease in the use of protein of animal origin in general is going to increase the need and demand for plant protein.

The world market prices for milk products are forecasted to exceed the level of the early 1990s in the medium term. Cheese prices can be expected to rise very strongly because of the rapid increase in the total consumption, but the increase in prices for butter and milk powder will be much smaller. The world market price for beef is expected to exceed the average level of 1994-1998 in 2005. Pig meat prices are expected not to increase very much owing to the competition against poultry meat and growth in the productivity and supply. No major changes are expected in the prices for poultry meat, which largely follows the development of fodder prices.

3.1.2 Change in the consumption trends

Besides the world market trends the future of the agricultural and food sector will be influenced by the long-term trends in food consumption, which are part of a general change in the consumer behaviour. In recent years the traditional views of consumption and the factors involved have been revised in many ways. Today the satisfaction of the basic needs is no longer considered the primary goal of consumer behaviour, but this is also steered by, for example, search for pleasures, images, aesthetics, emotional experiences and social factors. This general trend in consumption has also been reflected in food consumption and demand for foodstuffs.

The new consumer trends highlight the quality and safety of foodstuffs as well as ease and comfort in preparing food. Foodstuffs are no longer purchased simply to meet the nutritional needs, but the selection of foodstuffs is influenced by a wide range of different factors. The choice of food can be viewed based on nutrition as well as socio-cultural and economic theory, and it is influenced by the information available and food-related values in society, resources and circumstances of households as well as factors relating to food production and trade. On the whole the food market has become increasingly consumer-oriented.

Because of the changes in the consumption and consumer habits the traditional criteria for selecting foodstuffs (e.g. price, taste, freshness) are now complemented by a number of new criteria, such as the appearance, wholesomeness, quality, purity, packaging, familiarity, manufacturer and manufacturing method. The broader range of selection criteria means that anticipating and forecasting the changes in food consumption is a far more challenging task than earlier. For instance, suspicion concerning the safety or wholesomeness of a certain product or product group is very easily reflected in the choices and purchasing decisions of the consumers. What has happened in beef consumption is a very recent concrete example of this.

3.1.3 Technological development

The technical and technological development may cause significant changes in the functioning of the world market. According to various estimates, the most significant changes influencing the markets will be caused by the development of biotechnology and information technology applications relating to agriculture. This chapter deals with some of the issues involved from the perspective of the agricultural product markets.

Genetic engineering is a branch of biotechnology, which in general refers to the ability of humans to take advantage of microbes as well as cells and metabolic products from multicellular organisms. Some of the biotechnological methods are old and well established, such as souring of milk and brewing of beer. In recent decades the knowledge on the genotypes of living organisms and the genetic regularities has increased rapidly, making it possible to design new technologies for altering the genotypes of living organisms more accurately and rapidly than before, even across species. These methods are called genetic engineering.

Genetic engineering may be applied to agriculture in order to improve the productivity of plants and animals and their resistance against e.g. various kinds of diseases, pests and environmental stress. At present organisms modified by means of genetic engineering are used extensively only in crop production, where genetic engineering has been used to produce improved varieties of soya, maize, rapeseed and cotton. In 1999 the total area under transgenic plants in the world was 41.5 million hectares. Of this 69 per cent was in the USA, 14 per cent in Argentina, 10 per cent in Canada and 3 per cent in China, while only 0.03 per cent of the area under genetically modified crops was in Europe. In Finland no genetically modified crops have been approved for cultivation, but genetically modified organisms have been approved for use in research and field tests.

Currently in Europe there is a lot of discussion on whether genetically modified products should be accepted or not, including whether the genetically modified varieties should be approved for cultivation and, if they are, on what terms. This topic is also on the agenda of the international trade negotiations, where the arrangements for the international trade in genetically modified products are discussed.

In terms of the agricultural product markets the essential questions include whether the labelling requirement should concern the genetically modified products or products where this method is not used. Further, strict requirements concerning a clear distinction between the conventional products and products manufactured by means of new technologies may lead to high investment costs if separate means of transport and stores were required for different kinds of products.

From the perspective of consumers the acceptability of genetically modified products may be quite problematic. Some consumers categorically refuse to use any products that may contain genetically modified raw materials, while others see no major difference between the conventional and GMO products. The main reason for the different attitudes is the lack of accurate information on the long-term impacts of genetically modified products on health and ecosystems. People who are strictly against genetically modified products emphasise the gravity of the concealed risks involved.

From the farmers' perspective the use of genetically modified varieties might at best reduce production costs and improve the profitability of farming. In the worst scenario there would be no cost savings, but farmers would become increasingly dependent on the suppliers of production inputs and the risks in the marketing of the products would grow.

Information technology makes it possible to transfer data more efficiently and develop new applications. By means of modern technology information can be transferred rapidly and accurately to places which used to be very difficult or even impossible to reach. The development of data transfer systems has also made it possible to use more accurate cultivation methods. Product flows can be regulated more efficiently in marketing, and the consumers receive more accurate information on the content of the products and production methods used. The opportunities offered by information technology have not yet been adequately taken advantage of in the agricultural and food sector. The application potential is wide ranging, and in the future it may be highly significant in the agricultural product and food markets as well.

3.1.4 Special position and multifunctionality of agriculture

One of the major trends in the discussion on European agriculture has been the concept of multifunctionality. This is not directly reflected on the product markets, but the topic entered the political discussion during the Agenda 2000 process in connection with the concept "the European model of agriculture", which highlights the various functions of agriculture and its significance in balanced regional development. The concept was introduced to remind that agriculture not only produces food and raw materials, but it is closely linked to the production of a wide range of environmental, cultural and rural goods and services. Taking multifunctionality into account is one of the main objectives of the EU in the multilateral WTO negotiations.

In the WTO negotiations multifunctionality is so far not widely recognised or accepted, because many of the competitors and trading partners of the EU consider it mainly as an excuse for the payment of subsidies that distort the world trade and for maintaining import protection. These countries consider agricultural production similar to industrial production. The dispute on multifunctionality and the role of agriculture as a producer of public goods is mainly due to the fact that it is very difficult to calculate the economic value of the public goods generated in connection

with agricultural products. However, the problem is in fact much deeper, because on the world market there is no trade in environmental impacts or viability of the countryside. There is no world market or clear local markets for such externalities and thus the demand and consumption related to these is not reflected in the prices or production decisions.

In the efforts to reach an economically, socially and ecologically balanced regional development agricultural policy instruments should be able to integrate the demand and supply of public goods produced in connection with agriculture. The implementation of this in practice is a question which is going to influence the future of the agricultural and food sector a great deal. Measures to meet the challenges in the development of agriculture and the rural areas should combine the global market pressures with the opportunities and restrictions of the local business environment to make it possible for individual entrepreneurs to operate in a successful way.

3.2 International operating environment of agriculture

3.2.1 International trade negotiations

The new, comprehensive round of multilateral trade negotiations should have been launched at the Ministerial Conference in Seattle, USA in December 1999. The conference failed and no agreement was reached on starting the negotiations. This was mainly due to the conflicting views between the members on the extent of the negotiations and more detailed objectives. The EU advocated a comprehensive round, and its objectives were supported by several members. The developing countries were reluctant to start new negotiations, and they required that certain changes in the implementation of the earlier agreements be made first. The USA, supported by certain other industrialised countries, wished for a more specific round, and they were not willing to yield to any of the demands of the developing countries. At that point the WTO was not ready to make a decision on a new round of negotiations.

The long-term objective set by the WTO members in the Agreement of Agriculture concluded in the Uruguay Round is to introduce a fair, market-orientated system in respect of trade in agricultural products. Relating to this the members made a number of binding commitments concerning domestic support, export competition and market access. The commitments to reduce domestic support impose a maximum limit for agricultural subsidies that distort the trade and influence the production the most. It was agreed that domestic support would be reduced by 20 per cent from the base level during the implementation period. This commitment concerns all domestic support, except for the so-called blue and green boxes. Blue box contains e.g. support paid on the basis of a fixed number of livestock or fixed arable area under production restriction programmes. This is highly significant for the EU, because most of the CAP support paid in the Community is included in the blue box. The reduction does not concern product-specific support which is less than 5 per cent of the total value of the product during the year concerned (*de minimis* rule). The basic criteria for measures to be included in the green box is that they may have no or very few trade-distorting impacts and no major impacts on the production.

In the Agreement of Agriculture export subsidies refers to all subsidies requiring that the products receiving these are exported. The developed countries made a commitment to reduce the quantities of subsidised exports by 21 per cent and the budget funds used for these subsidies by 36 per cent from the base level during the implementation period. The quantitative restrictions on exports does not concern processed products. Market access was improved by cutting tariffs and agreeing on minimum quotas alleviating the access. Industrialised countries committed to reducing the tariff bindings by the average of 36 per cent so that the minimum cut per product will be 15 per cent.

Of the commitments to cut agricultural subsidies made in the Uruguay Round the export subsidies are problematic for the EU, and especially the commitments concerning maximum subsidised quantities are going to restrict exports in many sectors in the next few years. This will affect, in particular, cheese and other dairy products, sugar and processed products. The strengthening of the euro or sudden market disturbances may cause problems in the other sectors as well, for example, in the meat and fodder cereal sectors. Tightening the commitment would make the situation even more difficult. The enlargement of the EU is going to make it more difficult to meet the commitments concerning export subsidies, at least in the case of cereals, milk powder and sugar. This estimate is based on the assumption that the accession would not lead to any major changes in the production and consumption in the current candidate countries. If the production grows or consumption decreases in the new Member States, coping with the restrictions imposed by the export subsidy commitments will become increasingly difficult.

Meeting the commitments concerning domestic support made in the Uruguay Round is not problematic for the EU if no changes are made in the classification of support. In both the present and enlarged EU the total level of support will stay clearly below the commitment level, even if the trend of the previous round will continue. Instead, problems will arise if the blue box is brought under the reduction commitments by combining it with the amber box. In such a case meeting even the current commitments would be difficult, especially for the enlarged EU, because the enlargement will reduce the latitude for the part of domestic support. In such case the enlarged EU must either lower the support or revise the support systems so that a larger share of the support meets the criteria for the green box.

Commitments concerning market access should not cause problems for the EU, except in the case of butter and sugar, because the initial level of tariffs was set quite high in the Uruguay Round. In the case of butter and sugar the import price including the tariff may be lower than the supported price in the EU, if the value of the euro strengthens clearly. Exchange rates influence the amounts of import protection considerably. Enlargement will not change the border protection between the EU and third countries in any essential way, but in terms of market access it should be kept in mind that the enlargement will increase the minimum import quota of the EU. This increases the import pressures from third countries to the EU, particularly as so far the tariff quotas for many products have been fulfilled by imports from the applicant countries.

Despite the failure of the Seattle conference, the trade negotiations were formally started in the agricultural and service sectors during 2000. Launching the negotiations was agreed on in the agreement which concluded the preceding round of trade negotiations. For the part of agriculture this means that the issues to be discussed in the next round have been outlined in Special Sessions of the Agriculture Committee.

In the Agreement of Agriculture of the Uruguay Round it was agreed that the further negotiations on the reform process would be based on experiences from the implementation of the commitments and their impacts on world trade, non-trade concerns, differential treatment for developing countries and the objective of introducing a fair, market-orientated system in respect of trade in agricultural products. Based on Article 20 of the Agreement of Agriculture, the trade negotiations will be continued covering at least the topics agreed on in the previous round, complemented by the non-trade concerns.

The current positions of WTO members for the upcoming negotiations differ considerably from each other. Countries have grouped behind similar positions, but there are also differing views within these groups.

Certain countries, e.g. Japan, Korea, Norway and Switzerland, would basically like to retain the present policy instruments, but would also be prepared to discuss reducing of export subsidies. Developing countries consider it very important to maintain and strengthen the differential position granted to them during the previous round. This would imply e.g. lowering or abolition of tariffs on products coming from the developing countries, abolition of the special safeguard clause for the part of industrialised countries, giving up subsidies for exports to developing countries and allowing certain domestic supports for developing countries.

The Cairns Group demands liberalization of the world trade, increased market access, gradual removal of export subsidies and tightening the rules for domestic support. These countries take a very negative stand on the concept of multifunctionality. The positions of the United States are similar to those of the Cairns Group in many respects, but there are also certain differences. The fact that the USA has considerably increased the domestic support in the form of emergency aid in recent years is going to influence its future negotiation position. This trend is likely to continue under the new Farm Bill, which is now before the US Congress.

The European Union has requirements and objectives of its own with respect to the content of the agricultural negotiations. According to its position, the EU is prepared to negotiate market access, export competition, domestic support, differential and special treatment of developing countries, as well as non-trade concerns. Issues relating to market access are very important for the EU, which is the largest importer and second largest exporter of agricultural products in the world. The EU wishes to promote exports, especially for the part of high-quality products whose image is based on their geographical origin and traditional know-how. In the case of export subsidies the EU is prepared to negotiate certain restrictions, if all forms of export competition are taken into account. In addition to the export subsidies proper these include export credits, food aid and state trading enterprises. Further commitments concerning domestic support are acceptable, provided that the classification adopted in the previous round continues to apply. This means in the first place that no commitments for reductions are extended to the blue box or that the criteria for the boxes are revised. The EU maintains that the different topics to be negotiated must be well in balance.

The key issue in the content of the agricultural negotiations for the EU is the inclusion of the so-called non-trade concerns on the agenda of the negotiations. By emphasising the European model of agriculture the EU has highlighted the role of agriculture and its multifunctionality in society, not only for producing food but for the provision of various kinds of services and benefits. According to the EU, it is high time that the rules for international trade recognise the importance of multifunctionality. The impacts of the recent crises in the food sector on the position of the EU in the upcoming trade negotiations remain to be seen.

One important aim in the EU trade policy is to launch a comprehensive round of trade negotiations. Bearing this in mind the Council has made a decision on the free access of products from the least developed countries to the internal market ("Everything but Arms"). The negotiations on agriculture are underway. However, the negotiation stage proper will be launched after the decision on the range of topics to be covered has been made, hopefully at the next WTO Ministerial Conference in November 2001.

3.2.2 Regional and bilateral trade agreements and unilateral concessions

Various kinds of regional free trade agreements have been made in different parts of the world during the past years. By these agreements the states concerned are making an effort to ease trade and promote economic growth alongside and in accordance with the multilateral trade agreements of the WTO. Regional trade agreements increase the trade within the regions, also influencing the

trade flows of agricultural products, because in order to comply with the WTO rules the agreements must cover practically all trade within the region concerned.

In addition to the WTO agreement, certain other trade agreements made by the Community influence the development of the common agricultural policy. The most important ones are the Europe agreements with ten Central and Eastern European Countries, Cotonou Agreement (post-Lomé), the Mercosur Agreement, which is under preparation, agreements with South-Africa and Mexico, West-Balkan Agreement, as well as Association Agreements with twelve Mediterranean countries. One of the most significant free-trade initiatives outside the EU is the free trade agreement for the Americas (FTAA), where the negotiations are getting started.

The "Everything but Arms" decision of the EU is also politically significant, because it allows the least developed countries (LDCs) of the world free access to the agricultural market of the Community. This concession contains transitional periods until 2009 for the banana, rice and sugar sectors.

WTO negotiations and free trade agreements are a serious challenge to the Common Agricultural Policy. Liberalisation of imports increases the pressure on the internal market and leads to a growing need to export. In sectors that are already facing difficulties in meeting the WTO commitments growth in imports may cause serious problems and give rise to demands to change the system.

3.3 Enlargement of the European Union

The EU is negotiating on the accession of 12 new Member States. The negotiations with Cyprus, Hungary, Poland, Estonia, the Czech Republic and the Republic of Slovenia were opened in March 1998, and with Malta, Romania, the Republic of Slovakia, Latvia, Lithuania and Bulgaria in February 2000. In order to succeed in the membership negotiations a number of very difficult issues must be solved. In the Nice summit in December 2000 decisions were made on the size of the Commission of the enlarged Union, distribution of seats at the European Parliament and weighting of votes in the Council. These decisions pave way to the enlargement for the part of the decision-making procedures in the EU institutions. Many of the more specific issues are still open.

Agriculture is one of the most difficult topics in the enlargement process. It plays a major role in the national economies of the applicant countries, and thus the decisions on agriculture are very important for the success of the whole process. There are considerable differences between the current Member States and the applicant countries in the productivity of agriculture and the food sector and in the quality of the products, which make it difficult to enlarge the internal market. The most serious political problems relating to agricultural policy concern the functioning of the internal market, direct payments and production quotas.

3.3.1 Impact of enlargement on the internal market

The internal market cannot function properly and without any disturbances unless the quality of the products entering the market meets the EU standards. In concrete terms this means that the applicant countries have to implement legislation which influences the quality of foodstuffs concerning e.g. food hygiene and veterinary and plant health stipulations. Transitional arrangements are not acceptable in principle, because these would affect the markets and distort competition.

Since 1992 direct payments have been one of the most important instruments of the Common Agricultural Policy. They have been used to compensate the producers for the decrease in institutional prices. The applicant countries consider that they should be entitled to these direct

payments immediately after the accession. However, Agenda 2000 decisions were based on the view that payment of direct aid to the new members would not be justified because in these countries the prices of agricultural products do not fall as a result of the EU membership. At present there is considerable variation in the price level between different products and countries, but as a rule they are still below the EU level. In recent discussions the positions have come closer to each other, and maintaining two distinct agricultural policy systems, one for the old and one for new Member States, might be very difficult. Paying the direct aid in full to the new members right after the accession may not be in their best interest, because it would affect the relative profitability between different sectors of economy and slow down the structural development of agriculture. From the EU perspective direct payments also involve the possibility to bind the production of the applicant countries by means of various kinds of production quotas.

In the Common Agricultural Policy production and support quotas are applied to many agricultural products, e.g. milk, cereals, sugar and beef. One of the major challenges in the negotiations is to agree on these quotas with the applicant countries. They would like to have as large quotas as possible, preferably up to their production potential. However, this might lead to serious problems on the internal market, and thus the starting point of the EU is much stricter, based on the idea that quotas should be set according to the historical production. The applicant countries consider this unjust, because many of them can be classified as so-called transition economies where agriculture has not yet reach adequate stability to establish the quotas accordingly.

The EU enlargement is also linked to the international trade negotiations, because the EU is a tariff union. This means that after the accession the commitments of the new Member States concerning export subsidies and domestic support would be incorporated in the commitments of the EU, and the new members would adopt the external tariffs of the Community. In cases where the enlargement would call for an increase in the tariff level for third countries, the EU would have to negotiate on the compensations with the countries concerned. When combining the commitments concerning export subsidies the export subsidies used in the trade between the old and new Member States would probably be deducted when establishing the commitment for the enlarged Union according the so-called net principle. This means that the commitment of the enlarged Union would be lower than the total sum of the current EU commitments and those of the applicant countries. The so-called double-zero -agreements with ten applicant countries will reduce the export subsidies in the trade between these countries and the EU before their accession.

The enlargement negotiations are currently underway. According to the enlargement strategy the more difficult chapters should also be opened soon. There is no clear deadline for completing the negotiations, but the Gothenburg summit concluding the Swedish Presidency in the EU in June 2001 set as an objective that the most advanced applicant countries could participate in the 2004 elections of the European Parliament as members.

3.3.2 Financing of enlargement

The point of departure in the Berlin European Council was that the direct aids of the CAP would not be paid to producers of the applicant countries. Instead the summit reserved 1.6-3.4 billion euros per year for marketing and structural measures in agriculture for these countries as of 2002 as well as 520 million per year for pre-accession aid from 2000 (Annex 5). The principle of ring-fencing was applied to the expenses of the enlargement, i.e. the funds made available for the enlargement (pre-accession and accession related expenditure) may not be used for covering other expenditure, and vice versa. In the light of the current Interinstitutional Agreement and conclusions of the Berlin summit it seems that the funds could not be transferred from one year to another. Consequently, if the enlargement were postponed until, for example, 2005, the funds reserved for agriculture in 2002, 2003 and 2004 could not be used to cover the expenses of the enlargement in 2005.

The financial framework agreed in the Berlin Council does not have room for the payment of direct aids to the future Member States on the same grounds as in the old ones during the current financial period. The Agricultural Economics Research Institute in Finland has estimated that the payment of the direct aids under the Common Agricultural Policy to the ten Central and Eastern European countries would cost about 8-9 billion euros per year. The high costs of the enlargement imply that the allocation of additional resources to the current member States is becoming increasingly difficult.

Table 3.1. Estimate of the financial impact (EUR million) of the accession of the ten CEE countries on the EU budget for the part of agriculture (excl. intervention expenses and export subsidies).

	2003	2004	2005	2006	2003-2006	2007
Direct aid	7 083	7 083	7 250	7 418	28 834	7 584
LFA aid	678	678	678	678	2 712	678
Environmental support	548	548	548	548	2 192	548
Beef envelope	100	100	100	100	400	100
Dairy envelope			71	142	213	213
Budget expenditure	8 409	8 409	8 647	8 886	34 351	9 123

Source: Agricultural Economic Research Institute

In the discussion on enlargement it has also been suggested that direct aid could be paid progressively, provided that the countries concerned at the same time introduce production and support quotas. This approach is considered to take account of the necessary structural development in the applicant countries, relative profitability of different sectors of the economy, as well as differences in the labour costs and other inputs between the current Member States of the EU and the applicant countries.

3.4 Internal pressures for change in the common agricultural policy

3.4.1 Changes in the expectations of societies

The expectations of society concerning agriculture have changed considerably. Besides the basic functions of producing foodstuffs and raw materials the quality, health and safety issues, environmental protection, animal welfare, viability of rural areas, diversification of economic activities and maintaining the population in rural areas as well as social balance have become increasingly important in recent years.

Many consumers associate the recent food crises with intensive production and consider small-scale, pro-environmental production a safer alternative. The food crises have led to a growing interest in alternative production methods, and in many countries efforts are made to increase the share of organic farming in the total agricultural production. In Finland about 6.7 per cent of the arable area was under organic production in 2000. The development of organic production depends on the trends in the market and demand, as well as the support measures available for it.

3.4.2 Structure of EU support

<u>Distribution of support between the sectors and pillars</u>

The strict budgetary discipline decided in the Berlin European Council has led to increased criticism concerning the unequal distribution of agricultural expenditure between the different sectors. Arable crops account for about 45 per cent of the budget funds of the Common Agricultural Policy. The

Mediterranean countries are demanding more balanced resource allocation between the so-called northern products (arable crops, milk, beef) and southern products (fruits and vegetables, olive oil, wine, tobacco).

Criticism has also been directed at the fact that 90 per cent of the Community agricultural expenditure is allocated to the first pillar of the Common Agricultural Policy, i.e. market policy measures, and it is considered that the share of rural development, i.e. the second pillar, should be increased. In the future the Commission may propose compulsory modulation[1] and/or degressivity[2] for transferring funds from direct aids to rural measures. Depending on the method of implementation, however, this may call for revising the financial frameworks, which would be a very difficult process.

It is also possible that the scope of application of Regulation 1257/1999 on support for rural development (rural development regulation) may be extended for the part of the so-called other rural development measures (measures under Article 33) so that the measures need not be connected to a farm. The Commission has also put forward an idea that some of the support that is now financed through the market arrangements could be transferred to the second pillar (e.g. extensification premium for livestock production).

In the discussions on the further reform of the Common Agricultural Policy the introduction of a new, third pillar has also been suggested, comprising food safety and quality as well as environmental issues. The purpose of the third pillar would be to respond to the new expectations of the consumers relating to agriculture and increased transparency of expenditure. It is impossible to take a stand on the potential third pillar before its content has been specified in detail. Concerning the quality issues, however, geographically protected names of origin or the production methods of these cannot be directly equated with high quality, safety or environmentally sustainable production. The idea of the third pillar also conflicts with the multifunctionality of agriculture. The concept of multifunctionality implies that, for example, environmental issues, food safety and traditional landscapes are taken care of through the means of the Common Agricultural Policy itself. Introducing a new pillar might weaken the position of the EU in the upcoming WTO negotiations, where efforts are currently being made to describe the special characteristics of EU agriculture specifically through its multifunctionality.

Administration and control of support systems

The support schemes of the Common Agricultural Policy are cumbersome and very complicated from the perspective of both administration and farmers. The work load due to administrative tasks is just as heavy on large and small farms, and the cost-benefit ratio of this work is very poor on small farms. Commission has taken some action to alleviate the complexity of the support measures under the Common Agricultural Policy, including a simplified system for small farms. This system, which is voluntary both for Member States and farmers, will be tested in practice in 2002-2005, and it is expected to benefit both administrations and farmers. The aid paid through this system is not linked to the production, and thus it can probably be classified as a green box measure. The system may also be important for the enlargement process, as it may contribute to the adjustment of the applicant countries to the Community support systems.

The Community controls the payment and implementation of support based on the Common Agricultural Policy very closely. Also the national aid systems and e.g. compliance with the criteria

[1] In this context modulation refers to reduction of direct aids based on certain criteria, e.g. the total aid for a farm or the use of labour and using the funds thus created nationally to finance rural development measures.
[2] In this context degressivity refers to annual reduction of direct aids under the Common Agricultural Policy by a certain percentage and allocating a part or all of the funds to rural development measures.

of the environmental programmes are also controlled. From the farmers' perspective controls are often seen as an additional burden. Continuous development of the rules and implementation of the control is very important to make the procedures appropriate in terms of the administrative work and fair and just for the farmers.

Incentive problems and quality issues

One important problem in the current agricultural policy concerns the incentives for agricultural production, especially in regions where the costs are high and yield levels low. In agriculture entrepreneurial income per hour of labour remains quite low. It does not encourage farmers to develop their production or attract new entrepreneurs to the sector. Some production lines are very labour intensive, and some farmers may, for example, give up livestock production and start cultivating cereals, combined with working partly or full-time outside the farm. Finding ways of improving the incentive in all production lines is a major challenge, which also calls for increased emphasis on the physical and mental welfare of farmers and job satisfaction. Especially in livestock production neglecting these issues may considerably reduce the number of farmers who are willing to work in this sector.

Another problem in the current support system based on the Common Agricultural Policy is that it does not encourage the farmers to produce higher quality products as aids are basically paid on uniform grounds. In most sectors there are Community rules for minimum quality, but any value added to high quality production is to be decided by the market forces. If the additional return from the market does not cover the higher costs of high-quality products, there is no incentive to improve the quality. The value added for quality products should go through the food chain from the consumers to the producers.

Quality is also understood in different ways in the different Member States. In many countries it is associated with traditional products or products protected by labels of origin. In Finland guaranteeing a certain minimum quality is considered a government duty. The markets may agree on a quality standard exceeding the minimum and give adequate value added for higher quality. Quality must be secured through the whole food chain in accordance with the principle "from farm to table", which requires the commitment of all parties involved in the food chain.

Environmental perspective in Common Agricultural Policy

The relationship between agriculture and the environment has changed considerably in recent years. In addition to the reduction of harmful environmental impacts the expectations are to an increasing extent oriented to increasing the positive impacts farming may have on the environment. The idea put forward by the Commission that farms that do not meet the set environmental requirements should not be eligible for the full amount of support illustrates the growing significance of environmental considerations. In the future the compulsory environmental rules are likely to be increased and compliance with these is likely to be included in the criteria for direct aid.

However, such a trend may also undermine the foundations of the agri-environmental support system. Compulsory environmental legislation is increasing all the time and the number of environmental measures to be implemented by farmers is growing constantly. Environmental support cannot compensate farmers for these measures. This might weaken the significance and effectiveness of environmental support, and it can be considered to constitute a serious threat to the environmental support system, which has been highly successful in Finland.

Development of means for risk management in agriculture

As a whole the Common Agricultural Policy of the EU has functioned as a system for stabilising prices and incomes. If this is going to change in an essential way in the future, the possibilities for the utilisation of new instruments calls for careful study well in time. In recent years the Agriculture Directorate-General of the European Commission has examined the need to improve risk management in agriculture. So far the Commission has concentrated on stocktaking of the means available for risk management and their usability. Various kinds of means for risk management are being used e.g. in the USA and Canada. In Europe means for risk management are applied the most extensively in Greece, Spain, Portugal, Austria and France, and state aids for crop damages are used in many other EU countries as well, including Finland.

Risks influence agriculture in a number of ways, in both the production and marketing stages. Some risks are due to natural conditions, while some are related to the economic situation and management of the enterprise. The gravity of the risk caused by different factors for the farm depends on the size and economic position of the farm and the shares of income from farming and other activities. There is no simple answer to the question whether the risks in general are going to increase in the future, because this varies from one farm to another. Certain aspects in the development of agriculture and its operating environment have increased the risks (e.g. trade liberalisation, animal diseases, growth in the farm size and increased fluctuations in prices), while some have reduced the risks (changes in income structure).

Farms may react to risks and problems caused by these in many different ways. Farms may reduce the potential risk, for example, by diversifying the activities, shifting to low-risk products or searching for additional income outside the farm. Risks can be managed by means of various kinds of agreements and co-operation through the whole food chain. More advanced means for risk management include futures and options markets or income and crop insurance systems. At the farm level the means available for risk management may not be used due to lack of information, underestimation of the risks and lack of appropriate means.

The role of the EU in risk management has mainly concerned the management of the market, which has been one of the basic functions of the Common Agricultural Policy. One important starting point for the efficient utilisation of instruments for risk management is that they must be a functional part of the general set of policy instruments. The distribution of responsibilities in risk management between the private and public sector, on the one hand, and between the European Union and the Members States, on the other should be carefully considered to avoid the creation of inefficient and expensive risk management instruments. Recently animal diseases have caused serious problems for European agriculture and agricultural policy. These problems are acute and appropriate measures are needed in due course.

4. GENERAL OBJECTIVES OF AGRICULTURAL POLICY

4.1. Challenges and expectations directed at agriculture

The expectations directed at agriculture have changed considerably over time, and in modern society the expectations concerning agriculture are varied, even conflicting. In this chapter the expectations directed at agriculture are first examined on the general level, from the perspective of society as a whole. This is followed by a more detailed account of the expectations from the perspective of the most important interest groups involved in agriculture, i.e. consumers, producers and taxpayers.

The basic function of agriculture is to produce food. For a long time the practical implications of this were that food had to be produced efficiently and at a reasonable price. Both globalisation and the introduction of the single market increased the pressures to be more and more efficient. However, today demands relating to production practices have gradually been introduced alongside with efficiency. Interest in production practices has increased as environmental considerations and criteria for sustainable development have received more emphasis as the guiding principles for activities in the different sectors of the society. In recent years and months the discussion on food safety has gained momentum, and this has introduced new aspects to the expectations concerning agriculture. In general, the expectations of society for food production orient to an increasing extent towards the safety and quality of the products, in addition to the prices and volumes.

Agriculture is based on biological processes and utilisation of natural resources, which means that nature is an integral part of agriculture and agriculture is a very important form of land use. Consequently, agriculture is very important in terms of the regional policy and management of the environment. Finland is very sparsely populated and located far in the north, and thus the role of agriculture in regional policy and management of natural resources is greater than in the other EU Member States. One reason why agriculture is particularly important for the regional policy in Finland is its significant role in the development of the Finnish society, because after the Second World War agriculture carried the main responsibility for the resettlement of immigrants and ex-service men. This had considerable impacts on the regional distribution of farming and farm structure, and traces of this history are still clearly visible in Finnish agriculture and rural areas.

The expectations of society concerning agriculture and regional policy primarily concern the viability of rural areas. However, the practical implementation of this commonly accepted objective involves certain conflicts relating to both farmers and funds allocated for this purpose. In order to maintain a certain income level farmers have to either specialise and expand their production or diversify the activities, as well as to search for off-farm incomes. In practice this is often difficult either because the amount of farm work does not allow diversification or off-farm employment, or the possibilities to diversify or employment opportunities outside the farm simply do not exist. In the case of funds intended for developing the viability of rural areas there are conflicts relating to the amount of funds available and their appropriate allocation. It has been suggested that rural development funds should be allocated to a larger number of recipients than at present, but this may be problematic if we also wish to secure the profitability of basic agricultural production.

The relationship between agriculture and the environment has changed considerably during the past decade. As a result of the growing pressures to be more efficient and increased competition agriculture has in certain respects become detached from the use of local resources, and production is more and more clearly based on purchased inputs. This has reduced the diversity of the production and increased the centralisation of farming, which in turn has lead to impoverishment of the soil and problems in appropriate placement of animal manure. The expectations of the society concerning the agri-environmental policy used to be directed at reducing negative environmental impacts, e.g. non-point source loading. Today increasing the positive environmental impacts generated by agriculture receives more and more emphasis, alongside with the efforts to reduce pollution.

The new kinds of expectations concerning agriculture in modern society are clearly reflected in the discussions on multifunctionality in the context of the European model of agriculture. The concept of multifunctionality highlights the fact that agriculture concerns no longer only a food production, but it also yields various kinds of environmental, cultural and rural commodities and services. This concept has successfully combined a number of social expectations for agriculture which used to be considered different from each other. It makes also possible to integrate the externalities produced by agriculture to the agricultural and trade policy.

First and foremost the consumers still expect to get safe, high-quality foodstuffs from agriculture. Many consumers associate the recent food crises with intensive production and see small-scale pro-environmental production as a safer alternative. Domestic origin is often associated with safety and high quality. However, the strengthening of the emphasis on quality and safety does not mean that consumers would constitute a homogenous group. Today consumer groups are more and more heterogeneous and the purchasing decisions of the different segments depend on a large number of increasingly complex factors. For some the price of the product is the decisive factor, while others make their choices based on environmental impacts or production ethics.

What the agricultural producers mainly expect is a fair income level as compensation for their labour and capital inputs. In addition to this they also want their work to be fair and meaningful so that the amount of work needed to earn a living is not unreasonable and the physical and mental burden will not cause a health risks. Farmers expect the support systems to be stable and predictable, and to encourage enterprise. It is also important for farmers that the administration and control of agriculture is clear and consistent.

Taxpayers expect that the public funds are used in a reasonable and cost effective way. They also call for adequate controls so that the allocation of funds can be verified and misuse of the funds can be avoided.

4.2 Current agricultural policy objectives in the EU and Finland

4.2.1 Objectives of the Common Agricultural Policy

The objectives of the Common Agricultural Policy of the EU are laid down in Article 33 of the Treaty on Establishing the European Community, and they have been the same since the ratification of the Treaty of Rome in 1957. These objectives are:

- to increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilisation of the factors of production, in particular labour
- thus to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture
- to stabilise markets
- to assure the availability of supplies
- to ensure that supplies reach consumers at reasonable prices.

The policy objectives listed in the Treaty of Rome reflect the conditions of the time when the Community was established, when the main objective was to increase food production in Europe. In certain respects the objectives also conflict with each other, but in practice they have been interpreted so that the Council may emphasise a certain objective over the others depending on the particular case.

The changes in the operating environment of agriculture, oversupply in Europe and the new expectations directed at agriculture made it necessary to reconsider the objectives set for the Common Agricultural Policy, starting from the mid-1980s. Recently the Commission presented a new set of objectives for the CAP in connection with the Agenda 2000 reform, some of them different from the objectives laid down in the Treaty of Rome, some complementing these. The new objectives proposed by the Commission were:

- to improve the competitiveness of Community agricultural production on both domestic and external markets
- to guarantee food safety and food quality

- to integrate environmental goals into the CAP
- to ensure a fair standard of living for the agricultural community and the stability of farm incomes
- to create complementary or alternative income end employment opportunities and develop rural areas
- to improve economic cohesion within the Union

Of the new objectives increasing the competitiveness of agricultural production, food safety and quality and environmental issues have received considerable emphasis in the policy implementation in recent years. Efforts to increase competitiveness have led to a reduction in the producer prices and more stringent requirements for intervention. Food safety and consumer protection have been promoted through highly detailed regulation of primary production and processing and development of labelling systems. Environmental objectives have been implemented by means of environmental programmes as well as horizontal rules concerning direct aids.

4.2.2 National agricultural policy objectives in Finland

Well before Finland joined the EU the broadly-based Agriculture 2000 Committee laid down the following main objectives for Finnish agricultural policy (Committee Report 1987:24):

1. Production policy objectives
- production of target price products is adjusted to meet the domestic consumption in the long term
- imbalance due to the seasonal variation in the production and consumption is reduced as much as possible
- export subsidies for agricultural products can for the most part be abolished through regulation of the production
- production must be based on the utilisation of environmentally sustainable and economically profitable production technology
- to maintain food security, the storage of products and inputs is developed, an adequate productive arable area is left as a reserve and self-sufficiency in inputs is improved
- objectives of the production policy must be adjusted to the agricultural income and structural policy objectives

2. Structural policy objectives
- preconditions for rational use of inputs on farms are improved to reduce the production costs of agriculture
- formation of own capital on farms is promoted
- structure of agriculture is based on family farms
- transfers of farms to the next generation are supported and farmers who have reached the retirement age are encouraged to give up farming
- preconditions for co-operation between farms is promoted and supported financially

3. Income policy objectives
- income level of farming population, taking into account the labour and capital input needed in agriculture, is fair and equal compared to the other population groups
- income disparities due to location of farms and farm size are reduced further
- social security of farmers is developed, taking into account the special characteristics of agriculture, to make it equal to the social security available for other population groups

4. Other objectives

- negative impacts of structural policy of agriculture must be prevented and corrected by means of other policies for example, by intensifying the regional and rural policy
- significance of agriculture in terms of regional employment and development must be taken into account in decisions concerning the objectives and means of agricultural policy.

In certain respects these objectives are quite similar to those laid down in the Treaty of Rome, but some of them are more advanced. In the national agricultural policy of Finland the new functions of agricultural production and expectations of society have received considerable emphasis for quite a long time, and objectives concerning environmental protection, development of other economic activities in rural areas and maintaining the rural communities were put forward. Objectives concerning the rural population have been closely linked to the regional policy objectives adopted in Finland a long time ago.

In the membership negotiations Finland aimed at ensuring the possibilities to continue food production through adequate production and support quotas of the Common Agricultural Policy as well as application of support arrangements where the specific characteristics of Finland would be taken into account. During the negotiations it became evident that gradual adjustment of the prices would not be possible, and farmers were compensated for the price reduction through a degressive transitional aid and other support measures allowed by the Accession Treaty.

EU membership made it necessary to introduce new objectives for agriculture. A working group for agricultural policy decided in 1996 to set the following objectives:
- compensating the permanent competitive disadvantage due to natural conditions of Finnish agriculture
- consolidating the strengths of the Finnish agro-food sector
- ensuring profitable and rational agricultural production at the farm level
- competitive and adequately large agricultural production
- new and differentiated forms of production in rural areas

In the present Government programme these objectives have been complemented and specified as follows:
- improving the sustainable competitiveness of Finnish agriculture on the common market
- taking account of the specifities due to natural conditions in the Common Agricultural Policy of the EU
- continuation of the aid for serious difficulties based on Article 141 of the Accession Treaty after 1999
- extending the compensatory allowances (LFA support) to the whole Finland
- taking account in the aid policy the different conditions and starting points in different parts of the country
- reducing the bureaucracy related to agricultural policy
- development of a quality system which covers the whole of food chain, development of organic production
- full implementation of the rural development regulation

These objectives reflect the changes caused by the EU membership in the conditions and environment where decisions on agricultural policy are made. All the important policy decisions are made in the EU or in Finland based on framework conditions approved by the EU. Elements relating to support policy receive considerable emphasis, which is natural owing to the dramatic changes in the incomes of the farming population as a result of the EU membership. The new objectives of agriculture are emerging through the development of quality systems, promoting organic production as well as measures based on the rural development regulation (e.g. environmental programme).

4.3 Agricultural policy objectives for 2001-2010

Based on the current state of Finnish agriculture and to respond to the changes and challenges in the operating environment of agricultural policy, the following objectives will be set for Finnish agriculture for the present decade:

Reinforcing consumer-oriented action in the whole food chain

Securing an adequate supply of safe, high-quality foodstuffs is in the interest of all parties of the food chain. One important objective for agricultural policy in the coming years will be to improve the ability of the food chain to meet the needs and expectations of the consumers. This primarily means taking care of the supply of safe and high-quality foodstuffs. Consumers constitute an increasingly heterogeneous group, and thus in the future more and more attention should also be directed at the availability of products that are differentiated in terms of their properties or production methods.

The availability of safe and high-quality foodstuffs will be secured by using high-quality inputs and acceptable production practices, as well as by ensuring the origin and traceability of the products. The suppliers of agricultural inputs, farmers, food processors and traders must work together with the public sector to make sure that these principles are implemented in practice through the whole food chain. This can be verified by means of efficient and watertight control, and appropriate labelling makes it possible to trace the possible problems back to their origin and deal with them rapidly and efficiently. Comprehensive food labelling also provides the necessary information on the properties and production practices of foodstuffs for the consumers.

Securing the profitability and operating conditions of agriculture

Domestic food production is not possible without profitable agricultural production. Securing a fair and just income level for farmers in relation to the other population groups, taking into account the labour and capital input needed in agriculture, is still one of the most important objectives. This requires efficient markets where the quality and production costs are reflected in the price level of the products, as well as stability and predictability of the agricultural support measures.

To secure the profitability and operating conditions of agriculture special attention should be directed at the development of incentive systems for agriculture in different production lines. When establishing the support levels for different production lines and regions efforts should be made to allocate the funds in a balanced way, with due attention to the natural production potential of the regions and the amount work needed on the farm.

Developing more equitable and socially, economically and ecologically sustainable Common Agricultural Policy

The original framework of the Common Agricultural Policy of the EU was based on the circumstances in Central Europe. The recent reforms have improved the competitiveness of European agriculture on the international markets. The reforms

have included the introduction of direct aids, based on the compensation of reductions in the producer prices.

The objective of Finland is to develop the Common Agricultural Policy, in particular, the support system for arable crops from a system which at present compensates for price reductions into on which guarantees a fair and equal treatment of agriculture practised in different regions and conditions. This would secure the continuation of farming according to the principle of sustainable development in different parts of Europe. More equitable, as well as socially, economically and ecologically more sustainable agricultural policy would reduce the differences in the competitiveness due to natural conditions, promote the production of safe, high-quality products, and guarantee that the environment and production animals are appropriately taken into consideration in agricultural production. Following these principles in the Common Agricultural Policy would make it easier for the EU agriculture to adjust to the restrictions resulting from the international trade negotiations, and such a policy would also be better suited for the enlarged Union.

Improving interaction between agricultural and rural policy

The viability of rural areas will be one significant objective for both agricultural and regional policy in the next few years. Co-ordination of the agricultural and rural policy is closely linked to securing the profitability of agriculture and development of the Common Agricultural Policy of the EU, and thus the different options must be considered from various perspectives in a co-ordinated way. In the case of Finland it should be kept in mind that that the current agricultural support measures are already in many ways based on the multifunctional role of agriculture.

Support based on the rural development regulation has a significant position in the income formation of Finnish farmers. To a certain extent these support measures correct the inadequacy of the support systems based on agricultural production. Today in Finland agricultural support is not only supporting agricultural production, but it also has a number of broader social objectives: maintaining the rural population and viability of rural areas and preserving traditional landscapes and cultural environment.

Promoting structural development in agriculture

Improving the structure of agriculture to reduce unit costs is still an important objective in Finland. Efforts are being made to slow down the increase in the average age of farmers by encouraging farm succession and early retirement, and the transfer of production possibilities and capacity to the continuing farms is promoted. When allocating the public funding for structural changes it should be considered how the projects concerned promote the production of high-quality products and influence the public image of agriculture. The optimum farm size depends e.g. on the production line, restrictions caused by natural conditions and the situation of individual farmers, for example, their ability to cope with the farm work.

The means used in structural policy should also take into account of the development of the market situation, both nationally and internationally. Structural policy must contribute to the production of safe, high-quality products and use of production practices improving the environmental quality and animal welfare. This development would make it easier for agriculture to meet the consumer expectations.

Improving the functioning of markets

Requirements for increased demand-orientation of the agricultural production and the quality and safety of the products imply that the products must correspond to the expectations of the consumers concerning both the product properties and production practices. Demand-oriented markets call for efficient co-ordination through the supply chain, where information on consumer expectations passes to the primary producers and correspondingly the consumers are aware of the efforts made by the producers to guarantee the quality of the products. One important objective of the agro-food sector is to develope the means of passing the market information to the production stage and information on the production to the consumers along with the products. Successful communication of this information improves the competitiveness of agriculture, and promotes the reflection of high quality and production costs in the price level.

The advantages of more efficient co-ordination of food production include the improvement of the cost-effectiveness of the production, consumer-oriented products and reduction of the production risks. Cost-effectiveness improves if the supply can be better adjusted to the demand with respect to both the quality and quantity of the products. Consumers will benefit from products that are closer to their expectations, and from the producers perspective co-ordination reduces the risks in the production and marketing and increases the market returns.

5. PRODUCT-SPECIFIC AND HORIZONTAL CHALLENGES FOR AGRICULTURAL POLICY

The next reform process of the Common Agricultural Policy will start in 2002, when the Commission gives a number of reports concerning the different product sectors (arable crops, beef, milk) and, after these have been duly dealt with, the related legislative proposals to the Council. The decision on this mid-term review of the Common Agricultural Policy was made already in connection with Agenda 2000, but since then the number of sectors to be covered has increased as, for example, the sugar, olive oil and hops sectors have been included in the review process. In 2002 the Commission will also give a report on the financing of the Common Agricultural Policy, which will obviously influence the review process, because this report is going to examine the financial aspects of further reforms. Towards the end of 2002 some progress should have been made in both the WTO and enlargement negotiations, and the impacts of these can be taken into account in the mid-term review. The following chapters deal with certain issues and problems relating to the reforms of the most important product sectors from the Finnish point of view.

5.1 Livestock products

5.1.1 Milk and milk products

Milk production is the most significant production sector in Finnish agriculture. Income from milk sales account for about one quarter of the total return of agriculture and almost half of the total sales income. Consequently, changes in the milk sector are of primary importance for Finland.

At present the situation in the milk sector of the EU is quite good, but the WTO restrictions on EU exports are beginning to show more and more clearly in the group of cheeses and other milk products. Export subsidies have already been cut to comply with the allowable maximum quantities of subsidised exports. The EU exports mainly milk powder, butter and cheese, because exporting fresh products over long distances is not profitable. Compared to the other sectors milk production

is more closely tied to the local markets. Within the EU almost 40 per cent of milk is consumed as liquid milk products.

The main question concerning the milk sector relates to the content of the mid-term review agreed on during the Agenda 2000 process. In Agenda 2000 it was agreed that the Council undertakes to conduct a mid-term review in 2003, on the basis of a Commission report, with the aim of allowing the present quota arrangements to run out after 2006 (Article 3 of Council Regulation No 1256/1999, OJ L 160 26/6/1999 p. 76). However, it has already been decided that the quota arrangements will continue at least until the end of March 2008.

Depending on the market situation, the question of advancing the price reductions agreed in Agenda 2000 may also be raised in the mid-term review process. In the Berlin European Council it was decided that the institutional prices for milk will be reduced by altogether 15 per cent in three stages between 2005 and 2007, and the cut would be partly compensated for through direct aid based on the milk quotas. However, if the WTO commitments restrict the subsidised exports considerably before 2005, pressures may arise to lower the prices earlier, but in this case there should also be additional resources in the EU budget for advancing the agreed compensations for price reductions as well.

Abolition of the quota system or gradual increase in the quotas as a result of the mid-term review process would lead to a considerable fall in the price level of milk due to the growth in the production volumes. Abolition of the quota system has been estimated to lower the price level by 15-25 per cent within the EU (INRA: The Future of Dairy Production, 1999) and the production would concentrate to the most favourable regions. It would mean that, for example, in Finland the production might decrease considerably.

From the Finnish perspective the milk quota system has worked well. It has stabilised the price level within the EU and made it possible to continue milk production in regions with less favourable natural conditions. In the upcoming negotiations one of the main objectives of Finland is to retain the milk quota system and secure adequate production possibilities. In less favoured regions the competitiveness of milk production based on grass fodder should be ensured.

Through the management of the quotas Finland has made significant efforts to allocate the quotas especially to young producers and farms that intend to continue or expand their production. This policy should be continued, together with further development of the quota system, to make sure that the quotas are at the control of active producers.

Milk production in the applicant countries accounts for about 23 per cent of the milk production in the current EU Member States. The largest producer is Poland. The accession of these countries will increase the oversupply of the milk products in the EU. To prevent uncontrolled growth in the production milk quotas will have to be implemented in the acceding countries despite the possible administrative problems. Most of the milk currently produced in the applicant countries does not meet the hygiene requirements of the EU, and this will call for serious efforts in their milk production and processing industry in order to fullfill the Community criteria.

A serious threat for the Finnish milk sector is the expiration of the Commission Decision concerning the national aid for Southern Finland at the end of 2003. The level of national aid has also been considered problematic.

5.1.2 Beef

The second BSE crisis, which started in November 2000, has considerably reduced beef consumption in most European countries. The crisis affects the beef sector in all parts of Europe, and thus the situation is more serious than during the first crisis, which started in 1996. The total beef consumption is estimated to fall by about 10 per cent in 2001, and the BSE crisis has also led to difficulties in export to third countries as about half of the traditional export markets have closed due to import bans based on the protection of public health. Recently some of the bans have been lifted and beef consumption within the Community is gradually getting closer to the normal level. Decrease in both exports and domestic demand resulted in considerable decrease in the prices in most EU countries, and on average the prices fell by about 20 per cent between November 2000 and September 2001. The oversupply in beef within the Community amounts to about 500,000 tonnes in 2001, which has been either destroyed or purchased into stocks. It will take several years before the market situation is normalised in the EU, and it will continue to be highly sensitive to changes caused by e.g. disturbances in export as the exports of the main exporting countries are directed at relatively few countries.

In spring 2001 another serious animal disease, foot-and-mouth disease, caused problems in the livestock production of the EU. The situation was particularly serious in the United Kingdom, where almost four million animals had to be destroyed due to the disease, most of them sheep, but also bovines and pigs. The costs due to the foot-and-mouth disease will amount to more than 800 million euros. Recently the Court of Auditors has estimated that the total costs of the BSE crises between 1996-2000 have amounted to about 4,7 billion euros.

As a result of the BSE crisis the EU decided in June 2001 on short-term and medium-term measures to restore the balance on the beef market. During the mid-term review of the Common Agricultural Policy more long-term decisions may be made in order to bring the production closer to the consumption. BSE and foot-and-mouth disease revealed a number of problems in the livestock production of the Community. Concentration of livestock production to certain regions and high livestock density cause various kinds of environmental hazards and increase the risk of spreading animal diseases. The consumers consider meat produced organically or in smaller units to be safer than meat coming from large production units. The views and expectations of the consumers concerning acceptable beef production practices will very likely influence the content of the future reform process. If the mid-term review continues along the outlines chosen already under Agenda 2000 and continued by the decisions of June 2001, efforts will probably be made to further reduce the high stocking densities and give preference to extensive production practices.

In Finland the BSE crisis has not affected the market situation in the beef sector. Domestic beef production does not quite meet the consumption, and about 10 per cent of the consumption is covered by imports. Beef imports have decreased due to BSE. Finnish beef production is mainly based on animals from dairy farms, which means that most of the beef produced in Finland belongs to the lower quality classes. The number of dairy cows is falling, partly as a result of the increase in yields per cow, and thus the number of bull calves decreases. Beef production decreased from 99 million kg in 1997 to 90 million kg in 2000, and the reduction is expected to continue. During the EU membership the number of cattle farms has fallen more rapidly than the average number of farms, by more than 6 per cent per year.

The Finnish beef production sector is faced with obvious profitability problems. Of the production sectors specialised beef production has been the most clearly dependent on direct aid. The improvement in the farm structure has not been reflected in the profitability, and the number of farms and production volumes have fallen. The continuation of structural development and new quality and contract production systems should be guaranteed in order to promote beef production

based on high-quality beef cattle. Efforts to strengthen the production based on suckler cows must be made or otherwise the self-sufficiency in beef may deteriorate even further.

From the Finnish perspective it is of primary importance that in the possible changes to the common market organisation for beef the specific conditions due to the climate will be adequately taken into account. This means, in particular, that the short pasture season together with the need for production and storage of feed and shelters for the animals during winter must be taken into account in the criteria for extensification premium,. Maintaining the competitiveness of grass fodder is also important for Finnish beef production.

The crisis in the beef sectors has led to demands to reduce the intensity of beef production. One possible way of doing this which has been put forward by certain Members States is to base direct aids on the area instead of livestock units. These countries consider that area-based aid would promote more extensive production practices and contribute to the efforts to reduce stocking densities. The details of the possible changes are still open, and thus it is impossible to take any stand on them. The most important question for Finland is that the new payment criteria would promote high-quality meat production, taking into account the specific conditions in Finland, where animals must be kept indoors in winter and feed has to be collected and stored for the indoor feeding period.

A serious threat for Finnish beef production is also the expiration of the Commission Decision concerning national aid for Southern Finland at the end of 2003, which would make it extremely difficult to carry on beef production.

5.1.3 Pig meat, poultry meat and eggs

The market organisations for pig meat and poultry meat are relatively light and the markets function quite freely. The internal market situation is mainly balanced by means of export refunds and, in the pig meat sector, support for private storage. In the pig meat sector there has been some discussion on the introduction of some kind of system to balance the cyclic variation, but the Members State do not agree on the need for this.

The market situation in the pig and poultry meat sectors is affected by a great deal on factors outside the sector, such as decisions concerning cereal prices and the situation in the beef sector. Animal diseases, especially swine fever, also influence the market situation considerably. The reduction in cereal prices as a result of Agenda 2000 improves the profitability of pig meat and poultry meat production. After the latest BSE crisis consumers have to some extent shifted from beef to pig and poultry meat, which has reinforced the market position of these products.

Despite the improved competitiveness of pig and poultry meat after Agenda 2000, the OECD forecasts that the EU is going to lose some of its position on the world market in these sectors in the next few years. For example in North America these sectors are far more competitive than in Europe owing to the more efficient farm structure.

One major problem in Finland has been the oversupply in eggs, which has been further aggravated by the import ban issued by Russia on eggs coming from the EU on the grounds of various kinds of hygiene considerations (salmonella and BSE). Finland suffers from this without any cause. So far none of the efforts of the EU to lift this ban have been successful.

A serious threat for the pig and poultry meat sectors in Finland is the expiration of the Commission Decision concerning national aid for Southern Finland at the end of 2003. It would poses a serious

risk for the continuation of the production. In addition to this the restrictions relating to national aid the production cannot be increased in accordance with the growing demand.

5.2 Plant products

5.2.1 Arable crops

In the future some increase can be expected in the world market prices for cereals, but this is relatively modest and the prices in real terms are not likely to rise. However, in the future the EU may be capable of exporting wheat and from time to time possibly also barley without export refunds. A major factor influencing this is the trend in the exchange rates for the euro and dollar - if the exchange rate stays at the level of summer 2001 exports without refunds are possible, but this is not the case if the value of the euro strengthens considerably.

The current WTO agreement restricts the EU export of coarse grains considerably, especially for the part of subsidised quantities, and the upcoming round of negotiations may lead to further restrictions in the use of export refunds in the middle of the decade. The Commission estimates that the enlargement of the EU to the current candidate countries is going to increase the oversupply of cereals by about 10 billion kg per year. Thus the intervention stocks may grow considerably at least for the part of coarse grains and certain other cereals classified as fodder cereals, such as rye.

The 15 per cent reduction in cereal prices agreed in Agenda 2000 was 5 per cent smaller than the reduction first proposed by the Commission. According to the conclusions of the Berlin European Council, the final cuts in cereal prices will be decided based on the market situation in 2002. If the exchange rate of the euro against the US dollar does not strengthen from the current level in any essential way, there is no need for further reduction in the prices due to the WTO commitments. A special problem in the cereal sector is that if the intervention price continues to fall, the duty-free imports of high-quality wheat to the EU will increase, because according to the agreement between the EU and USA the EU import price may not be higher than the intervention price raised by 55 per cent. As an alternative to cuts in cereal prices the quality requirements for intervention might be tightened, which is within the competence of the Commission. The quality requirements were considerably tightened already in the context of Agenda 2000. Quality requirements can be used to reduce the intervention quantities of especially rice and rye.

According to the conclusions of the Berlin European Council, the compensation for price reduction must correspond to the compensation level agreed in Agenda 2000. This may be one reason why the Commission is not likely to propose a further reduction in cereal prices, because under the current financial framework the possibilities to pay additional compensation are very limited. At present arable crops account for 45 per cent of the total agriculture expenditure of the Community.

The aid level for oilseeds will be harmonised with that of cereals in 2003, as set out in the Agenda 2000 decisions. The Commission made a commitment to monitor the trends in the oilseed production potential and take necessary steps should any significant reduction be observed. The ban on the use of meat-and-bone meal as a result of the BSE crisis in the Community has led to shortage of protein raw material for feedingstuffs. Commission has drafted a report on alternative ways of promoting the production of plant protein in the EU, which has been dealt with in the Council's subordinate bodies, but the matter is still pending. It is possible that measures will be taken to promote the production of protein plants in the Community in connection with the mid-term review. The production of protein for feed will also be influenced by the decisions concerning the use of bio-fuels.

Further reduction in the institutional prices for cereals are very difficult to justify in a country like Finland, where the natural conditions are unfavourable and production costs high. Even now the sales income from cereals does not cover the variable costs on most farms. This concerns, in particular, fodder cereals, whose market prices are lower than those of bread cereals. Owing to the climate most of the cereals produced in Finland are fodder cereals. The motivation for production is weak which poses an obvious threat for the continuation of the production in Finland. This may lead to virtual farming and deterioration of the quality, which would have serious effects for the competitiveness of the domestic processing industry as well.

A situation where the price a farmer gets for the products does not cover the variable production costs will obviously have a very negative impact on the motivation of the producers. Efforts can be made to obtain a higher price through specialisation, improved market information and directing production according to the existing market demand. The proposals set out in the National Cereal Strategy project (see Publications of the Ministry of Agriculture and Forestry 1/2001) include increasing the contract production and improving the market knowledge of the farmers.

In Finland special attention must be directed at the quality of the production, because the competitiveness of Finnish agriculture cannot be based on efficiency or prices. For example, Finnish oats and malting barley have a good reputation on the world market, and every effort must be made to preserve this. Finland possesses special technical knowledge, which can be used secure the origin of the products and reliable deliveries. The domestic food industry benefits considerably from these factors, and they should also be taken into account in the prices.

In terms of the producers' motivation it would be positive if part of the support could be related to the production. However, incorporation of such support elements to the Common Agricultural Policy would probably be very difficult, because recently efforts have been made specifically to decouple aid measures from the production processes. Production-related aids are also subject to the reduction commitments under the WTO agreement.

One major problem for the Finnish arable crop sector is the distortion caused by the current support system. Area payments are based on historical reference yields so that areas with the highest yield receive the highest support. This weakens the competitive position of less favoured areas. The EU support system should be revised so that more support would be directed to areas that are less competitive, both on the internal and world markets. The historical reference yield established for Finland is also far too low compared to the long-term average, because the reference period of 1985-1990 included several bad harvest years. This problem should also be solved as part of more comprehensive decisions to be made in the future negotiations.

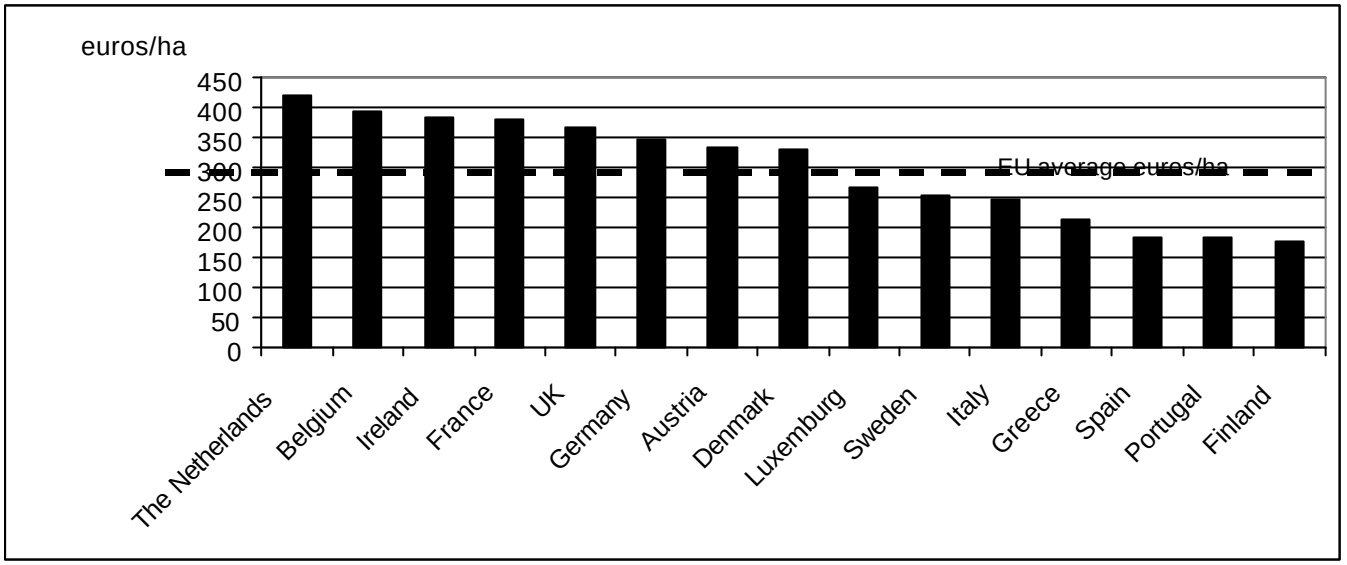


Figure 5.1. Aid level for cereals under the support system for arable crops (euros/ha), excluding the supplementary amount for northern parts of Finland and Sweden (EUR 19/t).

For Finland it is also important to preserve the special position granted to oats exports, because oats is not included in the intervention crops. As a result of the enlargement a number of major oats producers are going to enter the Community. For example the oats production in Poland clearly exceeds the Finnish volumes. In the case of starch potatoes it would be important to bring the starch production quota closer to the domestic demand, within the limits of existing processing capacity in Finland.

5.2.2 Sugar

The 1992 and 1999 reforms of the Common Agricultural Policy did not touch the market organisation for sugar. Its main elements are regulated institutional prices and production quotas. The institutional price for sugar in the EU is twice the world market price, and in recent years when the world market prices have been very low the pressures to change the system have increased. The export refunds needed for exporting the sugar produced within the EU and imported from the ACP-countries are very high. The current WTO agreement restricts the export of sugar surpluses considerably, and in the future even more severe restrictions can be expected. Restrictions on the value of subsidised exports have made it necessary to introduce temporary cuts to the sugar quotas of the EU countries. In June 2001 the Council also made a decision to cut the total sugar production quotas of the Member States permanently by altogether 115,000 tonnes.

No significant improvement is expected in the world market situation in the sugar sector. The current stocks correspond to the volume of international trade of several years, and thus even a global increase in the consumption over the production would lead to only minor increase in the prices, at least in the short term.

In June 2001 the Agriculture Council decided to continue the market organisation for sugar for the next five years and to keep the prices at the current level. The storage compensation system was abolished, but Finland was authorised to apply national aid for storage of sugar subject to certain restrictions. The decision also contained a clause concerning a mid-term review of the system based on a Commission report in 2003.

In the medium term pressures on the Community sugar market will be caused by the duty-free access to the Community market granted to the least-developed countries (LDCs). According to a decision made in the General Affairs Council 26 February 2001, a progressive import quota will be opened for sugar as of 2002, aimed at granting duty-free access to the Community market by 2009. The decision includes the possibility to impose duties if the imports cause serious disturbances on the Community market. In 2005 the Commission will give a report on the implementation of the decision to the Council. The Commission estimates that the quantities of sugar imported duty-free from the LDCs may rise to 2 million tonnes per year, which corresponds to about one-sixth of the Community production. The increased imports are likely to cause additional pressures to reform the system after the middle of the decade.

The sugar sector is also likely to face a growing need to either reduce the production within the EU or lower the prices on the internal market. The abolition if the quota system would lead to a considerable reduction in the internal prices. The compensation to farmers, even if it would follow the partial compensation introduced in Agenda 2000, would be costly. The Commission estimates that a 25 per cent reduction in the intervention price for sugar and compensating the producers for half of this would increase the EU budget expenditure annually by 1.125 billion euros. The ACP-countries might also be entitled for compensation. The current financial framework is very tight and the payment of such compensations would be impossible without changes in the other financial arrangements. Thus any more extensive reform of the market organisation for sugar is likely to be postponed until the next financial perspective enters into force.

The natural conditions in Finland lower the yield levels and increase costs in the sugar sector as well. The yield per hectare is the lowest in the Community. It is important for Finland to maintain the system of national production quotas in the sugar sector. Without quotas the prices would fall considerably and the production would concentrate to the most favourable production regions. If the institutional prices need to be cut in the future, this should be compensated in full in the low yield regions. From the Finnish perspective a more balanced approach would be to cut both the prices and quotas, as both could be kept at a reasonable level. For Finland it would be particularly problematic if area payments similar to those in the support system for arable crops were introduced in the sugar sector. This would bring the apparent inequality of the arrangements for arable crops also to the sugar sector. Should this become a likely alternative, the support system should include an additional aid element taking into account the higher production costs in low yield production regions.

5.2.3 Other products

In addition to the product sectors described above the Common Agricultural Policy of the EU covers a number of market organisations which are relatively insignificant from the Finnish perspective but which are very important for certain Member States. Such are the market organisations for olive oil, wine, tobacco, bananas, cotton, rice as well as fruit and vegetables. Finland produces a considerable amount of fruit and vegetables for the domestic market, and thus this market organisation and its development is also important for Finland.

The Finnish fruit and vegetable sector consists of vegetable production in the open, greenhouse production, the production of berries and apples, as well as wild berries and mushrooms. Membership in the EU has increased the competition, which will be even tighter after the growing supply on the Community market resulting from the accession of new members, reduction of export refunds and growing imports. The high labour costs and decrease in the price level after accession have weakened the position of Finland on the Community market, and thus aids for horticulture are of primary importance to secure the livelihood of the producers.

In the future, too, the small Finnish horticulture enterprises based on local demand will find their own niche markets. Many firms are also investing into quality systems and new cultivation technology, aiming at reaching competitiveness in relation to imports. The strategies of these companies include the handling of the crop as well as development of various kinds of processed and semi-processed products, as well as co-operation and market surveys with the trading sector. The quality of the final product is the primary competition factor. One problem is the shortage of skilled labour, as well as finding enough labour for the peak seasons.

In Finland producer organisations are still relatively uncommon. Only about 13 per cent of the domestic fruits and vegetables are sold through such organisations. The benefits through membership in producer organisations include the better negotiating position and various kinds of supports channelled through the organisations. The producer organisations should be developed according to the needs of the producers, and the objective is that an increasing share of the production would go through the organisations. This system is voluntary for the producers, and some of them are likely to continue to prefer selling their products on their own.

In the case of olive oil, wine, tobacco, bananas, cotton and rice it is in the Finnish interest to make sure that the common EU policy in these sector is rational from the perspective of the producers, consumers, market situation and budgetary discipline. Special attention should also be directed at the use of funds and appropriate control. The production of tobacco involves the question whether supporting this sector conflicts with the objectives of the Community health policy. These products are produced in the least favoured Mediterranean regions and they are often highly significant for the income formation and employment of the local population and preventing depopulation. The Finnish positions on these issues must be consistent with the arguments used as justification for taking account of the specific characteristics of Finnish agriculture in the Common Agricultural Policy.

5.3 Common Agricultural Policy and rural development

Today agricultural production must to an increasing extent respond to various kinds of expectations of society. One of these concerns the relationship between agricultural production and the environment. All human action burdens the environment in one way or another. Agricultural production is no exception to this, but it should be noted that agriculture also influences the environment in several positive ways.

The so-called accompanying measures introduced in connection with the 1992 reform are agri-environmental support, afforestation aid and early retirement. In the Agenda 2000 decisions rural development became the second pillar of the Common Agricultural Policy and the rural development measures were assembled under a single regulation, which comprises investment aid, start-up aid for young farmers, training, early retirement scheme, compensatory allowances, support for areas with environmental restrictions, environmental support, afforestation of arable land and other forest management, as well as other projects relating to rural development. Compensatory allowances were included in the accompanying measures in connection with this reform.

Even if the role of rural development as the second pillar of the Common Agricultural Policy has received considerable emphasis on the political level, the financial framework established in the Berlin European Council is very tight and the funds allocated for rural development measures remained scarce relative to the need. The funds were not increased, although the new regulation would have allowed far more comprehensive programmes. In the period 2000-2006 rural development measures account for only 10 per cent of the expenditure of the Common Agricultural Policy.

Pressure to raise the funds available for rural development has grown. Measures related to the rural development receive more and more emphasis in many countries as the Common Agricultural Policy is becoming increasingly market-oriented and the institutional prices are getting closer to the world market prices. Recent food crises have also led to growing demands to transfer funding from market support to the rural development. Especially the implementation of environmental programmes is lagging behind in many countries. According to the new rural development regulation, environmental support is the only form of support which must be included in the rural development programmes, and thus the application of environmental support can be expected to increase. Rural development measures are highly important for maintaining the rural population especially in areas where the income from agriculture is not enough to cover the production costs.

One problem in the financing of rural development measures is that the Berlin European Council decided to set a specific financial perspective ceiling for the rural development measures. This ceiling is laid down in the Interinstitutional Agreement, and thus changing this and increasing the funding is extremely difficult. The rural development plans were not approved in the Commission according to the original schedule. However, the measures have got a good start, and now there is the risk that towards the end of the financial period the need for funding in the Member States exceeds the amounts under heading 1b in the financial perspective. In Finland, too, the financial allocation (290 million euros per year in 1999 prices) has proven inadequate. More farmers have made commitments to the environmental programme than was expected, and thus additional funds will also be needed. This means that when the current commitments and contracts will be continued by the same level of funding until the end of the programming period, Finland will need more Community funding to cover the EU contribution part of the measures in 2005 and 2006.

Rural development measures can be divided into aaccompanying measures (environmental support, compensatory allowances, afforestation and early retirement), traditional rural development measures (investment aid, start-up aid for young farmers), and new kind of rural development measures (measures under Article 33, such as development of villages, marketing of quality agricultural products, conservation of the rural heritage, encouragement for tourism, etc.). In Finland most of the funding is directed to area based environmental support and compensatory allowances as they are highly important for maintaining agricultural production in all parts of Finland and securing the basic livelihood of farming (see Annex 8). Further discussion is needed on the position of the new rural development measures based on Article 33 call for further discussion, especially on what kind of connection between the measures and agriculture will be required. It should be kept in mind that if no connection to agriculture is required, the number of potential beneficiaries increases considerably.

Environmental programme

One important objective of the Common Agricultural Policy is to encourage farmers to use cultivation methods that load the environment even less than the usual good farming practices. Thus farmers may be eligible for support based on the commitment to the environmental programme. The main purpose of the support is to compensate farmers for the income losses and higher costs due to environmental measures, but it also provides an incentive to implement such measures. However, the requirements for usual good farming practice, including the provisions laid down in the compulsory environmental legislation, are becoming stricter all the time. This narrows down the scope of application of measures that are eligible for environmental support, even if the measures as such are the same. At present 91 per cent of Finnish farmers have made a commitment to environmental support, and the programme covers 97 per cent of the arable area. The environmental programme consists of basic and additional measures and contracts concerning special measures (including contracts concerning organic production, which accounts for 6 per cent of the total

amount of environmental support). Finland also applies a supplement to environmental support allowed by the Community rules (so-called national aid for crop production).

At present the EU contribution to support under the environmental programme is 75 per cent in the regions covered by Objective 1 and 50 per cent in other regions. The share of the EU contribution for the whole period 2000-2006 is 56 per cent. The fixed co-financing shares causes problems in planning the use of the EU contribution to rural development, and in the future here should be allowed similar flexibility as the other rural development measures. This would make it possible to continue the implementation of environmental programmes despite of any possible changes in the level of EU contribution.

In the future incorporating the environmental aspects into agriculture is going to receive even more emphasis due to e.g. the WTO concerns. Also the citizens' views favouring production that causes less burden on the environment take the development in the same direction. In the future efforts may be made to bind the direct payments for agriculture more closely to environmental criteria (so-called cross-compliance). Even today Member States must include certain environmental criteria they consider appropriate to direct payments. If a farmer fails to comply with the set criteria, Member States may lower the direct payments for the farmers concerned, taking account of the principle of proportionality. The shift of the justification for direct payments from compensation for price reduction to general income support is likely to reinforce the efforts to couple stricter environmental criteria to the payments. From the Finnish perspective considerable amount of flexibility should be allowed on the national level. In this way it would be possible to take account of the regional and local conditions influencing environmental protection in setting the environmental requirements in each Member State.

Compensatory allowances (LFA support)

The whole Finnish territory has been classified as less favoured agricultural area referred to in Council Regulation No 1257/1999. The purpose of compensatory allowances is to compensate the producers for the costs to agricultural production due to unfavourable natural conditions as well as to maintain the rural population and rural environment. In 2000 this measure covered about 96 per cent of the Finnish farms and 97 per cent of the arable area.

According to the rural development regulation, the maximum average LFA support may not exceed 200 euros/ha. The average support in Finland is at the moment 194 euros/ha, which is very close to the maximum. Thus it is not possible to use compensatory allowances to compensate for possible changes in other support systems, unless the maximum average laid down in the Council Regulation is increased. This should be one of the objectives of Finland, especially if the direct CAP payments are going to be cut. However, a problem related to this is that the share of compensatory allowances in the expenditure on rural development is already very high. The average EU contribution to compensatory allowances this in the period 2000-2006 is only 33 per cent.

Possibilities to use additional resources

At present the funds available for rural development are quite unevenly distributed among the Member States. Relative to the role of agricultural production, the amounts used for rural development are particularly high in Finland and Austria (see Annex 9). For Finland preserving the current proportional financing share is of primary importance in order to keep the viability of rural areas in this very sparsely populated country. According to the current view of the Commission, any additional allocation for rural development should be used for new measures or new commitments instead of complementing the existing programmes. Thus they cannot be used to top-up existing programmes. This is problematic also for Finland, because towards the end of the financial period

additional funding is needed for commitments under the environmental programme owing to the extensive participation in the programme.

5.4 National aids and measures

Finnish agriculture is practised in exceptionally harsh conditions. The unique nature of the special northern conditions prevailing in Finland and influencing farming can be highlighted by the fact that in the neighbouring EU country Sweden only a small share of farming occurs as far north as the whole Finnish production. Thus Finnish agriculture obviously suffers from a permanent competitive disadvantage owing to the natural conditions (see Chapters 2.2-2.3 and Annex 3). The aim of the national aids is to complement the support system based on the Common Agricultural Policy of the EU, secure the operating conditions for the different production lines and in different regions, and contribute to the preservation of the viability of the rural areas. The national aids are based on Articles 138-144 of the Accession Treaty and the more detailed Commission decisions based on these Articles.

The national aid scheme comprises three forms of aid, i.e. national aid based on Article 141, Nordic aid and national aid for crop production. In addition to these there are certain other national aids e.g. for potato production as well as for seed production. Table 5.1 presents the national aids according to the production lines and support areas in 2001 (map of the support areas is given in Annex 4).

Table 5.1. National aids for agriculture in different support areas in 2001.

	Support areas A and B	**Support area C**
Livestock production	National aid based on Article 141[1)]	Nordic aid[2)]
Crop production	National aid for crop production[2)]	National aid for crop production[2)] Nordic aid[2)]
Horticultural production in the open	National aid for crop production[2)]	Nordic aid[2)]
Greenhouse production	National aid based on Article 141[1)]	Nordic aid[2)]
Storage aid for horticulture products	National aid based on Article 141[1)]	Nordic aid[2)]
Other[3)]	Other national aids[2)]	Other national aids[2)]

[1)] currently in force until the end of 2003, [2)] in force until further notice, [3)] national aids based on Articles 87-88 of the Treaty which have been approved under the state-aid procedure

The national aids for the production of 2001 are estimated to total FIM 3.5 billion. The share of Nordic aid is estimated at 60 per cent of the total national aids, that of the national aid based on Article 141 23 per cent and national aid for crop production, which is a national supplement to environmental support, accounts for 14 per cent. The remaining 3 per cent is used for other national aids. About a third of the national aid is paid to support areas A and B and two-thirds are paid in the C area. Most of the national aid (70 per cent) is paid to livestock production.

5.4.1 Nordic *aid*

The long-term Nordic aid is based on Article 142 of the Accession Treaty. The purpose of the aid is to secure the continuation of primary production and related processing in Central and Northern Finland under the EU conditions. Further objectives are to improve the structure of processing and

trade, promote the marketing of agricultural products, environmental protection and to maintain the rural population.

Nordic aid has succeeded in guaranteeing the continuation of agricultural production in the area covered. The number of farms has fallen, but no major changes have occurred in the volumes of most products, and farmers' incomes have stayed close to the earlier level in spite of the decline in the profitability of the production. Without the Nordic aid profitability would have collapsed. Important progress has been made in meeting the environmental objectives, and the aid has at least to some extent contributed to the efforts to prevent depopulation. In most respects the aid scheme has thus fulfilled the objectives set for it.

Nordic aid involves various kinds of restrictions on the payment of the aid, and thus a considerable amount of administrative work is needed in the implementation and monitoring of the aid. The system is open to interpretation in the case of, for example, sanctions for exceeding the amounts of aid and production, which makes it difficult to assess the impact of such a situation.

The quantity of production eligible for the Nordic aid is strictly tied to the production volumes before the EU membership. This means that the development in agriculture, which basically refers to the need of individual farms to develop their activities to reach an adequate income level, is not taken into account in any way. The total volume of agricultural production has stayed at about the same level during the EU membership, but certain changes have occurred in the structure of production, mainly as a response to the changes in food consumption. The Commission has approved certain flexibility in the restrictions to the application of the Nordic aid, but e.g. the rapid increase in poultry meat production (or the growth in the production of other meats) may lead to a considerable reduction in the payment of aid. Finland continues to aim at amending the aid scheme to allow flexibility taking into account the structural development and responses of the production to the market in the area covered by Nordic aid.

Nordic aid was established as a long-term measure which will be effective until further notice, and thus its continuation is not at risk.

5.4.2 Aid based on Article 141 of the Accession Treaty

The national aid for Southern Finland is based on Article 141 of the Accession Treaty. This Article runs as follows:

"Where there are serious difficulties resulting from accession which remain after full utilization of the provisions of Articles 138, 139, 140 and 142, and of the other measures resulting from the rules existing in the Community, the Commission may authorize Finland and [Norway] to grant national aids to producers so as to facilitate their full integration into the Common Agricultural Policy."

The wording of Article 141 is very general, and it does not restrict the temporal or regional scope of application in any way. This is also reflected in the Commission Decision (2000/167/EC) authorising Finland to continue to grant the aid based on Article 141 after the general transitional period. Finland considers that the application of aids under this article should be allowed as long as the conditions for payment exist. This aid is highly significant in terms of the profitability and continuation of the production in livestock production, horticultural production in the open and greenhouse production sectors.

In the case of national aid for Southern Finland the most serious problem is the limited period of validity of the Commission Decisions authorising the aid payments. The current scheme remains in force until the end of 2003. The uncertainty relating to the continuation and future level of the aid is

problematic for the producers, especially those who are planning to transfer the farm to the next generation or to make long-term investments. Many of the factors causing the competitive disadvantage in Finland are permanent by nature, and thus permanent solutions should be used to compensate for these.

After to the decision of 1999 on the aid for Southern Finland, during the four-year period 2000-2003 the livestock aids can be applied in the same form in the whole of Finland. The harmonisation of the aid for Southern Finland and Nordic aid is still problematic because of the much lower level of certain livestock aids for Southern Finland and the dergession of the aid until 2003.

The authorisation for transitional aid in 1999 was used as the initial level when fixing the national aids for Southern Finland for the four-year period which started in 2000. In 2000-2003 the aid decreases, on average, by 3.5-4.5 per cent per year. In the first years the degression is more rapid and it slows down towards the end of the period. In the aids per unit the most serious problems relate to the differences in the aid levels in the case of milk, suckler cows, slaughter heifers and pigs.

Complementary forms of aid, such as the national aid for fodder grass, are used to compensate for the decrease in livestock aids and to prevent the increase in the regional differences in the aid levels. These also involve certain problems, for example, the distribution of aid through the aid for fodder grass is not fully equitable on the farm level. The possibilities to continue to compensate the decrease in livestock aids through the aid for fodder grass are limited, because the authorisation for this is already being utilised almost to the maximum.

If the aim is to harmonise the measures used in different parts of the country so that the differences in the aid levels reflect only the real differences in the production costs, must also the aid based on Article 141 of the Accession Treaty secure the profitability and continuation of agricultural production in Southern Finland in the long term.

The future of the aid for Southern Finland will be reviewed on the basis of a report on the implementation and results of the aid scheme that Finland will supply to the Commission before 30 June 2003. At the same time Finland will submits a proposal for further aid scheme with appropriate justification.

Preparations for the negotiation round of 2003 must be started already in autumn 2001. These include the assessment of further studies which will support the positions on Article 141 concerning e.g. the demonstrating the permanent natural handicaps. A mid-term review of a number of market organisations of the Common Agricultural Policy will also be conducted in 2002-2003, i.e. the common organisation of the market of beef, cereals, milk and sugar, as well as the Commission report on the financing of the common agricultural policy. These can be expected to influence the content and time schemes of the negotiations based on Article 141 at least indirectly. Various other simultaneous processes, most notably the WTO negotiations and EU enlargement, with significant impacts on the Common Agricultural Policy, must also be taken into account in preparing for the negotiations.

In the context of the mid-term review of the Common Agricultural Policy it is important that Finland is capable of describing and demonstrating the competitive disadvantages due to the natural conditions in different sectors. The objective of Finland is to introduce measures to compensate for these into the Common Agricultural Policy. Very likely, however, certain aid measures based on Article 141 of the Accession Treaty will be needed in the future, too. It should also be noted that the mid-term review of the market organisations mainly concern beef, milk and cereal sectors. In addition to these, the current national aid for Southern Finland also covers pig and poultry

production, horse husbandry as well as greenhouse production and horticultural production in the open for the part of storage aid for horticulture products. With respect to these there will be. in any case, need for national support measures.

Article 141 provides a natural statutory basis for the national aid for Southern Finland after 2004 as well. Amending the Commission Decisions based on the Accession Treaty is a process which will be conducted between the Commission and Finland. The aid schemes are notified to the Commission, which approves the conditions for granting the aid after internal consultation and negotiations with Finland. Amending the existing Commission Decisions is the simplest way for finding a solution for the aid in Southern Finland.

5.4.3 Structural policy measures

As a result of the rapid structural development in recent years, production has concentrated to an ever decreasing group of farms. In most production lines this has led to an increase in the farm size, whether measured by hectares, heads of livestock or economic indicators. The new operating environment, larger farms and introduction of new technologies have made it necessary for farmers to adopt new models of action. This also means that more and more attention needs to be directed at the well-being and job satisfaction of farmers.

The means to achieve structural policy objectives include the start-up aid for young farmers, aid for giving up agriculture (early retirement) and investment aid, as well as tax provisions concerning the transfer of ownership. Promoting the introduction of new technologies may reduce the unit costs, improve the quality of the products and alleviate the farm work. Cost savings can also be reached by promoting co-operation between farmers.

The start-up aid for young farmers improves the economic position of young farmers who start farming after the transfer of the holding, and it is often decisive in terms of the career choice of young people. In Finland farms are usually purchased from the parents, and in most cases the transfer leads to heavy debts at the same time when inputs would also be needed for developing the farm. This problem is getting even more serious as the farm sizes continues to grow.

In recent years the number of young farmers starting up farming has been much lower than in the early 1990s. Structural policy measures are needed to alleviate the debt burden of young farmers who are just getting started, and young people should be encouraged to choose farming in order to secure the continuation of agriculture in Finland. This would also slow down the ageing of farmers. One major problem in the start-up aid is the maximum amount of the aid, which is inadequate to support the start-up on large farms. This could be solved by raising the start-up aid to the maximum allowed by the EU rules in the first stage, while in the second stage national supplementary aid would be used. These measures would ease the economic situation of young farmers and would encourage young people to become farmers.

Aid for giving up agriculture (early retirement aid) is used to secure the livelihood of ageing farmers who wish to give up agricultural production. Aid is paid for the farmer who is giving up the production. This is indirectly supporting also the young farmers who continue cultivation. The early retirement scheme makes it possible to transfer a farm to the younger generation before the official retirement age, which promotes structural development in terms of both the farm size and age of farmers. Without arrangements allowing early retirement the structural development of agriculture would slow down considerably.

In practice the early retirement scheme implemented in 2000-2002 serves the transfers of farms to descendants. It does not contribute to the increase in the farm size as much as earlier, because

leasing arable land to another farmer is no longer included in the options for giving up agriculture, and the smallest livestock farms have been excluded from the scheme. The early retirement scheme implemented in 1995-1999 worked better in this respect. Reintroduction of the leasing option to the scheme would strengthen its effect on structural policy, but it would also cause additional costs.

Aid for farm investments improves the possibilities of farms to develop their production and reduce the unit costs of production. Especially in the case of building investments the aid alleviates the economic position of the farm during the investment project and immediately after it when the investment does not yet yield the intended return. Rationalisation of production through investments also improves the working conditions of farmers and promotes their job satisfaction.

As far as possible the criteria for investment aid should be uniform in different parts of the country. Investment aid must promote the development of agriculture that is based on the principles of sustainable development. Granting the aid must be based on the overall profitability of the farming activities, marketability of the production concerned and assessment of the environmental impacts. To alleviate the economic position of young farmers they should continue to be eligible for increased investment aid.

5.4.4 Other national measures

The operating conditions of agriculture can also be influenced through social policy and taxation measures as well as training and advising. These issues are still largely decided by the Member States, and thus changes in the social policy of farmers and taxation of agriculture can largely be made by national decisions.

Social policy measures (e.g. farm relief services, pensions, sickness insurance and occupational health care) are important in maintaining the physical and mental working capacity of farmers. Farm relief services are particularly important for livestock farms. Compared to the other EU Member States the social security of farmers is relatively good, but further development is needed so that the services available for farmers are equal to those of the other population groups. The distribution of the costs of the social policy between the society and farmers, especially farmers' contribution to the pensions and sickness insurance, also influences the profitability and operating conditions of agriculture.

The rapid increase in the knowledge and skills required in agriculture makes it necessary to secure that the skills of farmers and relief workers are maintained and updated by means of continuous training. Larger farms and new technology require more and more training and skills from farmers to guarantee successful management of farms. Education and training make a significant contribution to securing high-quality, market-oriented primary production which follows the principles of sustainable development. Agricultural advising is also in a key position in these efforts.

The taxation policy of agriculture should be examined in a comprehensive way in relation to the other EU countries. Finnish agriculture should be equal to its competitors in this respect. The costs of agriculture can be influenced through various tax policy measures, such as stipulations concerning depreciation, inheritance and gift transfer tax in connection with farm succession and exemption of additional arable land from capital transfer tax. The usability and general acceptability of such decisions, together with social policy measures, as well as their impacts on farmers and the State economy should be examined in detail in order to allow the flexible use of these measures as considered appropriate.

5.5 Financing of the common agricultural policy

5.5.1 Conclusions of the Berlin European Council

The Berlin European Council arrived at a financial framework with an average annual level of 40.5 billion euros over the period of 2000-2006, aimed at stabilising agricultural expenditure. Owing to the timing of the reforms the expenditure is higher in the first years of the period. In addition to agricultural expenditure, an annual financial framework of 4.3 billion euros was allocated for rural development and accompanying measures (see Annex 5). The financial perspective ceilings for agriculture and rural development are binding, i.e. no overshoot is allowed e.g. by transferring funds from the agricultural ceiling to rural development. Within the limits of the ceilings, however, such transfer is allowed.

According to the conclusions of the European Council, the Council must monitor the agricultural expenditure to ensure that total expenditure will not overshoot the average annual amount of 40.5 billion euros. The Council obliged the Commission to submit a report of the development of agricultural expenditure in 2002, accompanied by appropriate proposals. By that time progress will have been made in the enlargement negotiations for the part of agriculture, and the WTO negotiations have probably advanced as well, which makes it possible to assess the possible pressures on the Common Agricultural Policy due to these processes. The total funds needed to deal with the crises caused by the BSE and foot-and-mouth disease will be known, and decisions on the future of the agricultural guideline will also be made before any new accessions to the EU.

The exchange rate between the euro and the US dollar influence the agricultural budget a great deal. The funds for export refunds for most sectors and certain production supports are fixed as the difference between the Community prices in euro and the world market prices in US dollar. Fluctuations in the value of the dollar relative to the euro changes the difference, which is reflected in the need for export refunds and production support. If the value of the euro falls, the difference is reduced, and the budget expenditure decreases, but if the euro increases in value, the expenditure grows. The Commission estimates that at the current production volumes and aid intensity levels a 10 per cent change in the exchange rate between the euro and dollar in one way or the other increases or decreases the agricultural expenditure by 500 million euros.

The financial framework decided at the Berlin European Council was fixed by estimating the exchange rate between the euro and US dollar at 1:1.15. In accordance with the Interinstitutional Agreement, however, the average exchange rate of the previous quarter was taken into account when drafting the budget for 2002. Thus the 2002 budget was based on the exchange rate of 0.92 between the dollar and euro. The weaker euro has created a margin of about 700 million euros in the agricultural expenditure compared to the levels anticipated in the Berlin Council, but this margin has now been spent due to the increased expenditure caused by the BSE and foot-and-mouth disease.

5.5.2 Financial frameworks and further reform of the common agricultural policy

At the moment it seems that financing will be a major issue in the planning and making decisions concerning further agricultural policy reform. The financial frameworks fixed at the Berlin European Council were based on the assumption that no major changes would be made in the approved agricultural reform over the period 2000-2006. The framework does not allow further reforms that would increase the costs, particularly after the increased expenditure due to the recent BSE and foot-and mouth disease crises. The individual ceiling for rural development also restricts the efforts to develop agricultural policy by reinforcing its second pillar. Reforms involving even

partial compensation of the reduction in the institutional prices through direct support inevitably leads to an increase in the budget expenditure. Thus it seems that efforts to reform the Common Agricultural Policy in any depth in 2002-2003 will require either the opening of the financial framework decided at the Berlin Council or search for alternative ways of financing the expenditure of the Common Agricultural Policy.

The decisions on agriculture negotiations reached in the enlargement process and the outlines for the criteria for the blue and green boxes decided at the WTO negotiations probably also influence the decisions on financial arrangements in the context of the mid-term review of the Common Agricultural Policy.

The options for revising the financial arrangements include e.g. co-financing or degressivity of direct aids, national supplements and modification of the financial framework. These alternatives were already presented during the Agenda 2000 process and in the Commission Report on the Operation of the Own Resources System of 1998 (COM(1998) 560 final).

Modification of financial frameworks

Modification of financial framework is a highly complex process, which calls for unanimity between the Member States and a revision of the Interinstitutional Agreement between the Council, European Parliament and Commission. New financial framework is decided at the European Council and incorporated in the Interinstitutional Agreement. The Commission submits a proposal for the Interinstitutional Agreement to the Council and Parliament, and thus the Parliament may also influence the content of the Agreement through its own budgetary powers.

It is very likely that the so-called net payer Member States will not be willing to open the budget decisions reached in the Berlin European Council, and thus adjusting the financial framework during the current financial perspective would be extremely difficult. Depending on the progress of the enlargement negotiations, the issues that may be raised include advancing the preparations for the new financial framework and starting the new financial perspective, for example, already from 2006, or adjusting the current frameworks to a larger number of new Member States. The feasibility of these alternatives must be assessed in a wider context of the outcome of the enlargement negotiations and schedule for the enlargement, but it may also provide an opportunity to introduce deeper agricultural reforms in the middle of the current decade.

In the context of the mid-term review of the Common Agricultural Policy it will be of particular interest to analyse whether the different savings models call for the modification of the financial framework or not. It seems that savings models where such a modification is not necessary are more likely to be approved than models where modification is called for.

Co-financing of direct aids

Co-financing of direct aids was introduced in the discussion on agricultural policy reform in autumn 1998 when an analysis of this was presented in the Commission Report on the Operation of the Own Resources System. The co-financing model was suggested due to the budgetary imbalances in the net payer positions of the different Member States. Co-financing of direct aids would benefit Member States whose contributions to the EU budget are higher than their share of the direct aids based on the Common Agricultural Policy, and it would weaken the position of countries that receive a higher share of aids than their contribution to the budget. The Member States that would benefit the most are Germany, the Netherlands, Sweden and Austria, while France, Spain and Greece would lose (see Annexes 6 and 7).

Co-financing model met with strong opposition from certain Member States, which saw it as a way of re-nationalising the Common Agricultural Policy. Those in favour of the model maintained that it would imply only partial nationalisation of the financing, while the rules for agricultural policy would still be common. The contributions to the co-financing would have been compulsory, and the model could have been implemented by a qualified majority decision in the Council. In practice the income transfers from the EU to the Member States would have been cut by the per cent share of the co-financing and the Member States would have contributed the difference to reach the full amount of aid.

Co-financing would lead to considerable budgetary savings. After the implementation of the Agenda 2000 reform the direct agricultural aids total about 30 billion euros, and a 25 per cent co-financing share would have saved about 7.5 billion euros in the EU budget. However, this amount should be included in the national budgets of the Member States in order to pay the aids in full, and the less prosperous Member States and all of the applicant countries may not possess adequate resources to pay the national contributions.

The co-financing model has received little attention after the Agenda 2000 process. Savings in agricultural expenditure can be reached through models that do not cause such a major conflicts between the large Member States, e.g. through degressivity or compulsory modulation of direct aids. During the Agenda 2000 process it was estimated that Finland would have benefited slightly from the co-financing model, but the situation has changed. Since the implementation of Agenda 2000 the share of Finland from the direct aids has gone up and now the model would increase the payment burden of Finland. It should also be noted that Finland already finances a considerable amount of agricultural aid nationally.

Degressivity model

The idea of degressivity of direct aids, i.e. gradual decrease in the aids, was raised during the last stages of the Agenda 2000 negotiations as an option to the co-financing of direct aids. Degressivity was considered advantageous from the perspective of the WTO negotiations, because it would have changed the basic nature of the direct aids. Degressivity would also have made it possible to balance the budgetary expenditure and, according to some models, transfer of funding to rural development measures. Through special arrangements for small-scale producers the producers in weakest position could have been excluded from the system, which would have improved the political acceptability of the model. As justification for degressivity it was also pointed out that it corresponds to the development of productivity in agriculture, and thus the income level of farmers in real terms would not have fallen.

The main problem in the degressivity models was that they did not treat Member States and products in an equitable way. The models concerned only direct aids, and thus they would not apply to various kinds of processing aids, consumption aids, etc. There is also considerable variation in the development of productivity between different regions. In less favoured production regions productivity often develops more slowly than in the favourable regions.

The savings in agricultural budget resulting from the degressivity model would have been much lower than in the case of the co-financing model. One advantage of the degressivity model was that a part of the savings could have been transferred to rural development. However, the introduction of this kind of model in the middle of the financial perspective would require modification of the financial framework at least for the part of the ceiling for rural development. Even a more limited adjustment of the framework is a very complex process, and thus degressivity may be difficult to introduce in the middle of the financial perspective, even if there would be political pressures to do this in order to increase the rural development funds.

Degressivity models would be problematic for Finland, where the natural conditions restrict the development of productivity and introduction of new technologies compared to the best production regions in Europe. In Finland the increase in productivity would not compensate for the decrease in direct aids, and thus profitability would deteriorate. The actual impact of the reduction in direct aids would be greater in areas where the aids are lower than in areas where they are higher. Even if the smallest farms of the Community would be excluded from degressivity, it would still concern the majority of Finnish farms.

Finland would benefit from the increase in the allocation for rural development included in some degressivity models, especially if Finland managed to retain its relatively large share of the rural development funds. Additional funding would imply also increased national contributions. From the Finnish perspective any decisions on degressivity should involve also the strengthening of the rural development measures, such as increasing the maximum average amount of compensatory allowance. If this is the case, the acceptability of degressivity must be considered in a comprehensive way, with special emphasis on the fact that after the reform of the support system as a whole agricultural production must still be profitable in Finland.

Compulsory modulation

Modulation means that a Member State reduces a certain percentage of the direct aids to its farmers and transfers the funds thus saved to rural development measures. At present modulation is regulated by Council Regulation (EC) No 1259/1999 establishing common rules for direct support schemes under the Common Agricultural Policy, and it is a voluntary measure for the Member States, who have the opportunity to reduce direct aids as much as 20 per cent.

The idea of modulation would be problematic for Finland if all Member States would have to reduce direct aids in the same way. Even if the details of possible compulsory modulation are not yet clear, an overall reduction in the aid levels would cause serious problems in Finland, where the income level is already low and costs high. All regions with a low income level and high costs would face similar difficulties, but in most other countries such regions represent only a small share of agricultural land.

Modulation offers better opportunities for rural development in Member States where the direct aids are currently at a high level, and thus the obvious inequality in the direct aid system would be transferred to rural development as well. This cannot be considered acceptable. In the worst scenario compulsory modulation would cut the direct aids by the same percentage in all Member States, without taking into account the considerable variation in the aid level in different countries. The practical implications of the cuts would thus be greater in countries where the aids are low than in countries where they are high. The model would not change the proportional shares of the Member States in agricultural support, i.e. countries which receive the highest support would continue to do so in another way. Modulation may also change the allocation of aid between farmers as the support for rural development may be allocated according to different criteria than the direct aids.

A specific problem relating to modulation is that, according to the current rules, the rural development measures to be financed should be completely new commitments and the funds could not be used for the financing of the existing commitments under the existing rural development programmes. This would be difficult in Finland where the compensatory allowances and environmental support have already been implemented almost to the maximum.

The level of the reduction of direct aid and other criteria for compulsory modulation can be fixed either nationally or on the Community level. If they are fixed nationally, Finland must assess the need for additional funding for rural development to be reallocated through modulation, measures to be supported, a franchise to be excluded from the modulation and criteria for the implementation of the model in practice. Decision must also be made on whether the funds collected through modulation are used only for the financing of accompanying measures or for other rural development measures as well. If the Commission drafts a proposal for the implementation of modulation on the Community level, Finland must make every effort to allow adequate flexibility in the criteria, as in the current regulation, or that the Finnish conditions are taken into account in fixing the criteria.

In Finland it is not possible to transfer large amounts of funds for supporting rural development through modulation. For example, based on the modulation model applied in France, with a high franchise, practically no funds would be collected. Thus in order to create funding for rural development in Finland franchise would have to be set at a very low level. Thus the reduction in direct aid would affect a large number of farms, including farms whose profitability would deteriorate considerably due to even a very small cut in the aid.

Ceilings for direct aid

The model of ceilings for direct aid, which would have cut the aids for the largest farms, was also suggested during the Agenda 2000 process. According to that model, the aids for farms receiving 100,000-200,000 euros per year as direct aid would have been cut by 20 per cent and the direct aid for farms receiving more than 200,000 euros by 25 per cent of the amount exceeding these limits. Such progressive ceilings for aid were justified on the public opinion and the higher efficiency of large farms. The most serious problem in the model was that it would have affected the different Member States in very different ways. United Kingdom, Germany and France would have lost the most in Community contributions.

Different versions of the aid ceiling model were proposed where the limits were set at a much lower level, but the percentages of the reductions were also smaller at first. The model proposed by Austria was close to the degressivity model, but a larger share of farms would have been excluded from the cuts. The first ceiling was 75,000 euros, with only a small reduction, but already at the aid level of 150,000 euros the cut would have been 50 per cent, and the budgetary savings would have amounted to about 700 million euros. Models with even lower ceilings were also put forward, and e.g. the European Parliament suggested that the first ceiling would be fixed at 30,000 euros.

The political problem in the Community was that the aid ceiling model would reduce the aid of the largest and most efficient farms. This would be difficult to accept for the most efficient agricultural countries because the cuts would affect their producers more than the producers in the other countries. The model proposed by the Commission, or even lower ceilings, would have been quite acceptable from the Finnish perspective, because almost all Finnish farms would have been excluded owing to the farm structure in Finland.

National supplements

National supplement model is a variant of the co-financing and degressivity models. In this case direct aids would be reduced by a certain percentage, which would be much lower than the 25 per cent according to the co-financing model. Compensating for the difference to reach the full amount of aid would not be compulsory, but voluntary by means of a national supplement. National supplements are already being applied in suckler cow premiums and environmental support.

National supplements were not put forward very strongly in the discussion because of the problems involved relating to the internal market (risk of distorting competition if the supplements were too high) and the relative position of the Member States (the possibilities to pay national supplements). Like in the case of co-financing, it could also be difficult for the applicant countries to finance the supplements. However, if the national shares are not too high, the supplements might be a feasible solution to reach budgetary savings, and they could be easily combined with both degressivity and co-financing models.

6. OUTLINES FOR STRATEGIES AND PROPOSALS FOR MEASURES IN AGRICULTURAL POLICY

This chapter outlines the Finnish positions in response to the international and national challenges of agricultural policy and proposes concrete measures to implement the positions in practice. The positions are based on the combination of the proposed agricultural policy objectives to the most important changes in the operating environment and aim to maintain and improve the competitiveness of Finnish agriculture and viability of the rural areas. The main objective is to make sure that Finnish agriculture will continue to provide safe and diverse high-quality products to the consumers and to meet the various kinds of other expectations directed at agriculture in modern societies.

6.1 Development of international operating environment of agriculture

The bilateral trade agreements and unilateral concessions made by the EU as well as the outcome of the WTO negotiations will change the international operating environment of agriculture considerably during the present decade. Negotiations on agriculture to prepare for a new international trade agreement are already underway. As an EU member Finland participates in these negotiations on the basis of a commonly agreed position, which can be specified in more detail if needed. It is important for Finland to influence the common positions so that they would be as close to our own national interests as possible.

To secure the profitability and operating conditions of Finnish agriculture it is of primary importance to maintain the agricultural policy of the EU functional. The most significant international issues that may threaten the functioning of the common agricultural policy are the tightening of the restrictions for export refunds and domestic support.

- *Finland emphasises that exports refunds must be allowed also in the future, and different forms to promote exports must be treated equally. The current support classes (amber, blue and green box) for internal support and the rules and regulations applied to these must for the most part be retained.*

The objectives of the common agricultural policy of the EU emphasise the multifunctionality of agriculture and the role of agriculture as a provider of public goods, in addition to food production. The European model of agriculture is based on the principle of sustainable development, where efforts are not made to increase the production efficiency at the cost of the balance of nature.

- *The rules for international agricultural trade must take better into account the differences in the production conditions in the different parts of the world and the fact that food production is not the only function of agriculture. The multifunctionality of agriculture should be incorporated in the new WTO agreement when defining the allowable support measures in order to secure the provision of various kinds of public goods.*

Consumers are very much concerned about food safety, in particular, the use of growth promoters to improve the efficiency of production and possible health and environmental effects of genetic engineering. The cultivation of genetically modified plants makes the producers increasingly dependent on the suppliers of production inputs.

- *In order to maintain consumer confidence and to guarantee an adequate level of environmental protection, the precautionary principle must be followed without exception before allowing the use of the product to find out the possible health and environmental effects.*

- *In order to promote consumer orientated action and functioning of markets, the rules governing international trade must allow, also in the future, the labelling of products based on their origin, production method and quality.*

- *The use of biotechnology and marketing of GMO products must be based on the prior approval procedure, where licences are not granted before the use of a new method or organism in the product is proven safe for humans, animals and the environment.*

The enlargement of the EU is another change in the international environment of agriculture, in addition to the trade negotiations, which is going to have significant impact on the position of Finnish agriculture. Enlargement brings along several challenges to the internal market and for securing the profitability and preconditions for Finnish agriculture, but it also implies new opportunities to, for example, reinforce the viability of the European model of agriculture.

- *To secure the functioning of the internal market, the new Member States must meet the Community requirements for food hygiene, veterinary and phytosanitary issues as well as quality requirements for the products from the beginning of their membership.*

- *In the case of products for which quotas are being applied under the Common Agricultural Policy production quotas must also be fixed for the new Member States. The production and support quotas must be determined according to the real production based on a historical reference period.*

- *The expenditure due to enlargement must fall within the agreed financial framework. Decisions on the possible direct aids to be paid to the new Member States must make sure that the relative profitability of different sectors of economy or the structural development of agriculture will not be distorted.*

6.2 Development of the Common Agricultural Policy of the EU

From the Finnish perspective the main problem in the Common Agricultural Policy is the fact that Finnish agriculture is not competitive against the other Member States where the production conditions are far more favourable. As a result of the agricultural policy reforms, especially in the case of arable crops, the price level of some products is so low that in the northern conditions the variable costs of production are often higher than the market return. The current market organisation for arable crops in the Community is quite problematic because it is based on a compensation of a calculated income loss, which means that the system favours the best regions. If the share of support continues to grow in relation to the total income from farming and the

payments are to an increasing extent decoupled from the production process, there is a danger that the quality and properties of the products may no longer meet the requirements of the processing industry and consumers. Because of the high production and transport costs this is a serious problem especially in Finland. For Finland it is very important to utilise the production potential of products that are suited to the Finnish conditions (milk, beef, arable crops and starch potatoes) to the maximum.

The strengths of Finnish agriculture include the high quality of the products, production inputs and ethical production methods. The air and soil are clean and animals are healthy. Finland is free from many plant and animal diseases that are quite common in the other European countries.

- *The ability of the Finnish agricultural and food sector to provide safe, high-quality products may not be endangered. This means that, for example, the high standard of food hygiene and purity of inputs are not weakened through any Community rules. It is also important to guarantee the availability of domestic raw materials for the Finnish food industry.*

Reform of the common agricultural policy is a long-term process, which will succeed only in fruitful cooperation with the Commission and all other Member States. Next time the content of the common agricultural policy may be revised in connection with the mid-term review based on Agenda 2000.

- *When preparing for the negotiations Finland must carefully examine the means and grounds through which the specific conditions of Finland can to an increasing extent be taken into account in the market organisations of the common agricultural policy. In the case of each product and sector appropriate means must be searched for to develope a more equitable common agricultural policy, which takes account of the economic foundations for production practised in highly diverse regions and circumstances of the Community.*

Rural development policy is very important for maintaining agriculture and the population of rural areas. The current share of Finland in the Community funds allocated to rural development measures is insufficient for taking full advantage of the potential provided by the rural development regulation. In the future adequate resources should be made available for balanced rural development. Maintaining the viability of rural areas is particularly difficult in regions with very low population density and long distances. The key for maintaining viability in these areas is agricultural production.

- *Resources for rural development must be increased at the Community level. This must be done in such a way that different countries or regions will not be placed in an unequal position. Finland must get additional Community funding for rural development measures already during the current funding period.*

- *The allocation of additional resources for rural development may require a reduction in the funding for certain other measures of the common agricultural policy. However, the possible shift in the emphasis may not endanger the profitability of Finnish agriculture, which is based on family farming.*

- *The rural development measures co-financed by the Community for supporting the viability of rural areas could also be based on labour intensiviness, diversification of farming and high-quality of the products. Based on these criteria it could be possible to find feasible solutions in cases where it can be demonstrated that the*

production of high-quality products that meet the consumer expectations call for a considerable amount of labour and special care.

The measures and means used so far in the reform process of the common agricultural policy have been directed at increasing the competitiveness of EU agriculture. It may be necessary to continue these efforts, partly due to the upcoming WTO negotiations, but Common Agricultural Policy should also be developed with special emphasis on the preservation of sustainable agriculture in all parts of Europe in accordance with the conclusions of the 1997 Luxembourg European Council. More equitable and economically, socially and ecologically sustainable agriculture also strengthens the competitiveness of agriculture and makes the enlargement process easier.

- *Common Agricultural Policy must be developed in such a way that it becomes increasingly sustainable.*

- *Economically equitable and sustainable Common Agricultural Policy promotes the production of safe, high-quality products. The support payments must be better adjusted to the natural competitiveness of different regions, taking into account the characteristical production practices. The Common Agricultural Policy and especially the support system for arable crops should be based on the need of support instead of compensation, which would make it more equitable for agriculture practiced in very diverse regions and conditions in the Community.*

- *Finland must study the options through which the profitability and operating conditions of agriculture based on family farming can be secured in the future. Special attention should be directed at the motivation and meaningfulness of agricultural work.*

- *Socially sustainable agricultural policy contributes to balanced regional development as well as physical and mental well-being and job satisfaction among farmers, guarantees an income level that is in line with the requirements of their work, and improves their social position.*

- *Ecologically sustainable agricultural policy encourages farmers to introduce environmentally friendly production practices and reduces the concentration of the production. Agricultural production methods must be adjusted to the carrying capacity of nature, and animals must be treated appropriately according to the species without causing them any suffering.*

6.3 National agricultural policy measures

The measures of the Common Agricultural Policy of the European Union are complemented in Finland by means of a number of national measures, which include national aid for agriculture, structural policy and certain taxation and social policy measures.

The purpose of the national aid scheme is to complement the support measures of the common agricultural policy, secure the operating conditions of agriculture in different production lines and regions and contribute to the preservation of viability of rural areas. The aid levels for the different regions and production lines must be fixed in a balanced way, taking into account the natural production possibilities in different regions and labour intensivity of production. During the EU membership the number of livestock farms has fallen more rapidly than that of crop farms, and thus special attention must be directed in adjusting the relationship between the livestock aids and area payments so that the incentives for both production lines is maintained.

- *National aid must secure equitable preconditions for profitable agricultural production in the whole country and in different production lines. Changes in the return and cost factors influencing the profitability must be taken into account when fixing the aid levels, which may also call for the adjustment of the payment authorisations. Support policy should not encourage any shift of production to areas where the production concerned has traditionally not been practised.*

The most serious threat for the profitability of Finnish agriculture is the expiration of the payment authorisation of the aid for serious difficulties at the end of 2003.

- *Finland must prepare a long-term programme for aid based on Article 141 of the Accession Treaty, with due justification, well in time before the expiration of the current payment authorisation in order to make sure that these aids will be continued in an appropriate extent, taking into account the possible changes in the common agricultural policy. A working group will be appointed to prepare for the negotiations and starts its work in autumn 2001.*

The purpose of the long-term Nordic aid is to maintain traditional production and processing activities in the northern support areas, improve the structures of production, processing and trade as well as ease the marketing of the products, protect the environment and maintain the viability of rural areas.

- *The flexibility of the Nordic aid scheme should be increased so that it continues to contribute to the preservation of profitable agricultural production and promotes the development of agricultural structures and production in accordance with the market.*

Improving the structure of agriculture is an important aspect in maintaining its viability. Public financing promotes the structural development and thus reduces the unit costs of agricultural production. Farm relief services and training schemes are important for the well-being of farmers and mastering their own trade.

- *In the future it must be monitored that structural development meets for the part of e.g. the maximum level of investment aid the general expectations directed at agriculture. Farm structure will be influenced by directing financing to units that can be managed by family farms or a consortium of family farms. Otherwise it is not necessary to restrict the growth in the farm size through public measures.*

- *The conditions for farm succession, early retirement and giving up agricultural production must be developed to find more efficient means for promoting structural development. The economic situation of young farmers must be improved, especially in the first years after the transfer.*

- *Farm relief services are vital for the well-being and job satisfaction of farmers. The need for free time increases as the farm size and amount of work grows. Farm relief services must be developed further to guarantee adequate opportunities for farmers to take care of their social needs and improve the quality of life.*

- *Training systems must be further improved because the tightening competition has increased farmers' need for training. In particular, the need for training in business management has grown along with the farm size.*

In Finland agriculture alone will not be enough to maintain the viability of the rural areas, but there will be no living countryside without agriculture, either. To secure balanced regional development agriculture and rural development should be viewed as a single whole.

- *Within the limits of the available resources, the primary concern is to maintain the profitability of agricultural production.*

- *Multiactivity of farms is an important aspect of a farm structure supporting the viability of rural areas in Finland. In order to maintain the viability of rural areas, farms should be viewed as multiactive wholes, for example, when granting financial aid for investments.*

- *The use of more broad rural development measures should be promoted to diversify the economic activities in rural areas.*

The objective of the national quality strategy for the food sector launched by the Ministry of Agriculture and Forestry is to develop quality and maintain a high quality standards through joint efforts of the administration, research, advising and the whole food chain. The watertight quality chain extending from farm to table guarantees that the consumer expectations are met, while at the same time improving the competitiveness and profitability of companies operating in the agro-food sector. Problems can be prevented in advance by means of efficient and watertight controls.

- *The quality strategy for food production will be continued, and concrete solutions are searched to promote the different production sectors. The construction of the national quality strategy must be incorporated in the planning of measures concerning the different products and sectors. The product-specific opportunities and challenges relating to the consumer-oriented approach must be assessed to promote quality strategy. For example by product labelling consumers can receive more detailed information about the origin of products and production methods as well as other quality factors.*

- *Organic production will be promoted through active development of the marketing, processing and distribution channels. In terms of allocating the aid preparation will be made for an annual growth in the share of the organic area in the total arable area by one per cent. Special attention will be given also for promoting organic livestock production. The objective is that 15 per cent of the arable area would be under organic production by the year 2010.*

New technologies provide new opportunities for developing the functioning of the market. With the help of new technology and by developing producer organisations it will be possible to direct the product flows more efficiently and offer more detailed information on the products and production methods to the consumers.

- *The opportunities for improving the efficiency of market co-ordination must be examined in detail.*

- *The creation of producer organisations must be promoted and the efficiency of their operations improved.*

ANNEX 1

Gross national product at basic price, FIM billion

	Whole country	Agricul-ture	%	Food industry	%
1991	432.1	14.2	3.3	12.2	2.8
1992	422.4	11.2	2.7	12.2	2.9
1993	428.5	12.2	2.8	12.8	3.0
1994	455.2	13.2	2.9	12.2	2.7
1995	490.7	9.7	2.0	12.2	2.5
1996	509.7	9.0	1.8	12.1	2.4
1997	547.9	8.8	1.6	11.7	2.1
1998	595.3	7.2	1.2	12.0	2.0
1999	623.2	7.2	1.2	11.5	1.8
2000	680.4	7.9	1.2		

Investments, FIM billion

	Whole country	Agricul-ture	%	Food industry	%
1991	121.8	4.2	3.4	2.2	1.8
1992	96.9	2.9	3.0	3.0	3.1
1993	80.6	2.8	3.5	1.7	2.1
1994	80.8	2.8	3.5	1.7	2.1
1995	92.0	3.1	3.4	2.0	2.2
1996	100.0	3.2	3.2	2.1	2.1
1997	114.3	4.1	3.6	2.0	1.7
1998	128.9	5.0	3.9	2.1	1.6
1999	136.0	5.1	3.8	2.1	1.5
2000	151.3	5.1	3.4		

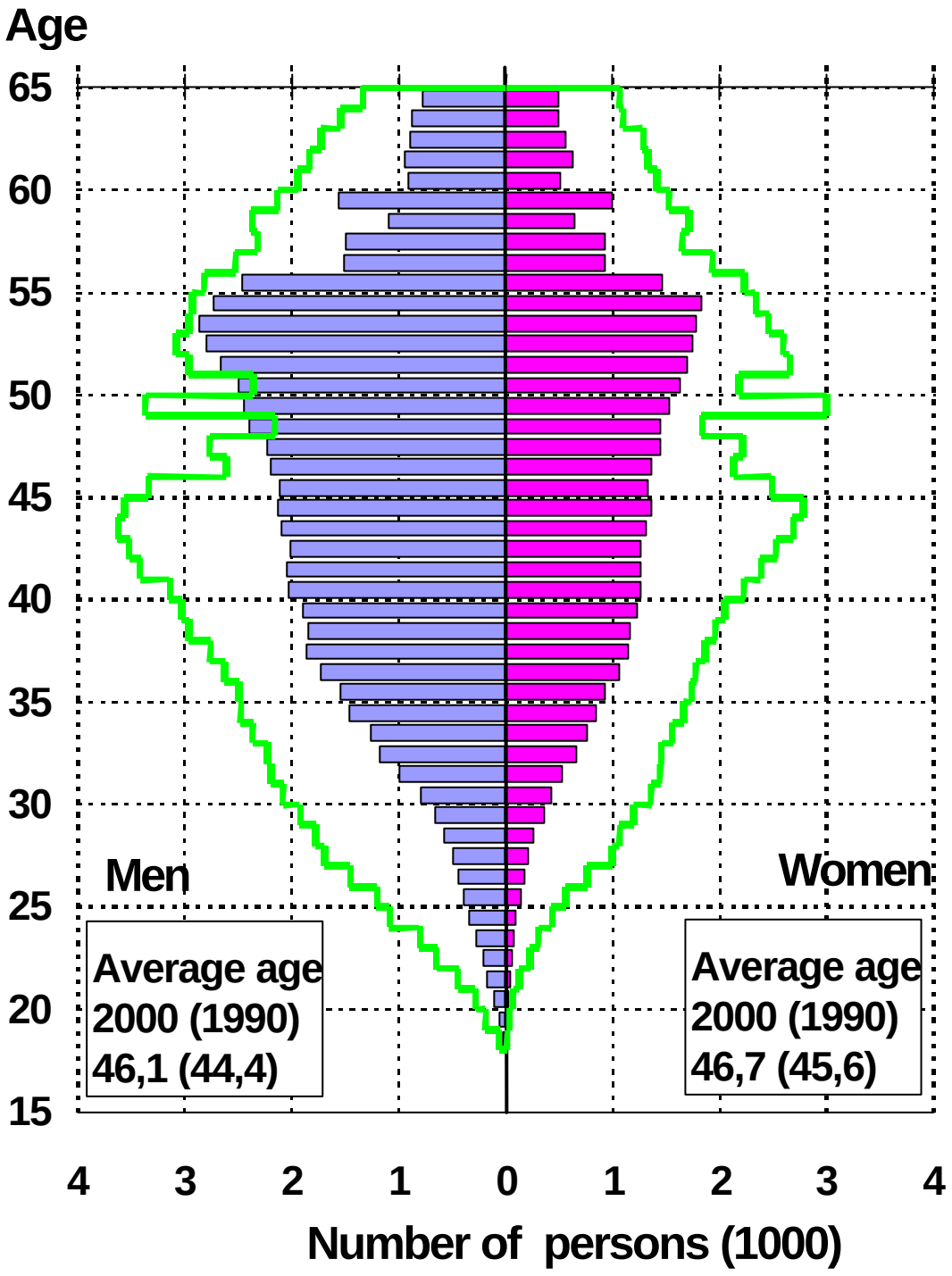
Number of persons employed, 1 000

	Whole country	Agricul-ture	%	Food industry	%
1991	2337.1	173.2	7.4	55.2	2.4
1992	2168.2	161.9	7.5	51.2	2.4
1993	2032.8	150.8	7.4	47.3	2.3
1994	2009.9	149.9	7.5	45.2	2.2
1995	2042.3	138.7	6.8	46.2	2.3
1996	2071.3	130.3	6.3	45.5	2.2
1997	2138.9	127.6	6.0	44.8	2.1
1998	2183.6	117.6	5.4	45.0	2.1
1999	2229.3	118.9	5.3	44.0	2.0

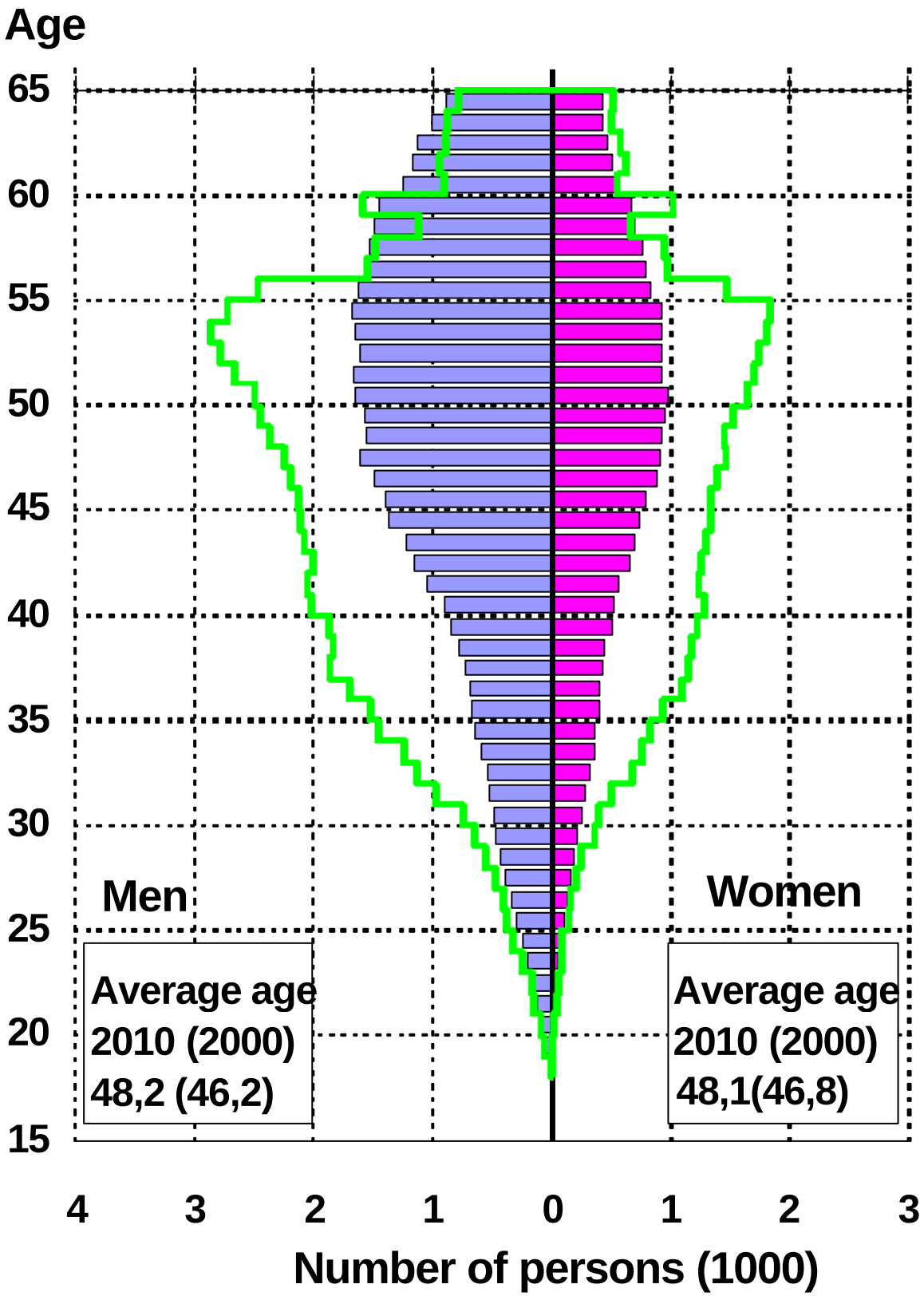
Sources: National accounting 1991-1999. Statistics Finland 2000.
National accounting 1999-2000. National economy 2001:7. Statistics Finland 2001.

ANNEX 2a

Age distribution of persons insured under the Farmers' Pension Act in 2000
(grey line represents the reference year 1990)



Age distribution of persons insured under the Farmers' Pension Act in 2010
(green line represents the reference year 2000)



ANNEX 3

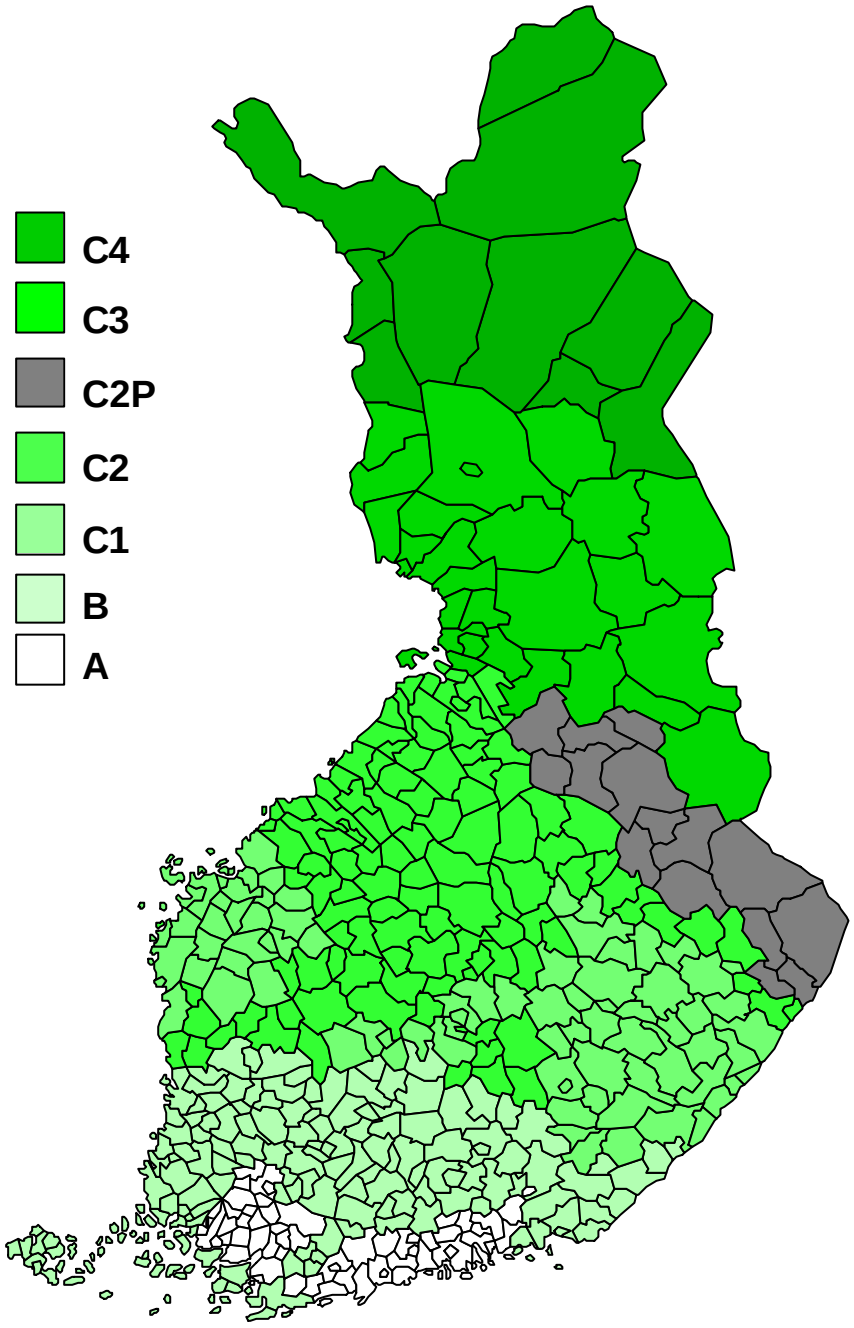
Impacts of climate, soil and location factors on returns and costs of plant and livestock production

PLANT PRODUCTION	**Indicator**
Factors diminishing returns	
Low yield level	◦ yield level kg/ha/year ◦ length of growing season ◦ effective temperature sum ◦ length of day ◦ uneven precipitation ◦ frost
Productive plant species and varieties do not succeed	◦ possible plant species ◦ northern limits for cultivation ◦ small share of winter cereals ◦ share of sales crops (wheat) ◦ snow cover ◦ frost in the ground
Long transport distances of products	◦ additional cost due to long distance
Factors increasing costs	
Soil types in Finland	◦ proportional share of soil types ◦ share of soil types that are difficult to cultivate ◦ distribution of arable land to productivity classes
Need for drainage, liming and fertilisation	◦ average pH of arable land ◦ nutrient situation of arable land
Stony soil	
Shape and size of parcels and distances	◦ average size of base and agricultural parcels ◦ number of parcels/farm ◦ average distance of parcels from economic centre ◦ average distance to new/leased parcels ◦ arable land (ha) within certain area and harvested yield ◦ additional cost FIM/km/tonne
Need for drying cereals	◦ average moisture content of cereals ◦ drying cost / kg of cereal
Heating and structures of greenhouses	◦ snow load in winter ◦ reduced returns/profitability
Temporal cost	◦ length of sowing and harvesting period
Amount of seed needed	◦ amount of seed kg/ha ◦ additional cost due to northern varieties
Storage of horticultural products	◦ additional cost FIM/tonne
Long transport distances of inputs	◦ additional cost due to long distance
LIVESTOCK PRODUCTION	**Indicator**
Factors diminishing returns	
Long transport distances of products	◦ additional cost due to long distance
Factors increasing costs	
High production cost of domestic feedingstuffs	◦ production cost FIM/f.u.

Building cost	◦ standard cost FIM/LU
Storage of feed for winter	◦ additional cost FIM/LU
Storage of animal manure during winter	◦ additional cost FIM/LU
Short grazing period	◦ length of grazing/indoor feeding period
Extensiveness of production (←feed production for winter)	◦ LU / used arable area
Long transport distances of inputs	◦ additional cost due to long distance

ANNEX 4

Agricultural support areas



ANNEX 5

Financial framework for headings 1, 7 and 8 decided in the Berlin European Council

Heading 1 (agriculture)[4] (Mio. euros 1999 prices)						
2000	2001	2002	2003	2004	2005	2006
40 920	42 800	43 900	43 770	42 760	41 930	41 660
CAP expenditure (excluding rural development and accompanying measures)[5]						
36 620	38 480	39 570	39 430	38 410	37 570	37 290
Rural development and accompanying measures						
4 300	4 320	4 330	4 340	4 350	4 360	4 370

Heading 7 (Pre-accession instruments) (agricultural) (Mio euros, 1999 prices)						
v. 2000	v. 2001	v. 2002	v. 2003	v. 2004	v. 2005	v. 2006
520	520	520	520	520	520	520

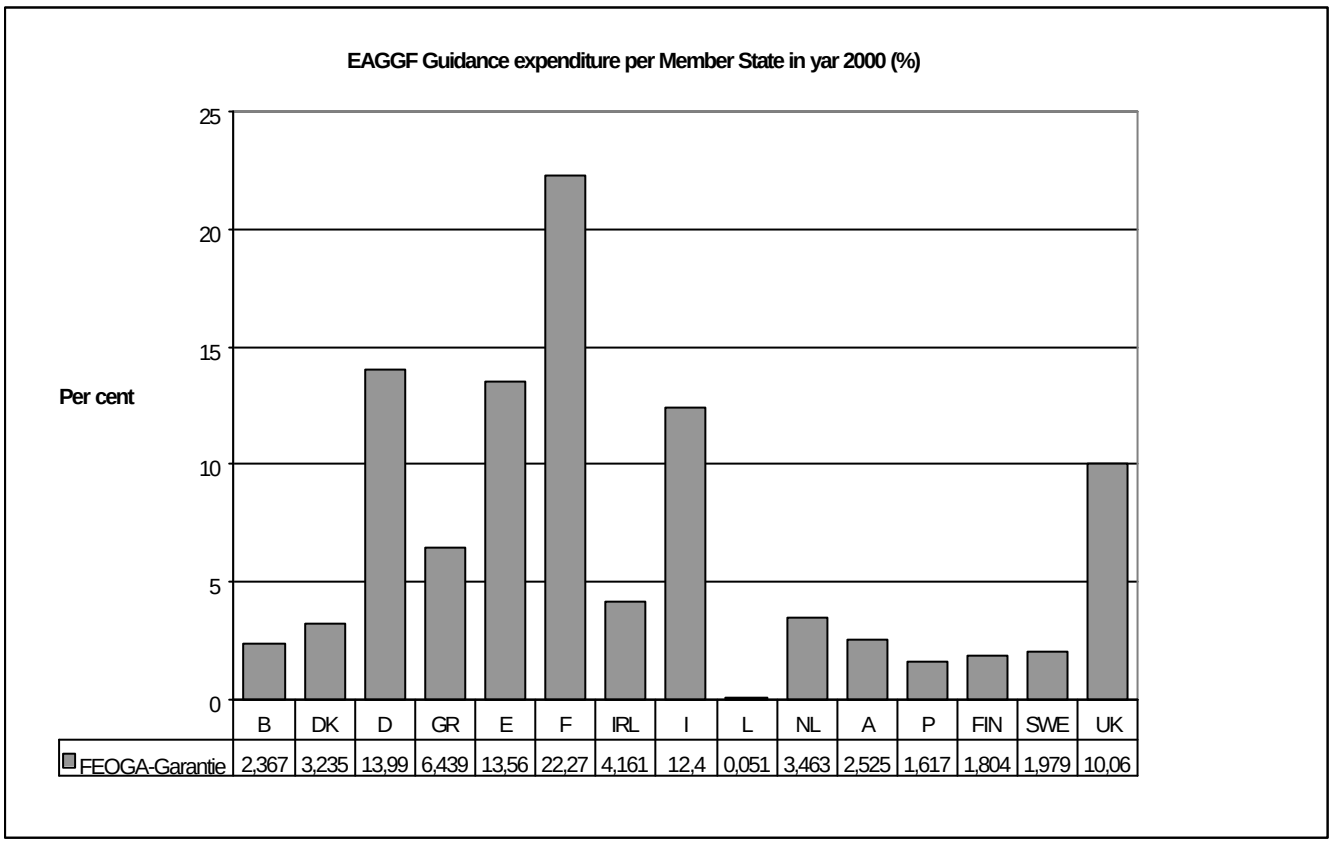
Heading 8 (Enlargement) (appropriations for commitments) (Mio euroa 1999 prices)					
	2002	2003	2004	2005	2006
Heading 8 (enlargement)	6 450	9 030	11 610	14 200	16 780
Agriculture	1 600	2 030	2 450	2 930	3 400
Structural operations	3 750	5 830	7 920	10 000	12 080
Internal policies	730	760	790	820	850
Administration	370	410	450	450	450

[4] For calculating the amounts in current prices a deflator of 2% will be used.
[5] Includes veterinary and plant health measures.

ANNEX 6

Distribution of funds from EAGGF Guidance Section between Member States in 2000

EAGGF Guidance Section expenditure according to Member State in 2000 (%)



ANNEX 7

SHARE OF CONTRIBUTIONS BY MEMBER STATES IN OWN RESOURCES OF THE EU IN 1999 AND 2000

	1999	2000
	%	%
BELGIUM	3.9	3.9
DENMARK	2.0	1.9
GERMANY	25.5	24.8
GREECE	1.6	1.5
SPAIN	7.6	7.3
FRANCE	17.0	16.5
IRELAND	1.3	1.2
ITALY	13.0	12.5
LUXEMBOURG	0.2	0.2
NETHERLANDS	6.2	6.2
AUSTRIA	2.5	2.4
PORTUGAL	1.5	1.4
FINLAND	**1.5**	**1.4**
SWEDEN	2.8	3.0
UK	13.4	15.8
TOTAL	100	100

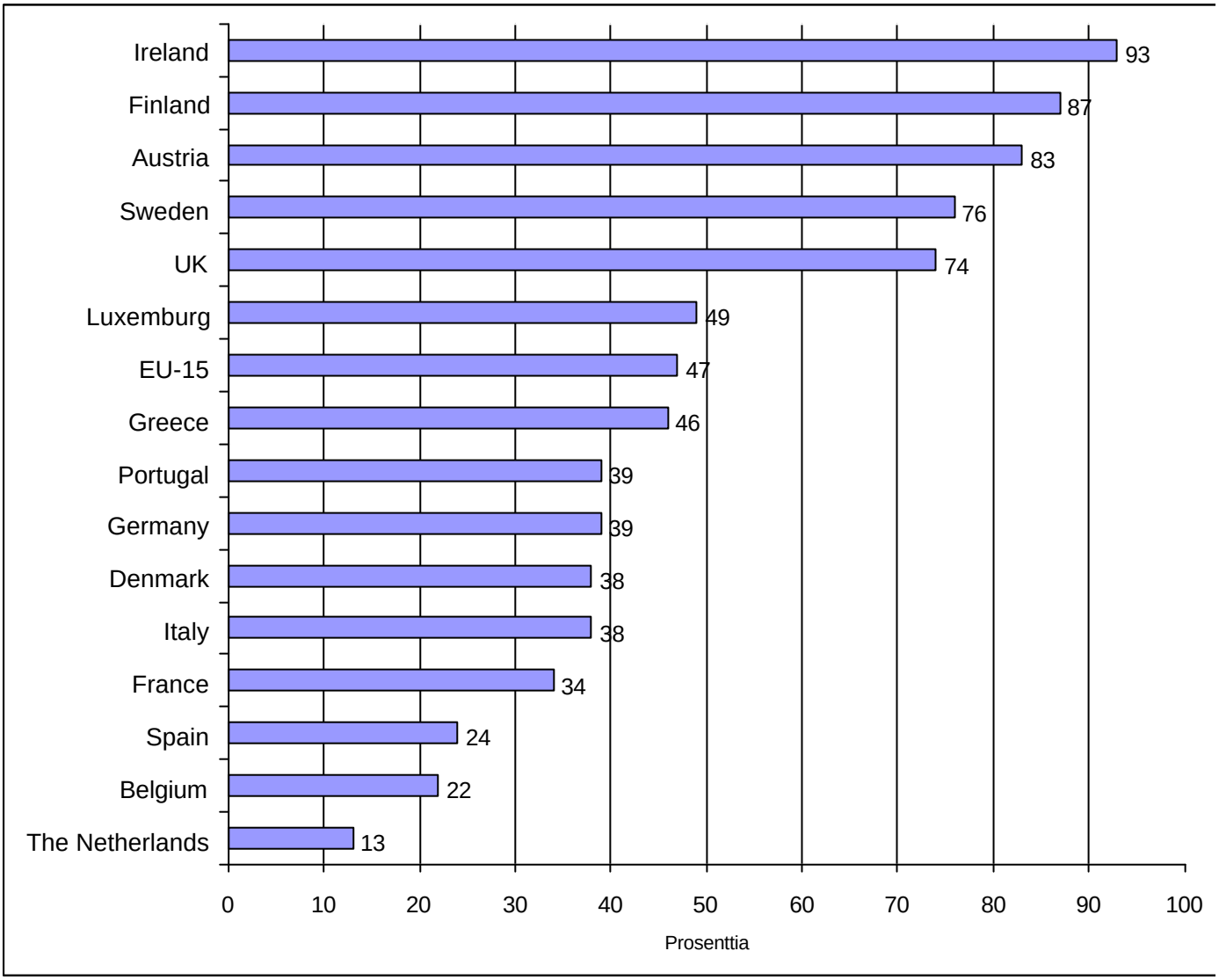
EU SPENDING IN MEMBER STATES: EXPENDITURE OF THE GUARANTEE SECTION OF THE EAGGF IN 1997-2000

	1997		1998		1999		2000	
	Mio. €	%	Mio. €	%	Mio. €	%	Mio. €	%
BELGIUM	983.4	2.4	859.7	2.2	1004.0	2.5	957.3	2.4
DENMARK	1235.7	3.0	1155.0	3.0	1258.3	3.2	1309.1	3.2
GERMANY	5778.4	14.2	5556.7	14.3	5793.8	14.6	5674.9	14.0
GREECE	2730.8	6.7	2557.4	6.6	2573.3	6.5	2598.2	6.4
SPAIN	4605.6	11.3	5304.6	13.7	5243.0	13.2	5498.6	13.6
FRANCE	9149.0	22.5	9014.3	23.2	9445.9	23.8	9005.8	22.2
IRELAND	2034.0	5.0	1633.7	4.2	1723.5	4.3	1682.3	4.2
ITALY	5090.8	12.5	4183.2	10.8	4675.1	11.8	5048.3	12.5
LUXEMBOURG	22.8	0.1	17.7	0.0	24.8	0.1	21.2	0.1
NETHERLANDS	1757.3	4.3	1374.7	3.5	1301.5	3.3	1441.9	3.6
AUSTRIA	861.3	2.1	843.2	2.2	844.4	2.1	1018.7	2.5
PORTUGAL	656.9	1.6	639.6	1.6	653.9	1.6	657.2	1.6
FINLAND	**570.6**	**1.4**	**576.4**	**1.5**	**560.0**	**1.4**	**727.8**	**1.8**
SWEDEN	747.0	1.8	770.9	2.0	734.8	1.8	798.1	2.0
UK	4399.7	10.8	4322.6	11.1	3933.7	9.9	4061.7	10.0
TOTAL	40623.2	100	38810.0	100	39769.9	100	40501.1	100

Source: European Commission Budget DG

ANNEX 8

SHARE OF ACCOMPANYING MEASURES IN RURAL DEVELOPMENT EXPENDITURE IN DIFFERENT MEMBER STATES



ANNEX 9

	Support for rural development in 2000 - 2006								
			Annual support in Member States						
				Allocation (million euros)					
			2000	2001	2002	2003	2004	2005	2006
	Annual	Share of							
R 1b) 1999 prices	average	Member State	4 300	4 320	4 330	4 340	4 350	4 360	4 370
Deflator (2)	(1999 prices)	of total funding	1.02000	1.04040	1.06121	1.08243	1.10408	1.12616	1.1486
R 1b) current price	(1)		4 386.0	4 494.5	4 595.0	4 697.8	4 802.8	4 910.1	5 019.8
B	50	1.15	50.5	51.8	52.9	54.1	55.3	56.6	57.8
DK	46	1.06	46.5	47.6	48.7	49.8	50.9	52.1	53.2
D	700	16.13	707.6	725.1	741.3	757.9	774.8	792.1	809.8
EL	131	3.02	132.4	135.7	138.7	141.8	145.0	148.2	151.6
E	459	10.58	464.0	475.4	486.1	497.0	508.1	519.4	531.0
F	760	17.52	768.2	787.2	804.8	822.8	841.2	860.0	879.2
IRL	315	7.26	318.4	326.3	333.6	341.0	348.7	356.5	364.4
I	595	13.71	601.4	616.3	630.1	644.2	658.6	673.3	688.4
L	12	0.28	12.1	12.4	12.7	13.0	13.3	13.6	13.9
NL	55	1.27	55.6	57.0	58.2	59.5	60.9	62.2	63.6
A	423	9.75	427.6	438.2	448.0	458.0	468.2	478.7	489.4
P	200	4.61	202.2	207.2	211.8	216.5	221.4	226.3	231.4
FIN	**290**	**6.68**	**293.1**	**300.4**	**307.1**	**314.0**	**321.0**	**328.2**	**335.5**
S	149	3.43	150.6	154.3	157.8	161.3	164.9	168.6	172.4
UK	154	3.55	155.7	159.5	163.1	166.7	170.5	174.3	178.2
	4339	100	4 386.0	4 4945	4 595.0	4 697.8	4 802.8	4 910.1	5 019.8
(1) Annual allocations per Member States: the percentages of this distribution apply to financial perspectives presented in point 23 of the Presidency Conclusions of the Berlin European Council of 24 and 25 March 1999									
(2) Deflator: the table is based on an annual fixed deflator of 2%									