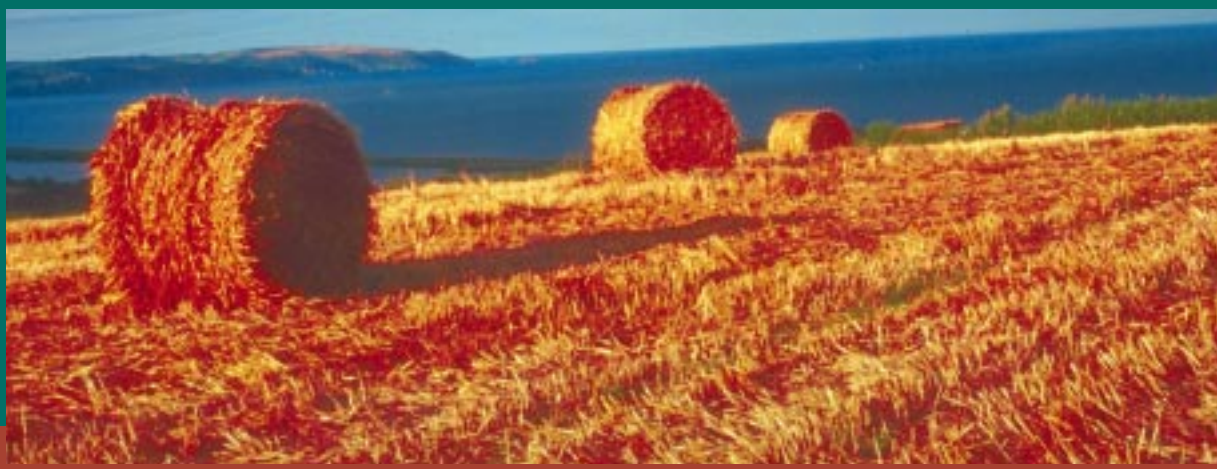
NEW METHODOLOGY



Agricultural Policies in OECD Countries

Monitoring and Evaluation

1999

AGRICULTURAL POLICIES IN OECD COUNTRIES

MONITORING AND EVALUATION

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996) and Korea (12th December 1996). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

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SUIVI ET ÉVALUATION

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EXECUTIVE SUMMARY

Over-supply in response to recent high prices combined with depressed economic conditions in the main emerging markets resulted in falling commodity prices. Responding to pressure on farm incomes, agricultural policies in 1998 were marked in many OECD countries by a resort to additional measures of support and protection, which were not always consistent with the longer-term directions of reform. Policy-makers gave higher priority to addressing public concerns over food safety and quality, through regulatory measures and information programmes. The trend over the last decade has been towards lower support, fewer trade distortions and greater market orientation, but developments in 1998 suggest that agricultural policy reform and trade liberalisation risk being stalled or reversed when market pressures emerge.

Agriculture Ministers set common goals: OECD Agriculture Ministers in March 1998 outlined a set of shared goals for the agro-food sector and agreed to a set of policy principles and operational criteria. Ministers stressed that agro-food policies should seek to strengthen the intrinsic complementarities between the shared goals, thereby allowing agriculture to manifest its multifunctional character in a transparent, targeted and efficient manner. The challenge is to use a range of well-targeted policy measures and approaches which can ensure that the growing concerns regarding food safety, food security, environmental protection and the viability of rural areas are met in ways that maximise benefits, are most cost-effective and avoid distortion of production and trade.

Progress has been made on agricultural policy reform: there have been significant efforts to liberalise trade, in particular through the Uruguay Round Agreement on Agriculture, with its disciplines on market access, export subsidies and domestic support and through the SPS, TBT and TRIPS Agreements. Resolution of some trade conflicts through dispute settlement procedures, and new bilateral and multilateral trade initiatives in 1998 should help further integrate agriculture into the multilateral trading system, although trade distortions remain. There has been greater attention to environmental and rural development objectives and to facilitating structural adjustment and enhancing the efficiency of the agro-food sector as a whole. But it is not evident, due to the complexity of many new measures, that efficiency, targeting and transparency are improving.

The level of support to agriculture in 1998 increased: total support to agriculture was estimated at US$362 billion, 1.4 per cent of GDP for the OECD in 1998. Support to producers, as measured by the share of the Producer Support Estimate (PSE) in total gross farm receipts, increased from 32 per cent in 1997 to 37 per cent in 1998, largely due to falling world prices not matched by a reduction in domestic prices, which was also reflected in the higher implicit tax on consumers. On average across the OECD, total farm gross receipts were 59 per cent higher than at world prices, as measured by the Producer Nominal Assistance Coefficient. But the OECD averages conceal wide variations in levels of support to producers among countries, from 1 per cent to over 70 per cent of total gross farm receipts in 1998. In some countries, levels of support were over 80 per cent for some commodities, with the highest levels of support generally recorded for sugar, milk and rice.

Market price support and output-related payments still dominant: the new OECD classification of agricultural support shows that market price support still accounts for over 65 per cent of support to producers, while commodity-linked budgetary payments accounted for a further 15 per cent in 1998. Consumers paid for two-thirds of total support to agriculture through market price support measures, with taxpayers financing the rest through budgetary payments. General services provided collectively to agriculture,

decoupled from production and primarily in the form of marketing and promotion and infrastructure, represented about 20 per cent of total support.

Several policy developments in 1998 shielded agriculture from market signals: a number of additional income support measures were introduced. Although some at least partially respect the operational criteria of transparency, targeting and flexibility adopted by OECD Agriculture Ministers, such measures could generate expectations of continued support. In response to low commodity prices and weak demand in many non-OECD countries, selected tariffs were raised in some countries and there was a greater use of export subsidies and credits. Publicly held stocks of farm commodities increased, despite the continued use of quantitative measures to control production. The sharp increase in the level of producer support over 1997 reflected that, for many countries, trade barriers still prevent world price changes from being fully transmitted to domestic markets.

Part I

MONITORING AND EVALUATION

MONITORING AND EVALUATION

1. ECONOMIC AND AGRICULTURAL MARKET BACKGROUND

Macroeconomic environment

The pace of world economic growth slowed dramatically in 1998. A sequence of adverse developments which began with the financial tensions and devaluation of the Thailand baht more than a year ago quickly spread to other countries, hitting Indonesia, Malaysia, the Philippines and Korea especially hard. Meanwhile, the economic and political situation in Russia continued to worsen. By year's end the crisis had spread to Latin America culminating, most recently, with the problems in Brazilian financial markets and the devaluation of the real.

To varying degrees, almost every country in the world, including some of those in the OECD, has been affected. The average rate of economic growth in OECD countries overall fell by nearly half between 1997 and 1998 (Table I.1). However, it is the stark contrasts in the composition of that average which has had the greatest implications for agricultural markets. In Japan, the largest importer of agricultural commodities in the OECD, GDP declined by nearly 3 per cent. In Korea, also an important importer of farm commodities, the decline was even greater at nearly 7 per cent.

In contrast, in North America, the strong economic performances registered in 1997 by the three NAFTA countries – Canada, Mexico and the United States – continued through most of 1998 and it is expected that the final outcome will indicate only a slight weakening for the region overall. Moreover, the average rates of growth in European countries were fractionally higher in 1998 than in 1997. The robust performance of these economies was accompanied by further moderation in already historically low rates of price inflation. And, although rates of unemployment are significantly higher in Europe than in North America, unemployment went down in both regions last year.

The Australian economy grew by nearly 4 per cent in 1998 while registering a rate of price inflation below 2 per cent. This outpaced economic performance of most other OECD economies and came despite the economic weakness in Asian economies which are important destinations for Australia's commodity exports. The New Zealand economy did not fare so well. The relatively rapid economic expansion which had been underway there since 1992 was brought to an abrupt halt by the effects of the Asian crisis compounded by a severe drought.

Non-OECD economies

Latin American economies, which had grown on average by over 5 per cent in 1997, slipped to an average of just over 1 per cent in 1998. There were, however, exceptions in this region. Argentina's economy posted a gain of nearly 5 per cent, with an accompanying rate of price inflation of just over 1 per cent.

The high growth rates witnessed in 1997 in countries across the whole of the non-OECD region fell abruptly in 1998 (Table I.2). The estimated average for 1998 is under 1 per cent. Accompanying the economic slowdowns in many countries have been sharp increases in rates of price inflation, attributable largely to currency devaluations. The Russian economy for example contracted by 6 per cent amid continuing devaluations of the rouble. China, however, seemingly unscathed by the recessions in neighbouring Asian countries, once again posted a gain in economic output of near 9 per cent and a stable currency.

Table I.1. **Key macroeconomic indicators**

	Real GDP		Inflation[1]		Unemployment		Short-term interest rates[2]	
	% change		% change		Percentage of labour force		Per cent	
	1997	1998	1997	1998	1997	1998	1997	1998
United States	3.9	3.5	1.9	1.0	4.9	4.6	5.1	5.1
Canada	3.7	3.0	0.5	–0.1	9.2	8.4	3.5	3.5
Mexico	7.0	4.6	18.8	15.0	3.7	3.4	21.3	21.3
European Union	2.7	2.8	1.8	1.8	11.2	10.6	4.2	4.2
Japan	0.8	–2.6	0.6	0.7	3.4	4.2	0.6	0.6
Korea	5.5	–6.5	2.4	6.0	2.6	7.3	13.4	13.4
Australia	2.8	3.6	2.0	1.9	8.6	8.2	5.4	5.4
New Zealand	3.1	0.2	0.1	0.5	6.6	8.3	7.7	7.7
OECD	3.2	2.2	3.7	3.3	7.2	7.1		

1. GDP deflator.
2. Japan: 3-month Credit Deposits; Europe area: 3-month interbank rates.
Source: OECD *Economic Outlook,* December 1998.

Table I.2. **Macroeconomic indicators for selected non-member countries**

	Real GDP[1]		Inflation[2]	
	% change		% change	
	1997	1998	1997	1998
Brazil	3.7	0.8	6.1	3.8
China	8.8	7.6	0.8	–2.5
Indonesia	4.7	–15.5	11.1	60.0
Russia	0.8	–6.0	11.0	70.0

1. Real GDP corresponds to the percentage change relative to the previous year. For China it is the GNP change.
2. Annual percentage change in the consumer price index, except for China where it is measured by the retail price change.
Source: OECD *Economic Outlook,* December 1998.

Agricultural markets

Market prices of both agricultural and of non-agricultural commodities also fell sharply in 1998.[1] Wheat prices for the 1998/99 crop year, for example, are expected to be down one third from their levels of 1996/97, and a fall of nearly 15 per cent from the previous year's level. Similar price falls have occurred in world coarse grain and oilseeds markets, leading to lower feed costs and ultimately to lower meat prices. The economic slowdown is part of the explanation. Consumers in countries where economies were contracting had less to spend and consumers in countries where the exchange rate was devalued saw prices in domestic currencies of most goods rise, reducing quantities demanded.

However, contraction in demand due to the economic crisis tells only part of the story as to why farm commodity prices fell so precipitously last year. Since the mid 1990s, world wheat production has increased by 13 per cent, maize production by 13 per cent and soybean production by 25 per cent. The combination of high farm prices of cereals and oilseeds and low input prices of earlier years constitute the main explanation for this increased production. Growers around the world responded to those attractive incentives, expanding plantings, while Governments responded by reducing or eliminating land set-asides. Demand for this increased output, especially demand weakened by poor economic perfor-

mance in many food importing countries of the world, was not sufficiently robust to avoid the inevitable falls in commodity prices.

Current estimates put world production of milk, beef, pig and poultrymeat for 1998 at close to record levels. This has been reflected in generally weaker prices for all these commodities, especially for pork, while dairy product prices have held up relatively well on world and domestic markets.

Farm incomes

Falling farm commodity prices since 1996 reduced significantly the value of farm production in both 1997 and 1998. Though mitigated to some degree by coincident falls in prices of some farm inputs – fuel, fertilisers and interest in particular – net farm incomes in most OECD countries declined. Table I.3 shows the evolution of net farm incomes in a selection of OECD countries from 1996, a year in which farm incomes were generally at or near historical peaks in most OECD countries.

Table I.3. **Farm income developments in selected OECD countries 1996-1998**

	Percentage change		
	1995 to 96	1996 to 97 [1]	1997 to 98 [2]
Australia	–5	–14	–21
Canada	–24	3	–4
EU 15	5	–3	–4
Japan	–4	–13	–5
United States	48	–7	–16

Note: Year over year per cent change in net farm income.
1. All 1997 figures are preliminary estimates.
2. All 1998 figures are forecasts made by the respective national agencies.
For Japan the estimate is based on monthly data through September.
Source: Figures were taken from the following sources:
Australia: Australian Commodities, Vol. 5, No. 4, December 1998, ABARE.
Canada: Farm Income, Financial Conditions and Government Assistance, Data Book, Agriculture and Agri-Food Canada, Policy Branch, 1998.
European Union: Statistics in Brief, Eurostat, 11 December 1998.
Japan: Monthly Statistics of Agriculture Forestry and Fisheries, 12 December 1998.
Statistics and Information Department, Ministry of Agriculture, Forestry and Fisheries.
United States: US Department of Agriculture, Economic Research Service, November 1998.

The numbers in the table reveal downturns, some quite significant, in the levels of net farm income in both 1997 and 1998 and for all the countries shown. Of course, incomes of farm households depend not only on what happens to the farm component of their earnings but what happens to off farm income as well. Data are not available to get a full picture on what happened in 1998. Typically, more than half of net farm household income is earned off the farm. In some cases, farm families may react to falling incomes from farming by shifting work time from farm to off-farm work. Although the poor economic situation in some OECD Countries may have reduced opportunities for off farm employment, this is not the case for others. Thus a crisis in farm commodity *prices* need not imply a crisis of equal proportion in the economic well-being of people who farm.

In examining the agricultural policy developments in OECD countries, it is useful to place such changes in the context of the relative importance of the agro-food sector versus the economy as a whole. Table I.4 shows key indicators on the relative economic importance of agriculture and food processing in OECD countries. Total economic output has grown faster than agro-food output in OECD countries, leading to a decline in agriculture's share. OECD wide, agriculture and food processing together account for only around 4 per cent of total GDP. The decline in the agro-food sector's share of total output is typically associated with declines in both the share of total employment and in the absolute number of people

Table I.4. **Main agricultural indicators**

	Percentage of								
	Agriculture in GDP[a]	Food processing in GDP[b]	Agricultural employment in total civilian employment[c]	Food processing in total civilian employment[d]	Agricultural commodities in total exports[e]	Processed prod. in total exports[e]	Agricultural commodities in total imports[e]	Processed prod. in total imports[e]	Food in total consummer expenditure[f]
Australia[g]	3.2	n.a.	5.2	2.1	17.7	2.7	1.1	2.8	14.9
1992-94 average[g]	3.1	2.0	5.2	2.3	11.0	2.3	1.1	2.8	14.4
1986-88 average[g]	4.4	2.2	5.8	2.4	18.4	2.0	1.2	2.7	15.1
Canada	n.a.	1.8	5.1	1.6	5.6	1.8	2.6	2.4	10.4
1992-94 average	1.5	1.7	5.4	1.7	5.5	1.6	3.1	2.4	10.7
1986-88 average	2.7	1.7	6.1	1.9	5.9	1.3	3.1	2.2	11.9
Czech Republic[g]	3.0	1.8	5.8	2.6	2.1	2.3	2.9	2.8	23.9
1992-94 average[g]	3.4	2.6	7.5	2.7	3.8	3.2	3.8	3.4	26.5
1989-91 average[g]	5.8	3.2	12.0	3.0	n.a.	n.a.	n.a.	n.a.	27.0
European Union[h]	1.9[i]	1.8[j]	5.0	1.6[k]	3.6	3.5	4.9	3.5	14.4[l]
1992-94 average[h]	2.3[i]	2.0[k]	5.5	2.4[k]	5.5	4.0	6.0	3.6	15.7
1986-88 average[h]	3.1[i]	2.1[k]	7.5	2.7[k]	5.7	3.5	6.7	3.6	17.7
Hungary[g]	6.4	4.0	7.9	3.5	8.4	5.4	2.2	2.0	n.a.
1992-94 average[g]	7.3	4.8	9.7	4.3	13.7	7.5	3.1	2.5	22.3
1989-91 average[g]	8.6	5.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	23.5
Iceland	n.a.	n.a.	8.5	n.a.	0.5	0.2	2.5	5.3	15.8
1992-94 average	9.4	6.6	9.5	7.7	0.7	0.3	2.7	5.9	17.1
1986-88 average	9.9	6.1	10.5	10.8	1.3	0.1	2.6	5.1	16.6
Japan	1.9	2.3	5.3	2.8	0.1	0.2	6.4	2.9	n.a.
1992-94 average	2.1	2.5	6.0	2.7	0.1	0.2	7.8	3.1	n.a.
1986-88 average	2.8	2.8	8.2	2.6	0.1	0.2	7.9	2.9	n.a.
Korea	6.3	1.9	11.0	1.0	n.a.	n.a.	n.a.	n.a.	n.a.
1992-94 average	7.2	2.1	14.8	1.0	0.5	0.5	3.5	1.2	n.a.
1986-88 average	10.4	2.1	22.0	1.3	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico[g]	5.6	3.9	23.2	4.1	3.3	2.4	3.7	3.2	24.0
1992-94 average[g]	5.7	3.5	25.7	3.6	4.5	2.4	4.2	5.1	22.4
1989-91 average[g]	8.2	3.8	n.a.	n.a.	7.9	3.3	6.6	7.7	27.3
New Zealand	n.a.	n.a.	8.4	3.8	36.3	3.9	2.9	4.3	11.1
1992-94 average	7.9	3.8	10.5	4.1	36.8	3.4	3.1	3.8	12.1
1986-88 average	7.2	4.0	10.4	4.7	37.9	2.8	3.1	3.3	12.5
Norway	2.2	n.a.	4.8	2.4	0.5	0.3	2.3	2.6	n.a.
1992-94 average	2.6	2.0	5.4	2.4	0.5	0.4	2.5	2.7	n.a.
1986-88 average	3.3	1.5	6.7	2.5	0.7	0.4	2.6	2.6	n.a.
Poland[g]	6.0	n.a.	20.4	n.a.	6.3	5.1	3.8	3.4	28.0
1992-94 average[g]	n.a.	n.a.	24.5	n.a.	6.9	4.3	5.4	4.3	32.4[m]
1986-88 average[g]	11.8[n]	n.a.	26.4[n]	n.a.	n.a.	n.a.	n.a.	n.a.	36.9[n]
Switzerland[g]	1.1	n.a.	4.7	2.2	0.8	1.6	2.7	2.8	n.a.
1992-94 average	1.5	n.a.	4.4	n.a.	1.0	1.5	3.1	2.8	n.a.
1986-88 average	2.1	n.a.	5.8	n.a.	1.2	1.4	3.3	3.0	n.a.
Turkey[g]	16.8	4.8	40.9	n.a.	8.4	8.1	2.8	1.7	n.a.
1992-94 average[g]	15.3	4.8	43.2	n.a.	12.3	7.2	2.3	2.0	n.a.
1986-88 average[g]	18.1	4.60	46.0	n.a.	15.7	6.4	1.8	1.7	n.a.
United States	1.7	1.29	2.7	1.3	7.3	1.7	1.8	2.1	7.6
1992-94 average	1.7	1.35	2.8	1.4	6.5	1.8	1.9	2.2	8.1
1986-88 average	1.9	1.39	2.9	1.4	8.6	1.5	2.0	3.0	8.7
OECD average[p]	2.1	1.71	8.2[o]	1.5[q]	3.2[r]	2.7[r]	4.7[r]	3.2[r]	11.4
1992-94 average[p]	2.4	1.89	8.9	1.8[q]	5.0	2.8	4.9	3.1	12.8
1986-88 average[p]	2.8	1.96	8.7	2.2[q]	5.6[s]	2.5[s]	5.2[s]	3.3[s]	13.0

n.a.: not available. The first row of data for each country provides the latest available year, either 1996 or 1997.
Note: For definitions and sources, see following page.

Table I.4. **Main agricultural indicators** *(cont.)*
Definitions and sources

a) % of agriculture in GDP:
National accounts gross value added for agriculture forestry and hunting as a percentage of Total Gross Domestic product for most countries. For a few, like Switzerland, Gross Value Added (GVA) at market prices (corresponding to Agricultural Gross Domestic Product) as a percentge of Total Gross Domestic Product (GDP) GVA at market prices is obtained by subtracting intermediate consumption from the value of output. Intermediate consumption, which is to measure all goods and services consumed in the production process, comprises the same items as in Eurostat's accounts database, plus one line for adjustment (*e.g.* to accommodate VAT under-compensation). GVA can therefore be considered as a residual, showing the contribution of agriculture to a country's Gross Domestic Product (GDP). Data taken from OECD, *Economic Accounts for Agriculture* database.

b) % of food processing in GDP:
STAN database for Industrial Analysis. Industry S3112 (Food). Value as a percentage of Total Gross Domestic Product (GDP).
Data taken from OECD, *STAN* database.

c) % of agricultural employment in total civilian employment:
Civilian employment according to the International Standard Industrial Classification (ISIC) division agriculture, hunting, forestry, and fishing expressed as a percentage of total civilian employment. Latest year 1997.
Definitions and data taken from OECD, *Labour Force Statistics* database.

d) % of food processing in total civilian employment:
STAN database for Industrial Analysis. Industry S3100 (Including food, beverages, tobacco and fisheries products).
Number engaged as a percentage of Civilian employment according to the International Standard Industrial Classification (ISIC).
Data taken from OECD, *STAN database*.

e) % of agricultural trade in total merchandise trade:
Trade data taken from the OECD *Foreign Trade Statistics*, Paris, January 1999, using the Standard International Trade Classification (SITC) (Revision 2) codes.
The categorisation of commodities is in accordance with the OECD Secretariat definition of Agricultural trade, which includes:
Agricultural commodities: 00 + 01 (including live animals) + 02 (excluding 025 eggs) + 041 to 045 + 054.1 + 054.2 + 054.4 + 054.5 + 054.81 + 057 + 06 + 08 (excluding 081.42 fishmeal) + 22;
Agricultural processed products: 091 (animal oils and fats) + 4 (vegetable oils and fats) excluding 411.1 (fish oils) + 046 to 048 + 054.6 to 056 + 058 (excluding 054.81 manioc) + 025 + 098 + 07 + 11; and
Agricultural raw materials: 261 + 263 + 268 + 232 + 264 + 265 + 12 + 21 + 29.
Latest available year is 1997 for all countries except the US for which it is 1996.

f) % of food in total consumer expenditure:
Final Consumption Expenditure of Resident Households for Food as a percentage of total Final Consumption Expenditure.
Data taken from OECD, *National Accounts.*

g) OECD Secretariat estimates based on national sources.

h) EU-15.

i) Excluding Denmark, Greece, Ireland, Luxembourg, Netherlands, Portugal, Sweden.

j) Excluding Ireland, Italy and Luxembourg.

k) Excluding Ireland and Luxembourg.

l) Excluding Denmark, Greece, Luxembourg, Portugal and Spain.

m) 1992-94 = 1991.

n) 1989-91 = 1989, from a national source.

o) Excluding Hungary and Poland.

p) Excluding Czech Republic, Hungary and Poland.

q) Excluding Czech Republic, Hungary, Korea, Poland, Switzerland and Turkey.

r) Excluding Korea, Mexico and United States.

s) Excluding Czech Republic, Korea, Mexico, Poland and Hungary.

employed in agriculture. The average share of the workforce employed in agriculture and food processing has declined in all OECD countries for which data are available.

The importance of agricultural trade varies among OECD countries. Exports of agricultural commodities and processed products, as a percentage of total exports range from less than 5 per cent in Japan, Korea, Norway and Switzerland to over 20 per cent in Australia and New Zealand. In many OECD countries, the relative importance of processed product exports has remained stable or increased, while declining for agricultural commodities. Imports of agricultural commodities and processed products represent less than 10 per cent of total imports in all OECD countries. The relative importance of agricultural commodity imports has declined in contrast to processed product imports which have increased.

Food continues to account for a significant but declining share of total consumer expenditures, at 11 per cent in 1996 for the OECD as a whole, compared to 13 per cent a decade earlier. The Czech Republic, Mexico and Poland report the highest proportion of consumer expenditures on food at over 20 per cent.

2. EVOLUTION OF AGRICULTURAL SUPPORT

Long-term trends in agricultural support

Within wide variations in the levels, composition and trends in all forms of support to agriculture among OECD countries and across commodities, the major trends in agricultural support in OECD area since 1986-88 include:

- a slow downward trend in the level of support to producers, as measured by the percentage PSE (Producer Support Estimate) in most OECD countries, but more markedly in countries with low overall levels of support;
- stability in the support to general services provided to agriculture, as measured by the percentage GSSE (General Services Support Estimate), at below 20 per cent of total support to agriculture (TSE);
- a slow long-run decline in total support to agriculture, as measured by the percentage TSE, and a shift in financing support from consumers to taxpayers;
- despite reductions in market price support, it is still the main source of support and, together with commodity-linked payments, represents over 80 per cent of support to producers, although constraints are increasingly attached to the levels of output, area or animal numbers that are supported; support based on overall farm returns, which is the form of support least linked to commodities, remains marginal.

Measurement of support to agriculture

The measurement of support to agriculture using the Producer and Consumer Subsidy Equivalent (PSE/CSE) method was adopted by the OECD in implementing the 1982 Ministerial Trade Mandate.[2] The purpose was to estimate the level and composition of support to agriculture, and to evaluate the impact of a progressive and balanced reduction of support using an economic model. The indicator incorporated the monetary value of transfers associated with all policy measures affecting agriculture grouped into four main categories: *i)* Market Price Support; *ii)* Direct Payments; *iii)* Reduction of Input Costs; and *iv)* General Services. At that time, market price support measures were predominant, with a relatively small number of policy measures within each of the other categories. Other transfers associated with agricultural policies, but not covered in these categories, were included in the calculation of Total Transfers.[3]

The "subsidy equivalent" was initially defined as "the monetary value that would be required to compensate farmers or consumers for the loss of income resulting from the removal of a given policy measure" based on work by Professor T. Josling in the 1970s, building on early work by Professor W. Corden.[4] However, the OECD indicators were defined more broadly as transfers from taxpayers and consumers to producers arising from policies. While the initial definition is an estimate of support in terms of equivalent farm income loss to producers, the OECD indicators have always been an estimate of support in terms of transfers to producers (PSE) and overall transfers associated with policies which support agriculture (Total Transfers). Therefore, although both PSE and Total Transfers as defined in the OECD work include the "subsidy element", they do not separately identify it.

In order to reflect as closely as possible the underlying definitions, it was agreed in 1998 to replace "subsidy equivalent" by "support estimate" in the names of the indicators, and to use the following nomenclature: Producer Support Estimate (PSE), Consumer Support Estimate (CSE), General Services Support Estimate (GSSE) and Total Support Estimate (TSE). In addition, a number of changes were made in the coverage and classification of measures, as well as the methods of calculation of each indicator in

percentage terms and in the producer and consumer Nominal Assistance Coefficients (NAC) – Box I.1. The objective of these changes was to make the indicators more consistent (across countries, policy measures, and over time), transparent (providing as much information as possible), useful and timely (for policy purposes), and more pragmatic (simple to understand and calculate).[5]

Box I.1. **Definitions of the OECD indicators of support**

Producer Support Estimate (PSE): an indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures which support agriculture, regardless of their nature, objectives or impacts on farm production or income. The PSE can be expressed in monetary terms; as a ratio to the value of gross farm receipts valued at farm gate prices, including budgetary support (percentage PSE); or as a ratio to the value of gross farm receipts valued at world market prices, without budgetary support (producer NAC).

Consumer Support Estimate (CSE): an indicator of the annual monetary value of gross transfers to (from) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures which support agriculture, regardless of their nature, objectives or impacts on consumption of farm products. The CSE can be expressed in monetary terms; as a ratio to the value of consumption expenditure valued at farm gate prices, including budgetary support to consumers (percentage CSE); or as a ratio to the value of consumption expenditure valued at world market prices, without budgetary support to consumers (consumer NAC).

General Services Support Estimate (GSSE): an indicator of the annual monetary value of gross transfers to general services provided to agriculture collectively, arising from policy measures which support agriculture, regardless of their nature, objectives and impacts on farm production, income, or consumption of farm products. The GSSE can be expressed in monetary terms or as a percentage of the total support to agriculture (percentage GSSE).

Total Support Estimate (TSE): an indicator of the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures which support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products. The TSE can be expressed in monetary terms or as a percentage of the Gross Domestic Product (percentage TSE).

With the reform of agricultural policies in OECD countries, the number and complexity of policy measures has increased significantly, limiting the usefulness of the original PSE categories for the analysis of policies. This was particularly the case of the Direct Payments category, which increasingly embraced a wider range of measures providing support to farmers to achieve a variety of different objectives, all with different eligibility conditions and implemented in different ways. It is the implementation criteria (and not the objectives or effects of policies), highlighting the nature of the initial incidence of a measure, that provide the basis of the new OECD classification presented in Box I.2. In turn, this classification by implementation criteria allows the PSE to become the starting point for analysis of the impacts of policy measures on production, consumption, trade, income, or the environment as, for example, in the Policy Evaluation Matrix currently under development.

Estimates of indicators of support based on this classification, together with the changes designed to clarify the coverage and interpretation of the indicators, are being presented and used for the first time in the present report. These estimates cover the period 1986-1998. While only the general outline of the new classification and definitions of the main support indicators are given here, a detailed description and analysis of the new methodology, coverage, definitions, and classification criteria is contained in Part II.2.

The new classification has been implemented as consistently as possible for all OECD countries over the period since 1986. It might be noted that, in general, the value of the TSE is essentially the same as the calculation of Total Transfers under the previous classification. Although both the percentage PSE and CSE are in general lower than before,[6] the relative levels of support across countries, and the long-run trends in the various indicators are similar. However, the breakdown of measures in the new classification provides more detailed and consistent information for policy analysis.

Box I.2. **Classification of policy measures included in the OECD indicators of support**

I. Producer Support Estimate (PSE) [**Sum of A to H**]

- A. Market Price Support
- B. Payments based on output
- C. Payments based on area planted/animal numbers
- D. Payments based on historical entitlements
- E. Payments based on input use
- F. Payments based on input constraints
- G. Payments based on overall farming income
- H. Miscellaneous payments

II. General Services Support Estimate (GSSE) [**Sum of I to O**]

- I. Research and development
- J. Agricultural schools
- K. Inspection services
- L. Infrastructure
- M. Marketing and promotion
- N. Public stockholding
- O. Miscellaneous

III. Consumer Support Estimate (CSE) [**Sum of P to S**]

- P. Transfers to producers from consumers
- Q. Other transfers from consumers
- R. Transfers to consumers from taxpayers
- S. Excess Feed Cost

IV. Total Support Estimate (TSE) [**I + II + R**]

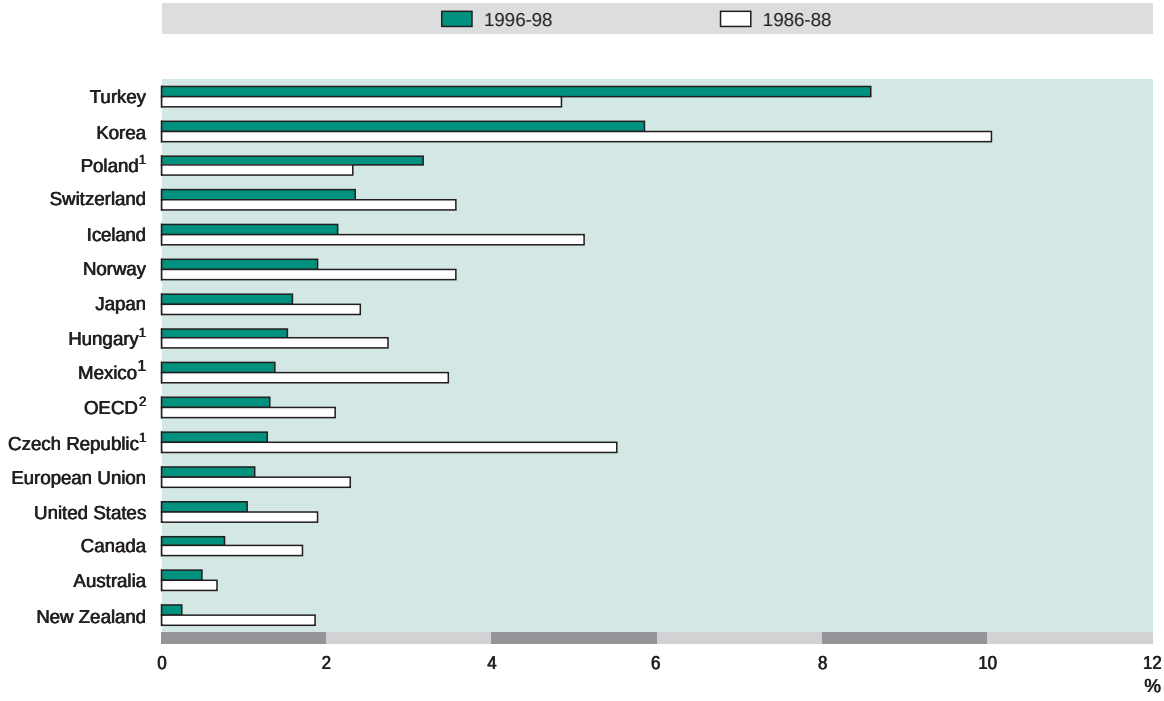
- T. Transfers from consumers
- U. Transfers from taxpayers
- V. Budget revenues

Overall level of support

Long-run decline in OECD support levels, but a large rise in 1998. The overall level of support to agriculture for the OECD area, as measured by the percentage TSE (support associated with agricultural policies as a percentage of GDP), fell from about 2.1 per cent in 1986-88 to 1.3 per cent in 1996-98.[7] It decreased in all countries, except Turkey and Poland (Graph I.1). The TSE reached about US$350 (ECU 300) billion in 1996-98 (Table I.5). The shares of the PSE and the GSSE in the TSE remained relatively stable over the decade at about 75 per cent and 20 per cent respectively, the remainder being budgetary subsidies to NSconsumers. Over the last decade, the consumer contribution to the financing of total support to agriculture, as measured by the TSE, decreased by about 10 percentage points to 53 per cent, the remainder being financed from budgetary sources. However, significant differences in the sources of financing as well as in the level and composition of support to agriculture persist across countries. In 1996-98, the TSE per capita ranged from about US$40 in New Zealand to US$900 in Switzerland (Graph I.2).

The overall level of support to producers in OECD countries as measured by the *percentage* PSE (which expresses the total value of support to producers as a percentage of the total value of gross farm receipts, including budgetary support),[8] has been on a slow downward trend, declining from

Graph I.1. **Total Support Estimate by country**
% of GDP



Notes: Countries are ranked according to 1996-98 levels.
For more detail, see Table III.16.
1. For the Czech Republic, Hungary, Mexico and Poland, 1986-88 is replaced by 1991-93.
2. For 1986-88, the Czech Republic, Hungary and Poland are excluded.
Source: OECD, PSE/CSE database.

41 per cent in 1986-88 to 33 per cent in 1996-98. This can be expressed as support to producers being about one third of total gross farm receipts, including budgetary support. In other words, as measured by the producer NAC of 1.50 in 1996-98, total gross receipts were 50 per cent higher than at world market prices without budgetary support. The PSE was 32 per cent in 1997, but increased to 37 per cent in 1998, due to a sharp fall in world market prices, which was not matched by a fall in supported producer prices on average (Table I.5).

The decrease in the percentage PSE over the last decade was largely due to a decline in market price support and payments based on output, although most other types of payments increased, especially those based on area planted or animal numbers, as well as support based on historical entitlements. The long-run decline in market price support has been caused largely by an upward trend in world market prices, and to a lesser extent to a downward trend in supported prices

The composition of support to producers, as measured by the PSE, has also changed over the last decade (Table I.6). The share of market price support fell from 77 per cent in 1986-88 to 67 per cent in 1996-98, and the share of payments based on output halved to 3 per cent. But the share of payments based on area or animal numbers doubled to 13 per cent. The share of payments based on input use (for example, interest concessions, capital grants) have been consistently around 9 per cent. Although payments based on constraints on the use of fixed and variable inputs (including environmental constraints) have increased nearly three fold, they represent only about 3 per cent of support. The share of payments based on overall farming income remain very low, representing less than 1 per cent of support. Overall, although with wide variations across countries, around 80 per cent of support to producers in OECD is still based on output, area or animal numbers, although

Table I.5. **OECD: Estimates of support to agriculture**

	1986-88	1991-93	1996-98	1997p	1998p
Producer Support Estimate (PSE)					
(US$ billion)	247	292	259	246	274
(ECU billion)	224	237	221	217	245
Percentage PSE [1]	41	39	33	32	37
Producer NAC	1.7	1.7	1.5	1.5	1.6
General Services Support Estimate (GSSE)					
(US$ billion)	63	77	66	66	63
(ECU billion)	57	63	56	59	56
Percentage GSSE [1]	19	20	19	20	17
Consumer Support Estimate (CSE)					
(US$ billion)	–192	–221	–172	–160	–181
(ECU billion)	–174	–180	–147	–141	–162
Percentage CSE [1]	–36	–34	–25	–24	–29
Consumer NAC	1.6	1.5	1.3	1.3	1.4
Total Support Estimate (TSE) [2]					
(US$ billion)	326	394	349	336	362
(ECU billion)	297	320	298	297	324
Percentage TSE [1, 3]	2.1	1.7	1.3	1.3	1.4

p: provisional. See Part II for definitions.

1. The denominators of the indicators in percentage are: PSE – the total farm receipts (including budgetary support); GSSE – the total value of support to agriculture as measured by the TSE; CSE – the total value of consumption expenditure on commodities domestically produced (measured at farm gate), including budgetary payments to consumers; and TSE – the total GDP.
2. TSE is the sum of PSE, GSSE and *transfers from taxpayers to consumers in the CSE*. Note that the TSE is *not* the addition of PSE, GSSE and CSE, as the transfers from consumers to producers appear with opposite signs in both the PSE and the CSE.
3. Excluding the Czech Republic, Hungary and Poland for which consistent GDP data is not available for 1986-88.

Source: OECD, PSE/CSE database.

some of the payments are based on limited output, area or animal numbers, or associated with environmental cross-compliance conditions.

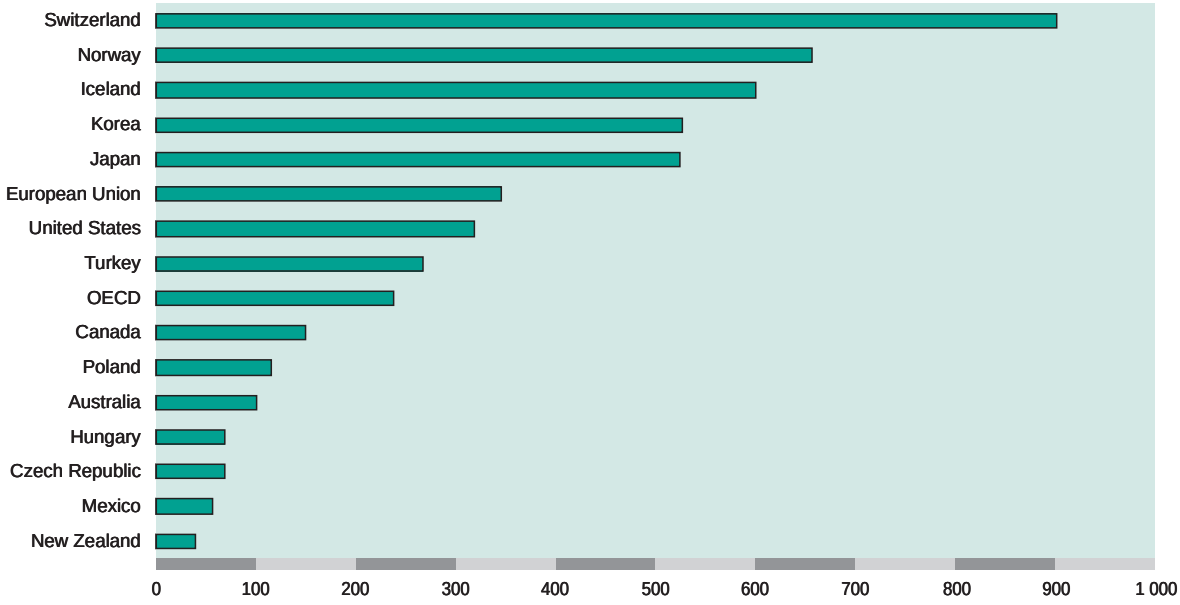
Reflecting the shift to budgetary payments, the percentage CSE, which measures the share of consumption expenditure due to policies affecting agriculture (the implicit tax on consumers), fell from 36 per cent in 1986-88 to 25 per cent in 1996-98. Thus, the contribution of consumers to finance support to producers is about a quarter of the value of consumption expenditure (at farm gate prices, and including consumption subsidies) on domestically produced commodities. In other words, as measured by the consumer NAC, consumption expenditure was 34 per cent higher than at world market prices without any budgetary payments. The percentage CSE increased by 5 percentage points to 29 per cent in 1998, mainly reflecting the increase in market price support to farmers (Table I.5).

Level of support by country

Wide variations in the long-run trend among OECD countries. There are wide variations in the level and composition of support for individual countries and commodities among OECD countries, as there are also wide variations in farm structures, natural, social and economic conditions, and trade positions. In 1996-98, the share of GDP to support agriculture, as measured by the percentage TSE, ranged from below 1 per cent in Australia and New Zealand to 5 per cent in Korea, and over 10 per cent in Turkey (Graph I.1). The share of TSE for general services provided to agriculture, as measured by the percentage GSSE, ranged from less than 10 per cent in the European Union, Mexico, Norway and Switzerland, to about 30 per cent in Australia, Canada, Turkey and the United States, and to 45 per cent in New Zealand (Graph I.3).

In 1998, support to producers, as measured by the percentage PSE and the producer NAC, increased in all countries, except Korea and New Zealand. However, over the last decade support to producers has tended to decrease in all countries. But, while it has remained below the OECD average in North America

Graph I.2. **Total Support Estimate per capita, 1996-98**
US$



Note: For more detail, see Table III.17.
Source: OECD, *Labour Force Statistics,* Paris, 1998; OECD PSE/CSE database.

and Oceania, it has remained higher in most European countries and Asian OECD countries. Countries within these groups present some similarities not only in their levels of support, but also in production conditions and trade positions. The Czech Republic, Hungary, Mexico, Poland, and Turkey are countries marked by ongoing major structural adjustments and similar macroeconomic developments, and generally recorded levels of support lower than the OECD average (Graphs I.4 and I.5). Although with some minor differences, the PSE per farmer and per hectare give essentially the same picture. The PSE per full-time farmer ranged from about US$500 in Mexico to US$34 000 in Switzerland, and the PSE per hectare ranged from about US$2 in Australia to US$9 500 in Japan (Graphs I.6 and I.7).

Support below the OECD average in North America and Oceania. Over the last decade, Australia, Canada, New Zealand and the United States have had levels of support to producers lower than the OECD average, as measured by the percentage PSE and producer NAC (Graphs I.4 and I.5). All of them are net exporters of major agricultural commodities, have a predominance of large farms, and a relatively low share of the civilian population in agriculture. With a percentage GSSE of around 30 per cent, the share of support to general services in total support to agriculture is the highest in the OECD area (Graph I.3). The share of market price support tended to increase and is more than half of the support to producers in 1996-98 in all these countries (Table I.6). However, this form of support is only applied to a small number of main commodities in an overall context of relatively low levels of support. Domestic prices in these countries are in general closely aligned with world market prices as shown by relatively low levels of the CSE and the consumer NAC (Graphs I.8 and I.9). In the case of the United States, the low level of implicit tax on consumption is accentuated by consumer subsidies, in particular food stamps. In 1996-98, the CSE was positive and the consumer NAC was below 1 reflecting a subsidy on food consumption in the United States.

In **Canada,** support to producers over the last decade more than halved to 15 per cent in 1996-98. While the share of market price support increased, the share of all other payments decreased, except for

Table I.6. **Composition of Producer Support Estimate**

% of PSE

		Market price support	Payments based on:						Miscel-laneous payments
			Output	Area planted/ animal numbers	Historical entitlements	Input use	Input constraints	Overall farming income	
Australia	1986-88	55	0	0	0	17	0	22	7
	1996-98	54	4	0	0	20	0	16	6
Canada	1986-88	49	17	17	0	15	0	0	2
	1996-98	55	9	4	11	12	0	9	0
Czech Republic	1991-93	95	0	0	0	5	1	–1	0
	1996-98	63	0	2	0	35	0	0	0
European Union	1986-88	84	6	2	0	7	1	0	0
	1996-98	52	4	29	1	9	4	0	1
Hungary	1991-93	74	0	0	0	18	1	2	6
	1996-98	39	5	0	0	46	0	9	0
Iceland	1986-88	87	1	1	0	11	0	0	0
	1996-98	46	46	0	0	8	0	0	0
Japan	1986-88	90	3	0	0	4	3	0	0
	1996-98	92	2	0	0	4	2	0	0
Korea	1986-88	99	0	0	0	1	0	0	0
	1996-98	95	0	0	0	4	0	1	0
Mexico	1991-93	86	1	0	0	13	0	0	0
	1996-98	30	0	2	34	33	0	0	0
Norway	1986-88	51	23	9	0	17	2	0	0
	1996-98	42	21	9	0	27	1	0	0
New Zealand	1986-88	26	0	0	20	45	0	9	0
	1996-98	78	0	0	0	22	0	1	0
Poland	1991-93	n.c.	0	0	0	n.c.	0	0	0
	1996-98	87	0	0	0	13	0	0	0
Switzerland	1986-88	87	1	6	0	2	0	0	3
	1996-98	65	1	15	12	3	1	0	3
Turkey	1986-88	76	0	0	0	24	0	0	0
	1996-98	72	2	0	0	26	0	0	0
United States	1986-88	47	7	26	0	13	2	2	3
	1996-98	50	1	2	19	15	6	3	5
OECD	1986-88	77	5	6	0	8	1	1	1
	1996-98	67	3	13	4	9	3	1	1

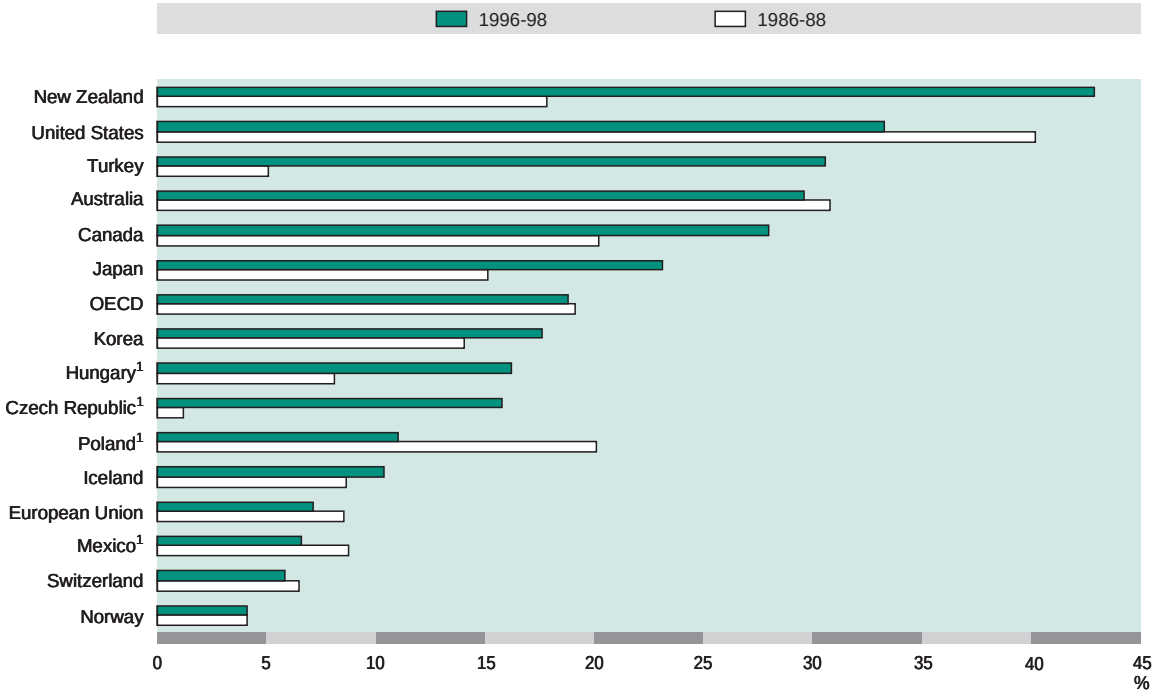
Note: n.c.: not calculated.
Source: OECD, PSE/CSE database.

payments based on overall farming income. In 1998, the PSE increased by 2 percentage points to 16 per cent, mainly due to higher market price support for milk and to higher crop insurance payments.

In the **United States,** the PSE decreased to 17 per cent in 1996-98, in particular due to a marked decrease in payments based on output and area planted. Market price support (mainly for milk and sugar) accounts for about half of support, most of the remainder is based on historical support entitlements for crops, and input use. Payments based on input constraints (including environmental constraints) increased three fold and now represent over 5 per cent of support to producers. In 1998, the PSE increased by 8 percentage points to 22 per cent, due to high *ad hoc* and *ex post* payments mainly for crops, and to market price support for milk, due to the combined effect of a rise in the domestic milk price and a fall in the world market price.

With a PSE of about 7 per cent over the last decade, **Australia** has the second-lowest level of support in the OECD area. Apart from market price support mainly provided to the milk sector, the other main

Graph I.3. **General Services Support Estimate by country**
% of TSE



Notes: Countries are ranked according to 1996-98 levels.
For more detail, see Table III.10.
1. For the Czech Republic, Hungary, Mexico and Poland, 1986-88 is replaced by 1991-93.
Source: OECD, PSE/CSE database.

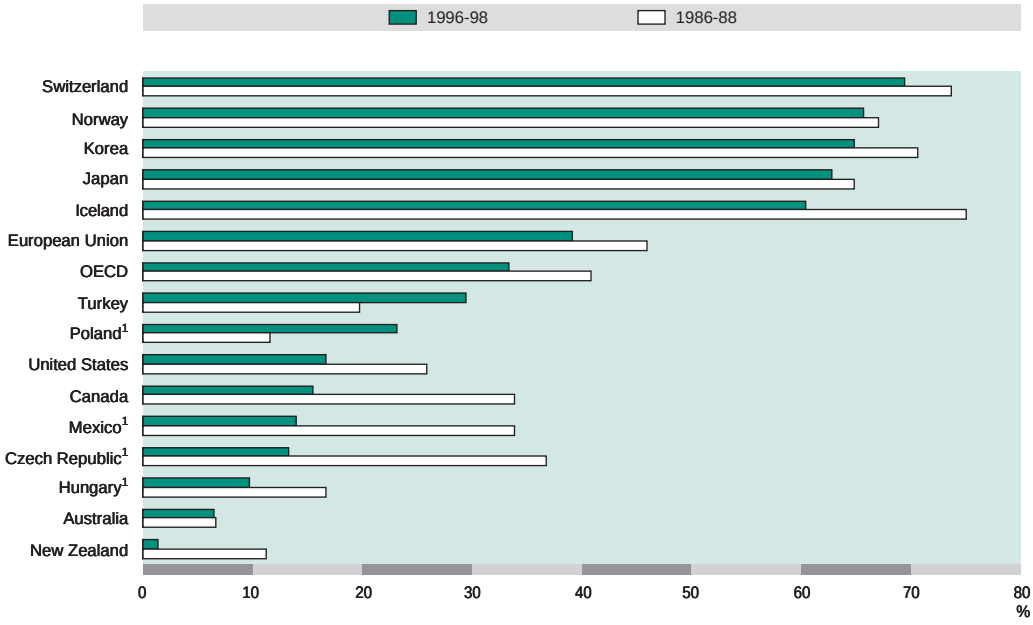
forms of support to producers are based on input use, and on overall farm income. In 1998, the percentage PSE remained at 7 per cent, but with a rise in producer prices and a reduction in world market prices for milk, which more than offset the reduction in payments based on input use, the PSE in monetary terms increased.

New Zealand, with a PSE of 2 per cent since 1991, provides the lowest level of support to producers of all OECD countries. In 1996-98, about three-quarters of support to producers was from market price support resulting from sanitary restrictions on imports of poultry and eggs, with the rest in the form of payments based on input use, mainly on-farm animal health services. In 1998, the percentage PSE fell to 1 per cent, due to a fall in market price support for poultry resulting from a rise in the world market price.

Support above the OECD average in most European countries and Asian OECD countries. Consistently over the last decade, support to producers has been above the OECD average in the European Union, Iceland, Norway and Switzerland, as well as in Japan and Korea. These Member countries present certain similarities in their production conditions and trade positions. All of them, including most of the EU member countries, are net importers of agricultural commodities, with a predominance of small farms and a relatively high share of the civilian population in agriculture. However, the EU as a whole is a net exporter of major agricultural commodities. While the level of support to producers in the EU is just above the OECD average, it is significantly above the OECD average in the other countries of this group (Graphs I.4 and I.5).

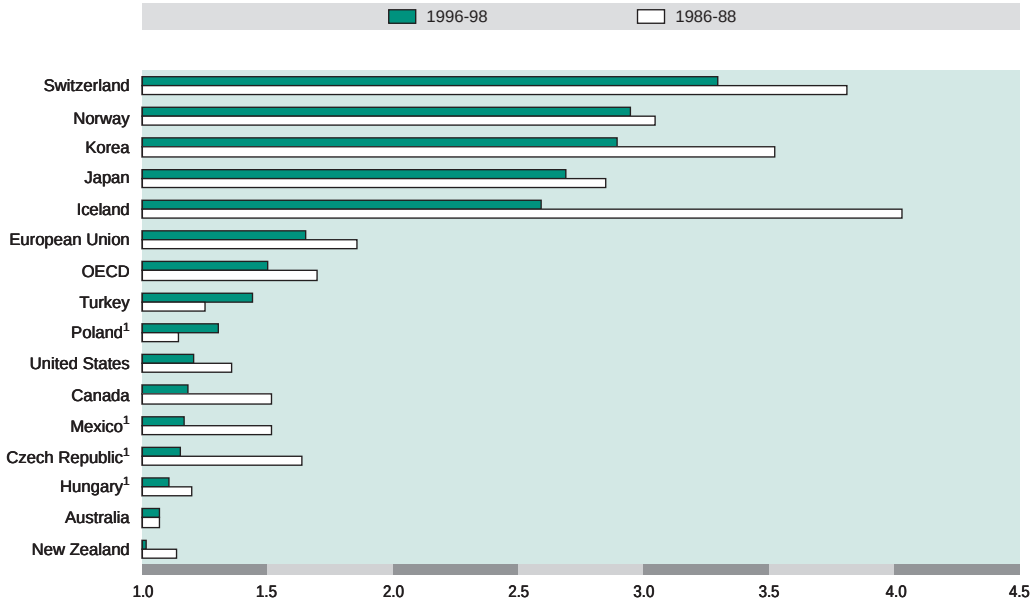
The percentage GSSE is significantly below the OECD average in the European countries, but around the OECD average in Japan and Korea (Graph I.3). Apart from Norway, countries in this group grant market price support for most major commodities, and have the highest share of market price support in overall support to producers amongst Member countries. This share has been significantly reduced to around

Graph I.4. **Producer Support Estimate by country**
% of value of gross farm receipts



Notes: Countries are ranked according to 1996-98 levels.
For more detail, see Table III.5.
1. For the Czech Republic, Hungary, Mexico and Poland, 1986-88 is replaced by 1991-93.
Source: OECD, PSE/CSE database.

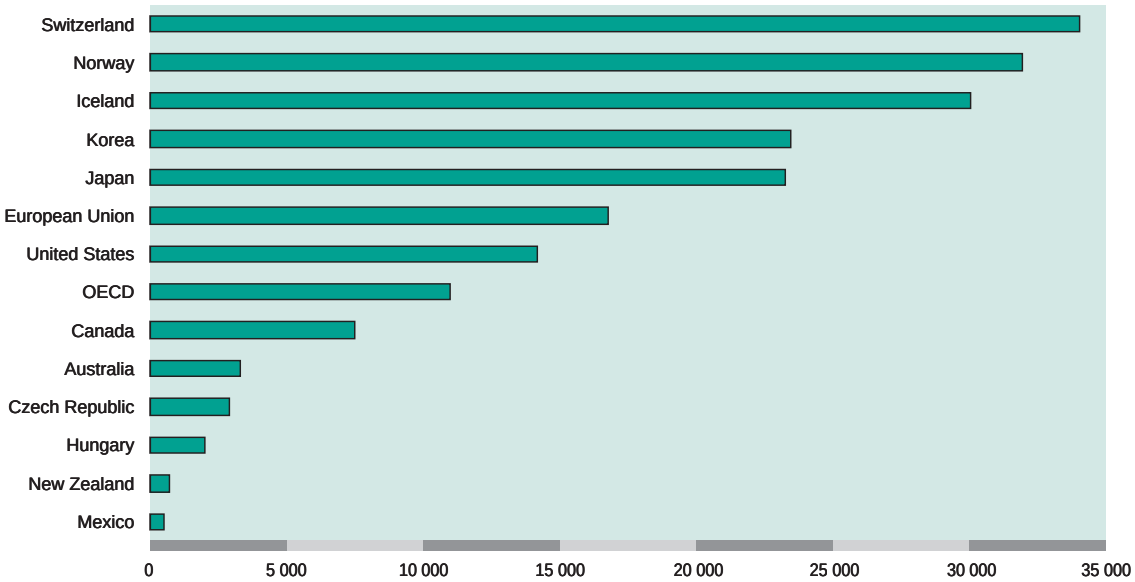
Graph I.5. **Producer Nominal Assistance Coefficient by country**



Notes: Countries are ranked according to 1996-98 levels.
For more detail, see Table III.5.
1. For the Czech Republic, Hungary, Mexico and Poland, 1986-88 is replaced by 1991-93.
Source: OECD, PSE/CSE database.

Graph I.6. **Producer Support Estimate per farmer, 1996-98**

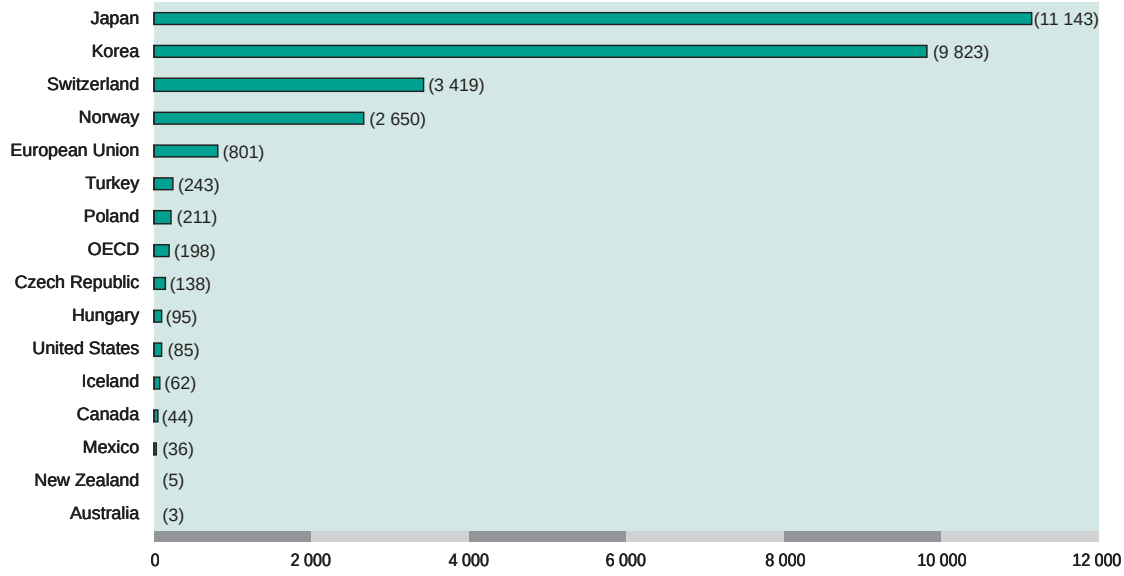
US$



Notes: PSE per Full-time Farmer Equivalent (FFE). All forms of labour – farmers, hired employees and unpaid family workers – are included in the calculation of FFEs. For the definition of FFE, see Part II.2.
Not calculated for Poland and Turkey.
For more detail, see Table III.7.
Source: OECD PSE/CSE database.

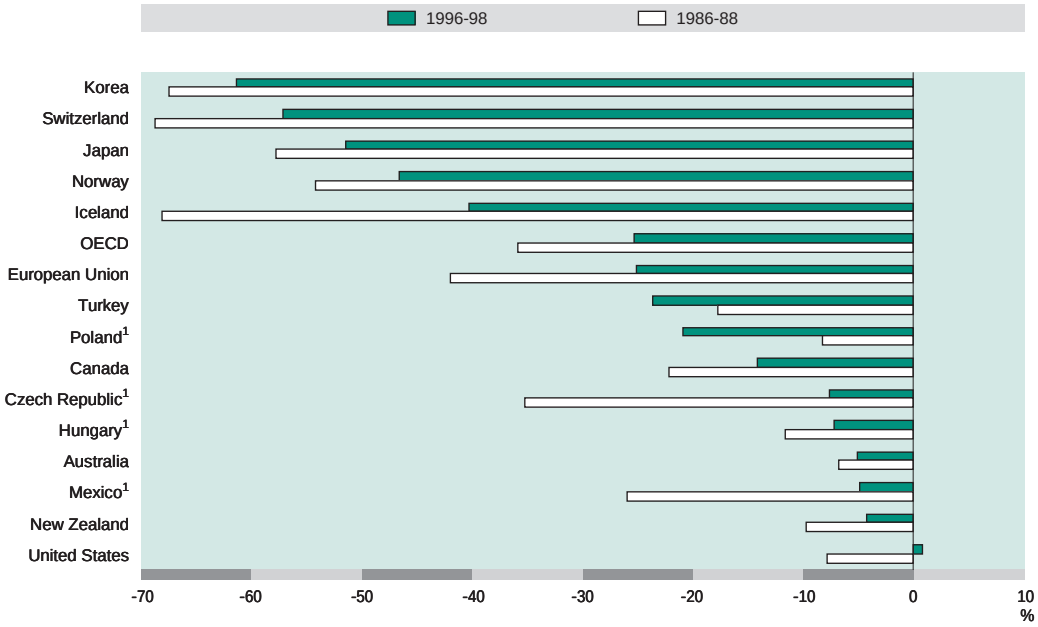
Graph I.7. **Producer Support Estimate per hectare, 1996-98**

US$



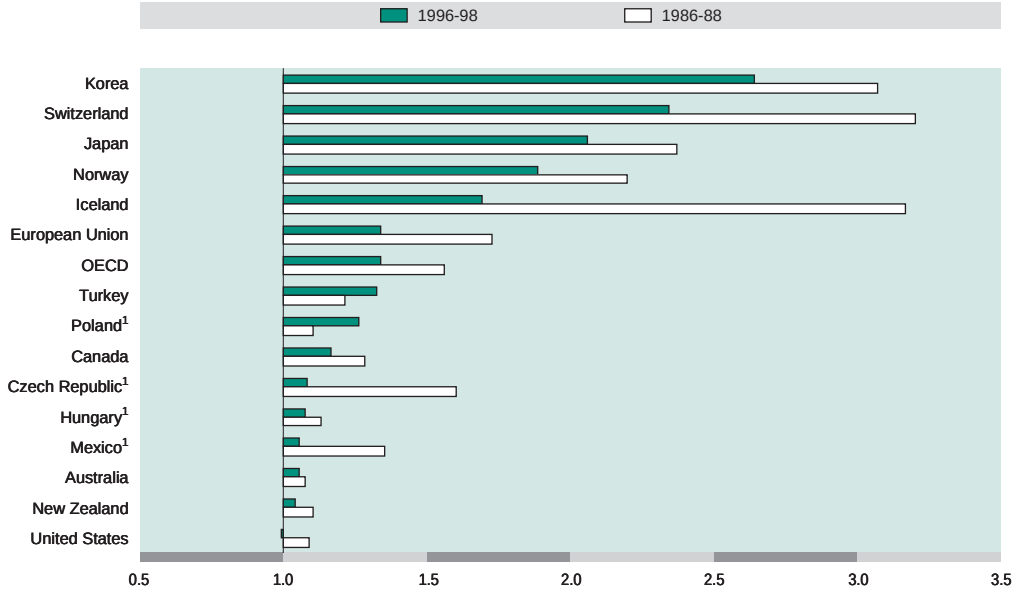
Notes: PSE per hectare of agricultural land (arable land, permanent crops and permanent meadows and pastures).
For more detail, see Table III.8.
Source: OECD PSE/CSE database.

Graph I.8. **Consumer Support Estimate by country**
% of consumption valued at the farmgate



Notes: Negative values indicate an implicit tax on consumption.
Countries are ranked according to 1996-98 levels.
For more detail, see Table III.12.
1. For the Czech Republic, Hungary, Mexico and Poland, 1986-88 is replaced by 1991-93.
Source: OECD, PSE/CSE database.

Graph I.9. **Consumer Nominal Assistance Coefficient by country**



Notes: Countries are ranked according to 1996-98 levels.
For more detail, see Table III.13.
1. For the Czech Republic, Hungary, Mexico and Poland, 1986-88 is replaced by 1991-93.
Source: OECD, PSE/CSE database.

50 per cent in the European countries, but remains above 90 per cent in Japan and Korea (Table I.6). The relative importance of market price support in these countries is mirrored in the levels and changes in the CSE and consumer NAC (Graphs I.8 and I.9).

As measured by the percentage PSE, support to producers in the **European Union** fell from 46 per cent in 1986-88 to 39 per cent in 1996-98. While the share of market price support fell, there was a substantial increase in the share of payments based on area planted and animal numbers. Payments based on input constraints (including environmental constraints) increased six fold, but only accounted for 4 per cent of support to producers at the end of the period. In 1998, the PSE increased by 7 percentage points to 45 per cent, due to an increase in market price support (due mainly to a fall in world market prices), as overall budgetary payments remained stable.

Support to producers in **Iceland,** as measured by the percentage PSE, declined by 15 percentage points over the last decade – to 60 per cent in 1996-98. The significant reduction in the share of market price support was more than compensated for by an increase in the share of payments based on output. In 1998, the PSE increased by 11 percentage points to 69 per cent, mainly the effect of an increase in market price support, due to an increase in domestic prices and a fall in world market prices for livestock.

Support to producers in **Norway** declined by 1 percentage point over the last decade – to 66 per cent PSE in 1996-98, the second highest PSE in the OECD area. Norway has traditionally recorded a low and falling share of market price support in the PSE, together with a high share of payments based on output and on input use. In 1998, the PSE increased by 5 percentage points to 70 per cent, the effect of an increase in market price support, mainly due to a fall in world market prices together with an increase in producer prices, and in payments based on area planted or animal numbers.

Support to producers in **Switzerland** declined by 5 percentage points over the last decade – to 69 per cent PSE, the highest in the OECD area in 1996-98. The share of market price support in the PSE decreased significantly together with an increase in the share of payments based on area or animal numbers and historical support entitlements. Payments based on input constraints (including environmental constraints) increased significantly, but those that are not commodity specific represent only 2 per cent of the support to producers. In 1998, the PSE increased by 5 percentage points to 73 per cent, mainly due to a fall in world market prices.

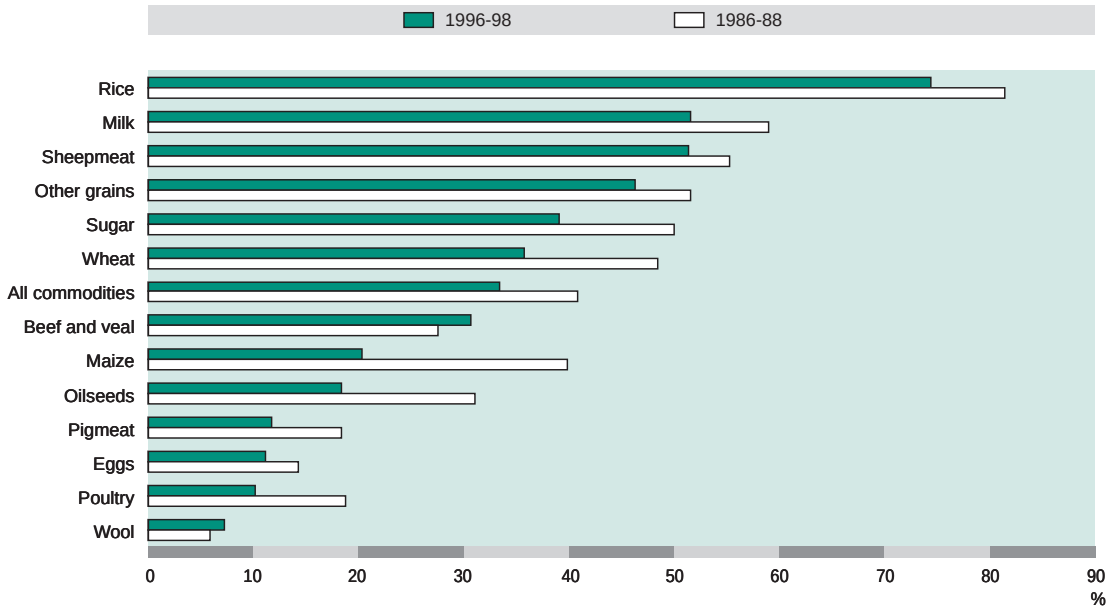
Support to producers in **Japan,** as measured by the percentage PSE, declined to 63 per cent in 1996-98, a fall of 2 percentage points since 1986-88. The share of market price support has remained stable, at around 90 per cent of support to producers. In 1998, the PSE increased by 2 percentage points to 63 per cent, which was due to an increase in market price support, resulting from a decrease in world market prices that was greater than the fall in domestic prices.

Support to producers in **Korea** decreased by 6 percentage points over the last decade to a 65 per cent PSE in 1996-98. Market price support decreased, but still represents 94 per cent of support to producers. In 1998, the PSE fell by 7 percentage points to 59 per cent, which was largely due to the sharp depreciation of the won which more than offset the fall in world market prices in dollar terms.

Support in countries marked by major structural problems and macroeconomic developments has remained below the OECD average (Graphs I.4 and I.5). The **Czech Republic, Hungary, Mexico, Poland** and **Turkey** have generally experienced high inflation[9] and volatile exchange rates over the last decade. The **Central European** countries and **Mexico** have in addition been undergoing a process of fundamental economic reform involving deregulation and trade liberalisation, the former in the context of transition from centrally planned to market economies, the latter in the context of NAFTA. With respect to agriculture, all countries in this group have severe structural problems leading to relatively low productivity, including in the upstream and downstream sectors. Despite the structural and productivity problems in the agricultural sector, the share of support to general services provided to agriculture, as measured by the percentage GSSE, is below the OECD average in all these countries, except in Turkey due to high financial costs associated with the price premium paid to cotton producers in 1993 (Graph I.3).

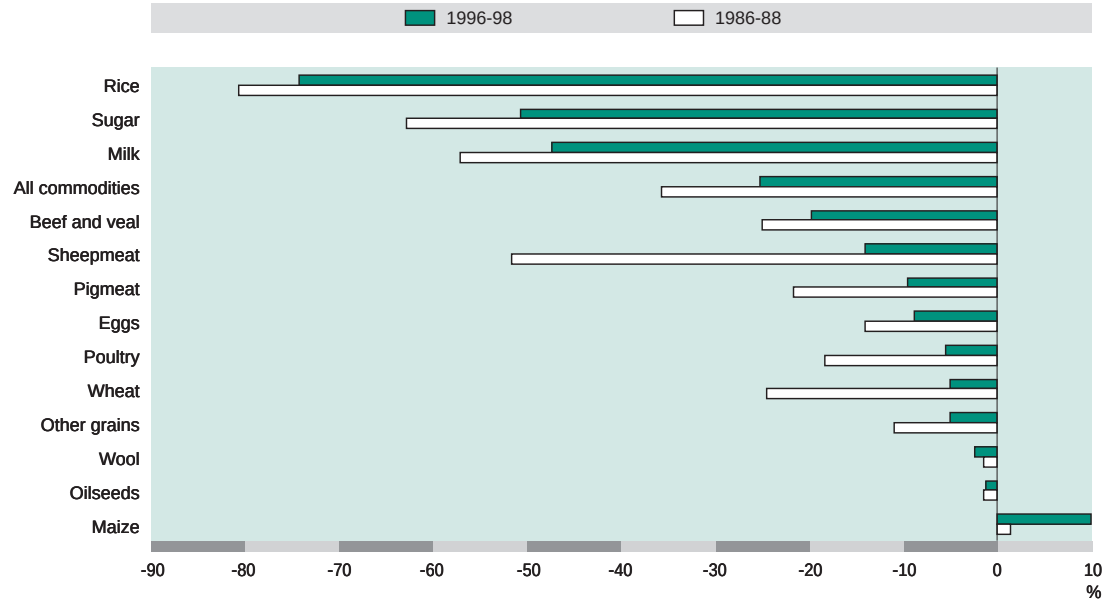
In the **Czech Republic,** since the economic reform initiated at the beginning of the 1990s, the PSE fell from 37 per cent to 13 per cent in 1996-98. Two-thirds of the support is in the form of market price support and 28 per cent is based on input use. In 1998, the PSE increased by 7 percentage points to 17 per

Graph I.10. **Producer Support Estimate by commodity**
OECD average as % of value of gross farm receipts



Notes: Products are ranked according to 1996-98 levels.
For more detail, see Table III.6.
Source: OECD, PSE/CSE database.

Graph I.11. **Consumer Support Estimate by commodity**
% of consumption valued at the farmgate



Notes: Negative values indicate an implicit tax on consumption.
Products are ranked according to 1996-98 levels.
For more detail, see Table III.13.
Source: OECD, PSE/CSE database.

cent, the combined effect of increases in market price support (mainly for grains and milk) and in payments based on area planted or animal numbers.

In **Hungary,** since the economic reform initiated at the beginning of the 1990s, the PSE fell from 17 per cent to 10 per cent in 1996-98. While the share of market price support in support to producers fell to 45 per cent, the share of payments based on input use increased significantly to 42 per cent. In 1998, the PSE increased by 4 percentage points to 12 per cent, essentially the effect of an increase in market price support (mainly for milk) and to a limited extent in payments based on input use.

In **Poland,** support to producers, as measured by the PSE, initially fell significantly with the economic reform at the beginning of the 1990s, but has since doubled to reach 23 per cent in 1996-98. This increase has been the result of a significant rise in market price support, which now accounts for 87 per cent of the PSE. At the same time, the share of support based on input use halved to 13 per cent. In 1998, the PSE increased by 4 percentage points to 25 per cent, due to an increase in market price support, essentially the combined effect of a rise in producer prices and a decline in world market prices.

In **Mexico,** with the economic reform initiated at the beginning of the 1990s, the PSE decreased by 20 percentage points to 14 per cent in 1996-98. Market price support and support based on input use have fallen significantly to respectively 56 and 17 per cent of support to producers, and a quarter is now in the form of support based on historical entitlements (PROCAMPO). In 1998, the PSE increased by 3 percentage points to 19 per cent, essentially due to a rise in producer prices, as the fall in world market prices was more than offset by the depreciation of the Mexican peso.

In **Turkey,** support to producers, as measured by the PSE, has been below the OECD average but has increased in each of the last three years to reach 29 per cent in 1996-98. The main source of support remained market price support accounting for 82 per cent of the PSE, while payments based on input use account for 17 per cent. In 1998, the PSE increased by 8 percentage points to 39 per cent, due to an increase in market price support, essentially due a rise in producer prices as the depreciation of the Turkish Lira more than offset the fall in world market prices in dollar terms.

Level of support by commodity

Wide variations also in support among commodities. As with countries, there are also wide variations in the levels of support to producers for the major agricultural commodities.[10] Since 1986-88, the percentage PSE declined for all commodities, except for beef and veal, and wool (Graph I.10). Despite a fall of 7 percentage points, at 74 per cent, the PSE for rice remained the highest in 1996-98. The PSE for wheat and sugar fell by over 10 percentage points, but together with rice, milk and sheepmeat were above the OECD average. Rice, sugar and milk are commodities for which market price support continues to be the main source of support in all OECD countries.[11] Consequently, these commodities are those with the highest levels of implicit tax on consumption as measured by the CSE. On the other hand, maize consumption has been generally subsidised, mainly due to relatively high consumption subsidies on maize used for food in Mexico (Graph I.11).

The percentage PSE for crops overall is below the OECD average, having fallen by over 20 percentage points for maize and by over 10 percentage points for oilseeds over the last decade. The shift from market price support to payments based on area planted and animal numbers has, in general, been accompanied by a reduction in support for crops, but an increase for beef and veal. However, in 1998, percentage PSE increased for all commodities, except poultry. This was mainly the result of the fall in world market prices not matched by declines in domestic support prices.

3. EVALUATION OF AGRICULTURAL POLICY DEVELOPMENTS

The previous section reviewed the main trends in the level and composition of support to agriculture, and the incidence of that support on taxpayers and consumers, as measured by a number of OECD indicators. This section evaluates the broad directions in agricultural policy reform in Member countries over the last decade, followed by the main policy developments in 1998 and a review of new framework laws for agricultural policy reforms in the EU, France, Japan, Korea and Switzerland. An in-depth evaluation of long-term trends in agricultural policy reform was undertaken in 1998 for the March meeting of the OECD Committee for Agriculture at Ministerial level, updated for the 1998 monitoring and evaluation report and is reproduced in part below.[12] The 1998 assessment presented here is complemented by special policy features in Part I.4 of this report on food safety, the environment, the EU single currency and trade with non-member countries. Policy developments are assessed against the principles for agricultural policy reform adopted by the OECD Ministerial Council in 1987, re-affirmed in subsequent years, and most recently by Agriculture Ministers in 1998. The relevant text from Ministerial Communiqués is reprinted in Part II.1 of this report.

Long-term trends in agricultural policy reform

The context for policy reform changed significantly over the last ten years, suggesting a changing frame of reference for policy makers. Membership in the OECD has been enlarged since 1994 to include five additional countries (Czech Republic, Hungary, Korea, Mexico, Poland), thus widening the spectrum of economic and social conditions across the OECD. Population and, until recently, strong economic growth in South East Asia, combined with political upheavals in Central and Eastern Europe and the former Soviet Union, shifted trade patterns, while trade in processed products took on increased economic importance. The large surpluses, low prices and extensive use of export subsidies which characterised world cereal markets in the late 1980s gave away to strong demand, high prices and historically low stock-to use ratios by the mid-1990s, but surpluses and low prices re-emerged towards the end of 1997 and during 1998. Vertical integration and co-ordination, greater concentration, increased foreign ownership and new technologies have fundamentally altered the structure of the agro-food sector. Agriculture has become more specialised with bulk commodity markets and auction systems declining with the emergence of more differentiated products regulated by contracts. As the agro-food sector has become more integrated, many primary producers and processors have witnessed a decline in market power and, in some cases, a redistribution of risks and returns. At the other end of the food chain, consumers have become more vocal with the result that concerns, such as food safety, environment and animal welfare, have a higher profile on the policy agenda.

Shifting government priorities, budgetary pressures and the expansion of multilateral, regional and bilateral trade agreements have brought many changes to agricultural policy in Member countries, ranging from limited reinstrumentation to comprehensive reforms. From the domestic perspective, policy makers are seeking to balance a wider range of objectives and mediate amongst a broader range of interest groups. This has created a need for greater flexibility and adaptability in agricultural policies, consistency with broader policy frameworks and a shift in focus from the farmgate to the entire agro-food sector and rural economy. Progress has been made towards the OECD Ministerial principles for agricultural policy reform, in particular, following implementation of the Uruguay Round Agreement on Agriculture (URAA) from 1995. The main highlights have been:

- greater transparency in border protection and increased exposure of domestic markets to international competition, but overall barriers to trade remain high;

- reduced levels of support to agriculture and increased market orientation, but progress has been uneven across countries and commodities;
- significant shift from market price support to budgetary payments, although most payments remain linked by different degrees to commodities or inputs and supply controls persist;
- decreased use of subsidies for purchased inputs such as fertilisers and pesticides, with enhanced support for farm investment and diversification;
- growing emphasis on agri-environmental payments and cost-sharing measures, but the transparency, targeting and cost-effectiveness of these measures need to be improved;
- greater emphasis on continued structural adjustment and support to disadvantaged areas, with more attention to sector-wide policy impacts and policy coherence with rural development objectives;
- increased focus on domestic regulatory measures, especially in the areas of food safety/quality, leading to international disputes where such measures are perceived as constituting non-tariff trade barriers.

Reducing trade distortions

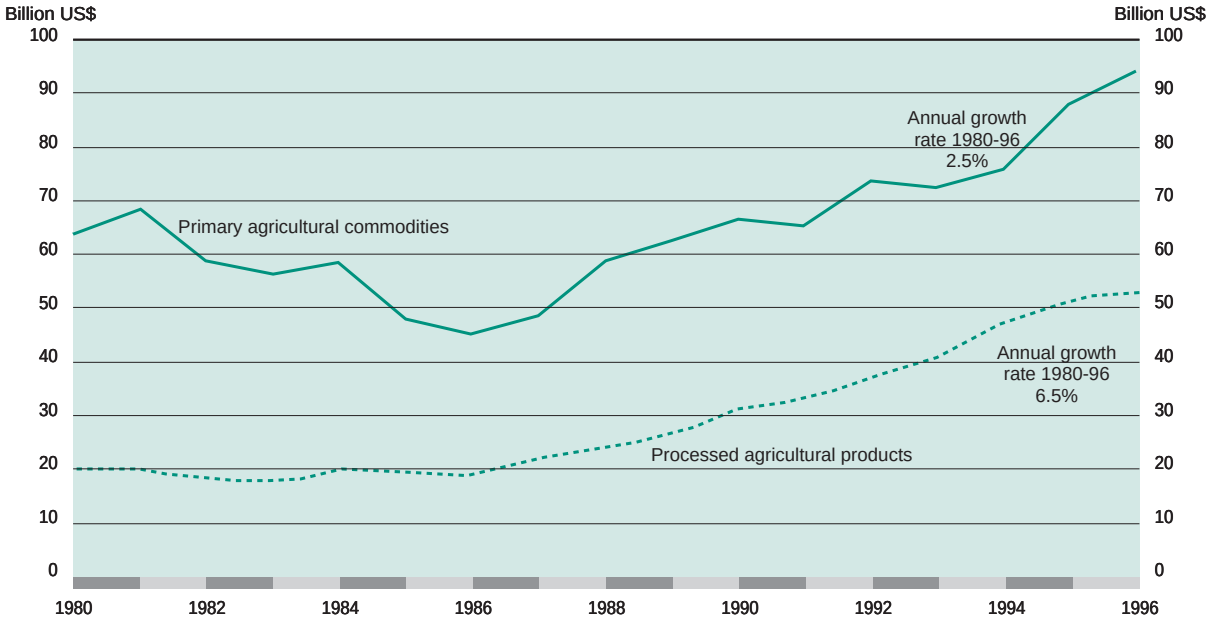
The tariffication that took place as a result of the URAA resulted in the elimination of virtually all quantitative restrictions on imports and their replacement by bound tariffs, although a number of tariff rate quotas have been created.[13] In the short run, however, the tariffs that have replaced non-tariff barriers are, in some cases, so high that they deter potential imports and continue to shield producers from world markets. Nonetheless, some hitherto closed markets have been opened and new trade opportunities have been created under the minimum access commitments. Many OECD countries have been able to take advantage of these newly created export opportunities, although a significant number of the tariff-rate quotas have not been filled. In some cases this is due to high in-quota tariffs but also because changes in domestic and international prices have reduced import demand or have made exports under quota arrangements less attractive. In addition, some questions have arisen concerning quota administration, in particular the allocation of import licences.

The high tariff levels for agricultural products stand out against the more modest levels achieved over successive GATT Rounds for manufactured goods in most industrial countries and an increasing number of middle and low income nations. Many manufacturing tariffs are of the order of 5-10 per cent, and several countries have average tariffs for the manufacturing sector of considerably less than 10 per cent. Agricultural tariffs by contrast average above 40 per cent, with tariff peaks of over 300 per cent.[14] However, applied rates within tariff rate quotas (TRQs) for those products are generally much lower.

The constraints on the value and volume of export subsidies are one of the more effective measures of the URAA, although the high world prices prior to 1998 made the export subsidy limits less constraining, especially for grains. Indeed, some governments implemented export taxes and quantitative export restrictions during peak-price periods in order to slow down or limit the outflow of grains and to prevent domestic prices from rising to world market levels. Export taxes and restrictions make goods more expensive for importers, and export restrictions also prevent supplies from reaching international markets, and may therefore increase concern over price fluctuations and the availability of food in countries that are heavily dependent on food imports. More recently, export subsidy constraints have been binding in a large number of cases, reducing the distortion of trade that would otherwise have occurred.

There has also been a move to a more liberal trade regime for processed food products, which will have substantial benefits for consumers and the agro-food sector, especially as trade has grown more rapidly for processed than for primary agricultural products (Graph I.12). A 1997 OECD study, *The Uruguay Round Agreement on Agriculture and Processed Agricultural Products*, identified significant tariff reductions for some products in some countries which were expected to stimulate trade.[15] The report also noted that tariff escalation was reduced in some cases although still evident in a number of product chains. However, as in the case of primary agricultural products, the current protection levels for processed food products remain high and the immediate gains from trade liberalisation are likely to be small. In general, tariffs

Graph I.12. **OECD exports in primary and processed agricultural products**



Notes: For the definition of agricultural commodities and processed products, see the notes to Table I.4. OECD exports include new Members as of year of accession: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994) and Poland (1996). Intra-EU trade has been excluded.
Source: OECD, *Foreign Trade Statistics,* 1999.

have not been reduced more for processed than for primary agricultural products under the URAA, and the reductions are less in many cases.

Tariffication has been used less frequently for processed products and where it has been applied, the high tariffs established for the agricultural primary products carry through to the processed goods. The tendency to concentrate tariff reductions on products with relatively low protection levels, and to minimise reductions on sensitive items, such as dairy and sugar products, applies to basic and processed products alike. Consequently, sensitive processed products that have been tariffied are unlikely to benefit significantly from tariff reductions in the short or medium term; it can be expected that the disparities in protection levels between product categories will remain. Tariff escalation, even though it has been reduced still prevails in some important product chains, notably impeding imports of processed products from less developed countries where these products are not covered by preferential trade agreements.

Export subsidies have been less important for processed than for basic agricultural products in the past. Nevertheless, the export subsidy commitments under the URAA constrain exports of food products containing subsidised agricultural raw materials. Products likely to be most affected are those incorporating dairy components, sugar and cereals. Some countries have resorted to greater use of arrangements allowing duty-free entry of agricultural raw materials for processing if the final products are re-exported.

In parallel with multilateral trade liberalisation, bilateral and regional agreements continue to be developed, most of which include some provisions for agricultural commodities and processed products.[16] There has been an expansion of regional and other trade arrangements (*e.g.* NAFTA, CEFTA, AFTA) involving OECD and non-OECD countries in recent years. Many trading groups are set to expand in the future and, in contrast to the past, agricultural trade is often included in these arrangements. The Singapore WTO Ministerial Declaration noted that regional agreements can promote further liberalisation and may assist least-developed, developing and transition economies in integrating into the international trading system. Regional trade agreements may divert trade and investment to the extent that

they discriminate against third parties and restrict membership but contribute to the development of agricultural trade in cases where they allow countries to liberalise faster and more comprehensively than might have been possible through multilateral negotiations alone.

Increasing market orientation

A key reform principle is to allow market signals to influence the orientation of agricultural production. Greater market orientation has been achieved by reducing support and by delivering support through less distortionary measures, as evidenced by a decline in the producer and consumer Nominal Assistance Coefficients over the last decade for most OECD countries. The level of support can be reduced through reductions in administered prices and related interventions in domestic markets, or through reductions in budget outlays for the sector. But unless border protection is also lowered or modified to allow for the transmission of price changes, domestic markets continue to be sheltered from world markets and producers will not become more responsive to world market signals.

In carrying out reforms, some countries have put the emphasis on reducing the constraints on agriculture imposed by support policies with the aim of creating a competitive industry that can take advantage of emerging market opportunities. Others have primarily responded to internal and external pressures for reform, including those related to the implementation of the URAA. To achieve these objectives, many countries have frozen or lowered their administered prices over the last decade and these changes have often been accompanied by reductions in public purchases of agricultural commodities and some easing of supply controls (*i.e.* production quotas, land set-asides). As long as high levels of support remain in place, supply controls serve to reduce production and trade distortions, and to limit programme expenditures but they are usually associated with higher consumer costs and significant rigidities at the farm and downstream levels. In some countries, supply controls are also used to contribute to regional, environmental and social objectives. Such measures have tended to be used for those commodities with the highest levels of protection. The dairy and sugar sectors, for example, continue under tight supply management in many countries and generally less progress has been made in reducing support to these products.

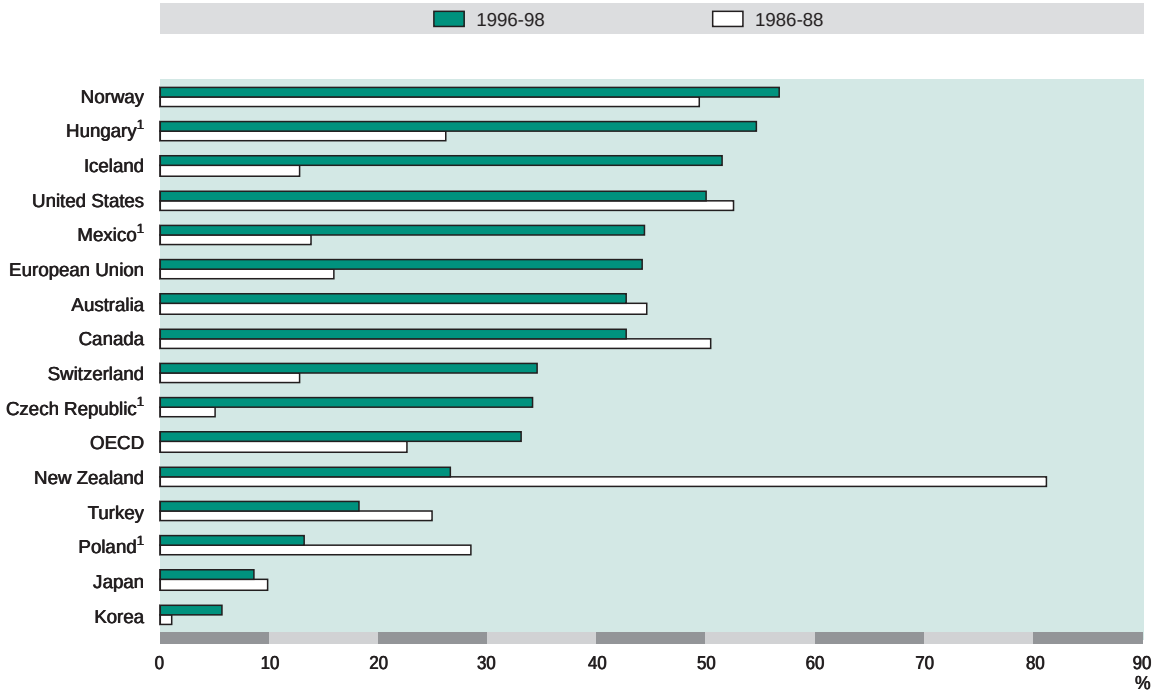
Shifting to budgetary payments

In their principles for policy reform, OECD Ministers advocated a shift away from production-linked measures and towards budgetary payments in providing support to farmers. They suggested that direct income payments, for example, would be particularly well suited to meeting the needs of, amongst others, low income farmers, those in particularly disadvantaged regions, or those affected by structural adjustment in agriculture. Budgetary payments can also provide a means of addressing certain objectives in agriculture that cannot be achieved by relying on the market mechanism alone, such as environmental or rural development objectives, without unduly distorting agricultural markets and trade.[17]

Taxpayer-financed budgetary payments to producers are more transparent and impose a smaller burden on low-income households than market price support. They can channel support more effectively to the intended beneficiaries and have smaller side-effects for other market participants. If the payments are targeted to specific problems they will be less distorting of production and trade and should allow policy objectives to be achieved with a lower overall level of support. Nonetheless, the government administrative costs associated with budgetary payments can be quite high initially, especially in countries with a large number of small farms, if there is a need for information as a payment base to be established for each eligible farm. Once this base is established, however, the administrative costs of a budgetary payment may be reduced and compare favourably with similar costs for other forms of support.[18]

Judging by the increasing share in total support provided to the agricultural sector, it appears that the OECD countries are favouring the use of budgetary payments (Graph 1.13). In fact a greater use of budgetary payments has been the predominant characteristic of agricultural policy reforms in almost all Member countries during the last decade. Nevertheless, the shift to budgetary payments has not been comprehensive and most countries still rely more heavily on price support than on budgetary payments to assist the sector.

Graph I.13. **Budgetary payments to producers**
% of PSE



Notes: Countries are ranked according to 1996-98 levels.
For more detail, see estimates of support to agriculture tables for each country in Part III.
1. For the Czech Republic, Hungary, Mexico and Poland, 1986-88 is replaced by 1991-93.
Source: OECD, PSE/CSE database.

While virtually all budgetary payment measures introduced in recent years have been implemented in the context of a decline in output-related price support and have therefore improved market orientation, they have not always reduced the dependency of the agricultural sector on support. In many cases they have been provided to compensate farmers for reductions in administered prices, leaving the overall level of support unchanged, or even increasing it if compensation was based on the assumption of lower producer prices that did not materialise. Compensation that is open-ended in time reduces the incentive for farmers to make those structural adjustments that are necessary because of reform and prolongs the burden on the taxpayer.

In terms of their influence on resource allocation, most of the programmes achieve a certain degree of dissociation from production by relating area and headage payments to fixed, historical parameters such as area planted to a crop or group of crops, or animals registered at a point of time in the past. Although such programmes weaken or eliminate the policy incentive to increase agricultural production at the margin, they usually require that the resources be kept in production and that the farmers stay in the industry. Some programmes contain payment ceilings per holding or are restricted to farms in disadvantaged areas, but many are proportional to farm size and benefit predominantly the bigger producers in the more prosperous farming areas. However, the shift to budgetary payments has made it more transparent as to who are the beneficiaries of support.

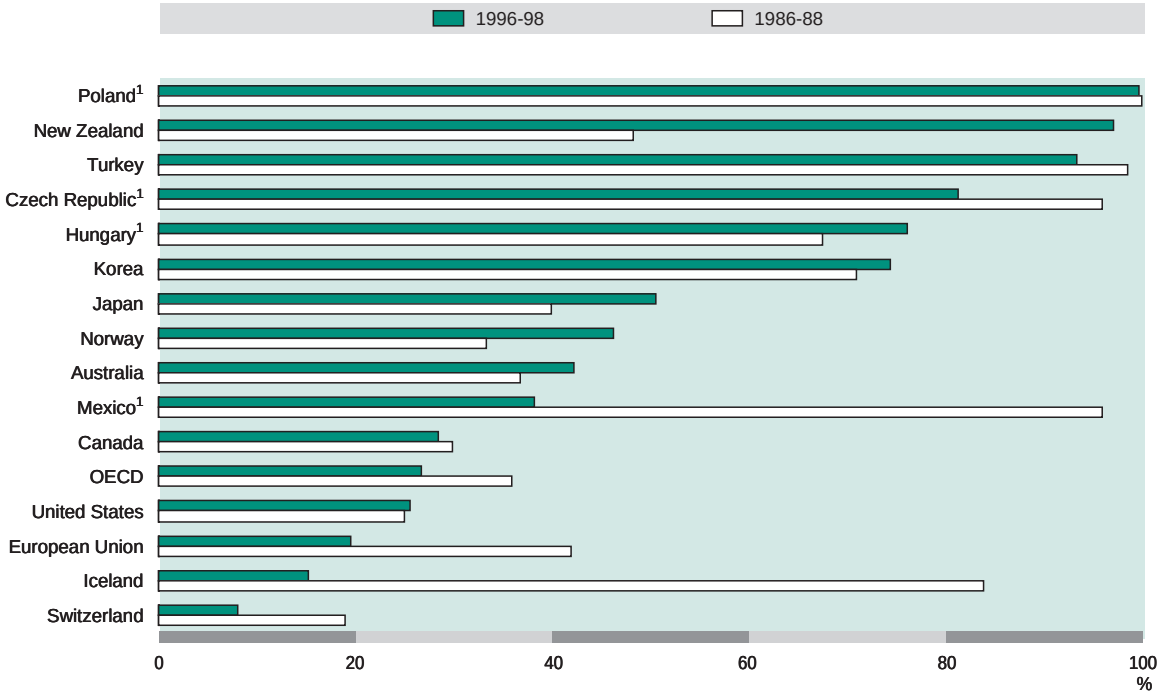
Declining use of input subsidies

Subsidies for yield-enhancing variable inputs can increase unwanted surpluses and encourage excessive use of purchased inputs at the expense of land and labour, while their net effects on farm

incomes are relatively small. Excessive use of fertilisers and pesticides, and water abstraction for irrigation at unsustainable rates, can also have detrimental consequences for the environment. General subsidies for farm equipment, buildings and structures, by increasing farm investment and attracting capital into the sector, also influence the allocation of productive resources.

Trends in types of input subsidies have generally been mixed (Graph 1.14). Over the last decade, there has been a general reduction or elimination of subsidies for fertilisers in many OECD countries. Many OECD countries continue to exempt farmers from taxes paid on transport fuels, particularly diesel. These tax exemptions typically result in farmers paying prices that are less than half of those charged to motorists. In much of the OECD area, subsidised water remains a major element of support for crops, though there have been reforms in some countries in the last decade, reducing or eliminating subsidies and imposing charges on water withdrawals by farmers.[19]

Graph I.14. **Payments to producers based on input use**
% of total budgetary payments



Notes: Countries are ranked according to 1996-98 levels.
For more detail, see estimates of support to agriculture tables for each country in Part III.
1. For the Czech Republic, Hungary, Mexico and Poland, 1986-88 is replaced by 1991-93.
Source: OECD, PSE/CSE database.

In general, investment aid is provided in a targeted fashion to facilitate structural adjustment and farm modernisation, or encourage adoption of less polluting technologies. A few countries have reduced or eliminated capital grants and interest concessions to farmers in recent years, but for some new Member countries (*e.g.* Czech Republic, Hungary, Mexico, Poland) subsidies for farm investments have been one of the primary means of modernising and restructuring the sector. Some of these countries have recently shifted away from providing capital grants and interest-free loans towards interest subsidies, which are not as completely disconnected from financial market conditions.

Improving environmental performance

Over the last ten years agricultural policy has increasingly addressed environmental issues and the sustainable use of resources in agriculture.[20] Agriculture influences the environment – soils, water, air, biodiversity, wildlife habitat and agricultural landscapes – in both beneficial and harmful ways. The specific impacts depend, among other factors, on the type and quantity of crops or livestock produced, the farming practices employed, the level and mix of chemicals applied, and site-specific environmental conditions. Farmers will enhance the environmental performance of the sector if they are faced with proper incentives to include the environmental costs and benefits of their activities in their production decisions (Box I.3). But markets do not always provide the right signals because many environmental costs and benefits are not accounted for in market prices, and, in some cases, agricultural support policies further distort production incentives.

Current efforts by Member countries to reform their agricultural policies are seen both as an opportunity and a risk for the environment. Policy reform that reduces market price support and input subsidies will contribute to achieving sustainable resource use. However, this will not necessarily be sufficient unless account is also taken of the provision by farmers of any non-renumerated environmental benefits and that farmers are held responsible for meeting the required level of environmental protection, including through input taxes and regulations (polluter-pays-principle).[21] Environmental measures in agriculture should be transparent, targeted to the objective and tailored to the environmental situation, and subject to regular monitoring and evaluation to ensure that they are effective and cost-efficient and do not distort production and trade.

The environmental performance of agriculture in the OECD area has improved in several respects over the last decade. The reductions in production-related support in recent years have in many cases generated a double benefit: they have resulted in a more efficient allocation of resources, while mitigating some of the negative effects of agriculture on the environment. In particular, reductions in price support and input subsidies have lowered the demand for chemical and mechanical inputs as well as for irrigation water. Reforms in the livestock sector have in most cases resulted in lower livestock densities, thereby reducing grazing pressure and manure surpluses and, as a consequence, the risk of soil erosion and nutrient leaching. Policy reforms have also slowed down the conversion of environmentally fragile land to agricultural uses, and in some areas have led to a shift of land from crop production to grass-based uses. The changes have sometimes been aided by land diversion schemes, which have paid farmers for idling land or for replacing arable crops by less intensive forms of production. Shifts in the location of agricultural production as a result of policy reform, which improve environmental performance in a particular country or region, may be offset by reduced performance in others.

Box I.3. Examples of agricultural practices that help sustainability

Rotation: alternating two or more crops on the same piece of land.
Intercropping: growing two or more crops simultaneously on the same piece of land.
Conservation tillage: seeding directly in the soil with little or no preparatory cultivation.
Agroforestry: growing of annual crops along with perennial trees or shrubs.
Silvipasture: Combining trees with grassland on which livestock graze.
Integrated pest management: using natural predators and pest control thresholds to control pests.
Adequate nutrient management: more targeted fertiliser use and reduction of emissions.
Semi-natural habitat management: providing hedges, low-level marshes and extensive grazing.

Source: OECD (1998), *Agriculture and the Environment Issues and Policies*, Paris.

However, there have been concerns that some of the positive environmental effects of agriculture could be reduced if reform causes agricultural activity to shrink, especially in areas where agriculture has historically supported a rich variety of flora and fauna and created scenic landscapes, or where it has

been associated with land conservation, including landslide and flood prevention. In some regions land that is taken out of agriculture will revert back to nature and enrich the environment, but in others it may degrade and erode, causing damage to wildlife habitat and biodiversity, and a loss of the flood controlling function of the land.

To prevent such damage but also to respond to the demand for environmental quality, many countries have implemented environmental measures in parallel with policy reform. These measures often involve payments aimed at reducing soil erosion, improving water quality, preserving or creating wildlife habitat and maintaining the landscape. However, most of these measures have been implemented through payments per hectare or per head of livestock rather than on the basis of specific environmental outcomes. Moreover, many of these payments have been provided in the context of high levels of overall agricultural support. There has been some resort to regulatory measures but little emphasis on levying financial charges on farmers to reduce environmental harm (polluter-pays-principle), which reflects a distribution of property rights over environmental resources that tends to favour farmers. Monitoring and assessment of the programmes have, in many cases, been insufficient.

Facilitating structural adjustment and rural development

The agricultural sectors in OECD countries continue to face pressure to adjust to economic, demographic and social forces, and to the changing economic environment created by agricultural policy reform. Structural adjustment in agriculture usually involves a decrease in farm labour (Graph I.15), an increase in the average farm size, mechanisation, greater concentration of production and, increasingly, diversification of the sources of farm household income.

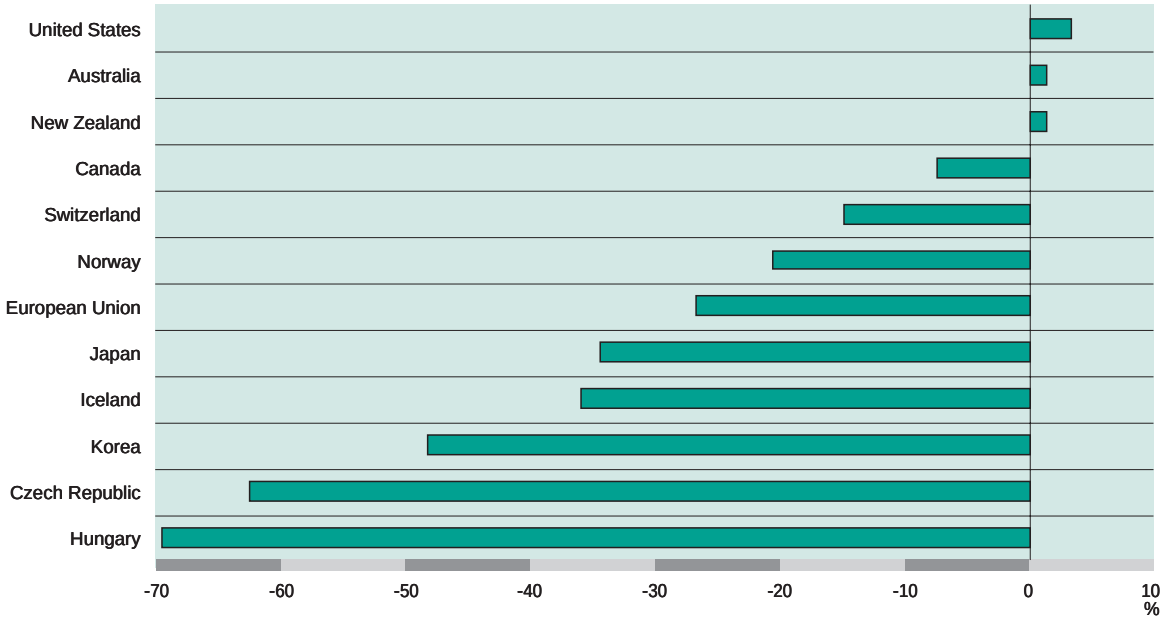
The pressure for structural adjustment can impose a degree of hardship on certain segments of the farming population, particularly in the short run. The problems are often aggravated by over-regulated land markets, tax exemptions and other restrictions that discourage the conversion of farm assets to alternative economic uses. Reducing such impediments to factor mobility is one way OECD countries have attempted to facilitate adjustment of the sector and permit a better allocation of resources. Improving factor mobility can also help increase the opportunities for farm households to mitigate the income losses and reduce the social costs associated with structural adjustment.

In the last ten years, virtually all OECD countries have implemented measures to promote structural adjustment in agriculture. Labour market measures, including education and retraining, are important elements in many structural adjustment policies. Other measures that have been used include early retirement schemes for farmers, installation and set-up assistance for new entrants into the sector, and incentives to ensure that land released in the restructuring process is taken up by viable farm units. While the majority of structural adjustment measures are sector-specific, some OECD Member countries have made efforts to embed their social security nets, retraining programmes and other employment measures for farmers in their national policy framework, which allows them to address social problems created by structural adjustment in agriculture in the same way as is done for other sectors.

It has been recognised by policy makers that rural development with its multiple objectives such as halting or reversing the decline in rural populations, reducing rural poverty, stimulating employment, fostering the development of small and medium-sized enterprises, protecting or enhancing rural amenities, maintaining a sufficient infrastructure and improving social facilities can not rely on agriculture and agricultural policy alone, but requires a broad range of economic activities and cross-sectoral policies.[22] Agricultural policy, with its emphasis on output-related support, has contributed to inflated land prices and rents, and may make rural areas less attractive to non-farm industries. Moreover, production-linked support has tended to increase rather than reduce inter-regional differences in income levels, as the largest benefits have often gone to farmers in the more affluent rural areas. At the same time, the decline in farm employment has continued.

One area where advances have been made in recent years is the promotion of regional quality produce. Some countries have begun to implement product certification and labelling schemes, which provide better information to consumers about food attributes, such as quality and geographic origin, thereby offering them a wider range of products and permitting producers of high-quality foods to benefit

Graph I.15. **Farm employment**
% change 1986-88 to 1996-98



Notes: As measured by Full-time Farmer Equivalent (FFE). All forms of labour – farmers, hired employees and unpaid family workers – are included in the calculation of FFEs. For more detail, see definition of FFE in Part II.2.
Historical data for Mexico, Poland and Turkey are not available.
For comparison purposes, Austria, Finland and Sweden have been added to the European Union in 1986-88.
Source: OECD, PSE/CSE database.

from a price premium. Promoting quality labels and labels of origin enables regional producers to specialise in certain quality segments and opens up niches for farmers who cannot be competitive on the basis of production costs alone, and can potentially stimulate economic activity in disadvantaged rural areas.

In rural regions where the prospects for economic diversification are limited, a fall in agricultural incomes could trigger a further outflow of agricultural labour and lead to economic and social problems. In such cases, social measures for low-income farm households, including direct income payments, can play an important part in easing the adjustment pressure and mitigating the degree of hardship. However, unless factor mobility is encouraged and productive outlets for labour, capital and land are provided, these measures will not help rural economies to become more viable in the long run. While most recent initiatives in rural development have been away from output-related agricultural support towards broader inter-sectoral and regional approaches, some major programmes for problem areas continue to be heavily centred on agriculture, especially in regions with few alternatives to agriculture.

Greater focus on regulatory reforms

Regulations are widespread in the agro-food sector. They are an integral part of agricultural support policies in the form of, for instance, administrative prices, supply controls and import licensing, but they are also common in the food processing industries, where many exemptions from competition laws have been granted, and where regulatory measures have been implemented to maintain competition in markets in which a group of producers, food manufacturers or retailers exercises a dominant influence. At the same time, new regulatory issues have emerged in connection with changing consumer concerns regarding food safety and quality, the way food is produced, the environment, biotechnology and animal welfare.

Regulations can be necessary and may enhance competition where markets do not ensure full transmission of economic signals and in meeting consumer concerns (*e.g.* food safety, animal welfare), but they can have adverse effects on economic performance if they are ill-adapted or have become unnecessary because market conditions have changed.[23] Regulatory measures that benefit certain groups of farmers or food manufacturers can have negative effects on the structure and performance of related industries, and exemptions from competition law can insulate inefficient firms from market forces, restrict innovation and hinder expansion into value-adding activities. Where regulations are used, they should be limited to areas of demonstrated market failure, to the extent possible be subjected to cost-benefit analysis, and their administrative and compliance burdens should be minimised by ensuring sufficient flexibility and clear definitions of responsibilities within the regulatory framework. There is also a risk that regulatory responses to legitimate public concerns can act as non-tariff barriers to trade, as evidenced by a number of international disputes involving domestic food safety and quality regulations.

The agricultural policy reforms of the past decade have permitted some relaxation of distorting regulations in OECD countries, although progress has been limited and restricted to a few commodity markets. Among the achievements that have been made in the regulatory field in recent years are a series of bilateral agreements on veterinary and health standards, some limited regional harmonisation of standards, and a greater recognition of the importance of transparent and science-based risk analysis. Greater international efforts in mutual recognition and, where appropriate, harmonisation of regulations are necessary to reap the full benefits of policy reform. Alignment and simplification of regulations within countries would facilitate these efforts and some of the new regulatory issues could also be addressed through industry-led quality schemes.

Agricultural policy developments in 1998

A detailed description of agricultural policy developments in each OECD country is contained in Part II.3 of this report. This section provides an overview of the main policy developments in 1998, evaluated with respect to the OECD Ministerial principles for agricultural policy reform.

It was a difficult year for agricultural policy makers in 1998. Poor global economic performance, including in some OECD countries, and the continuing Asian financial crisis led to reductions in demand for food and other commodities (discussed in Part I.1 of this report).[24] Market prices of most agricultural commodities fell sharply, especially for grains and pigs, causing farm cash receipts to fall dramatically in many countries. The relatively high commodity and strong trade growth prices of recent years had eased the pressure for government intervention in the sector, but governments once again faced strong farm-level demands for increased support and protection. In addition, a number of food-related concerns [*e.g.* BSE, E Coli 0157, salmonella, listeria, as well as increased public attention on the growing use of genetically modified organisms (GMOs)] raised consumer unease and led to demands for tougher regulation and stricter enforcement in many OECD countries. As a result, the focus shifted somewhat away from longer term policy objectives towards short-term, emergency measures that were not always consistent with the OECD Ministerial principles for agricultural policy reform. The key points of the evaluation of agricultural and related trade policy developments in 1998 include:

- increases in selected tariffs by a few Member countries and greater use of export subsidies (within UR disciplines) and export credits served to restrict market access and maintain agricultural trade distortions;
- resolution of some long-standing trade conflicts through various dispute settlement procedures combined with several new bilateral and multilateral trade initiatives contributed to longer term trade liberalisation;
- support to producers, as measured by the percentage PSE and the producer NAC, increased in all countries except Korea and New Zealand;
- market price support increased by 14 per cent from 1997 for OECD countries, as world prices fell and some countries increased administered prices, indicating no or only weak transmission of price changes to domestic markets;

- budgetary payments increased by 6 per cent from 1997 due to higher expenditures under existing compensatory payment schemes triggered by falling prices and emergency assistance programmes introduced in response to falling farm incomes;
- emergency income assistance programmes were generally transparent and temporary, but masked market signals and may renew expectations of continued support (moral hazard);
- OECD countries seeking EU membership continued to align agricultural institutions with the EU and appeared to move closer to the EU system of support to agriculture, although their levels of support are lower;
- agri-environmental measures to reduce environmental harm and to improve environmental performance continue to favour producer payments for altering practices (which are not always consistent with PPP) and there was more emphasis on setting specific objectives, targeting and evaluation;
- regulatory reform was the main means used to address food safety and quality concerns, which improved consumer confidence, but raised concerns about non-tariff barriers to trade, with increased attention to GMOs and animal welfare issues;
- agricultural policy and rural development programmes continued to merge with a focus on sector-wide structural adjustment aimed at increased competitiveness and industry-led business plans developed at the regional or sub-regional level

Trade measures

There was a mixed assortment of trade measures in 1998 – some aimed at reducing barriers and others in the direction of increased support and protection. **Japan** replaced the quantitative restriction on the import of rice with tariffs from 1 April 1999 (US$2 680 per tonne for fiscal 1999) pursuant to the UR Agreement on Agriculture. The **EU** reduced the tariff on the extra autonomous quota for bananas, while announcing a tax on imports of US corn gluten used in animal feed to take effect in June 2001 in response to US actions to impose a quota on wheat gluten imports. **Australia** converted all remaining quantitative restrictions to tariffs and removed export subsidies on cheese, sugar and tobacco. In **Mexico**, some milk import quotas were transferred to private importers for the first time and **Switzerland** dismantled its state monopoly on foreign trade in dairy products, enabling cheese and butter producers to trade directly with partners abroad.

However, the **Czech Republic** and **Poland** took initiatives to further protect domestic markets, including actions to limit preferential imports from other Central European Free Trade Agreement (CEFTA) countries, resulting in trade disputes among the members. **Poland** also introduced a system of additional import levies, under the UR Special Safeguards Clause, which are triggered if prices fall below a threshold price, affecting most crops and livestock products.

A number of Member countries expanded the use of export subsidies and export credits in 1998. **Canada,** the **Czech Republic** and the **US** increased activity under existing export credit programmes. Similarly, the **US** rolled-over unused export subsidy commitments for skim milk powder. The **EU** reached its UR limit on subsidised exports for fruits, vegetables and some dairy products while rolling-over its export subsidy commitments from previous years for some other commodities. The **Czech Republic, Hungary** and **Turkey** also increased the use of export subsidies although, in the case of **Hungary,** reforms were introduced to increase transparency and reduce expenditures in future years.

Several bilateral and multilateral negotiations to liberalise trade were completed or underway in 1998. The **EU** reached a sanitary agreement with **Canada** covering trade in live animals and animal products. Negotiations between the **EU** and South Africa on a Trade and Co-operative Agreement, including agricultural products, reached final agreement in March 1999 while the EU took initial steps towards future trade negotiations with **Mexico,** MERCOSUR members and a Transatlantic Economic Partnership with the **US. Canada** and the **US** agreed to a number of measures to improve bilateral trade in agricultural products, including greater harmonisation of health and safety regulations. **Turkey** is negotiating with the EU and with EFTA countries to extend existing trade agreements to agricultural commodities.

Table I.7. **Summary of WTO and NAFTA dispute settlement procedures (1998 and early 1999)**

	Consultations	Requested by
WTO Procedures		
Argentina	Countervailing duties on wheat gluten	EU
Czech Republic	Import duties on wheat	Hungary
EU	Differentiated treatment on coffee	Brazil
EU	Patent protection	Canada
EU	Import duties on rice	India
EU	Exportation of processed cheese	US
Japan	Imports of pork	EU
Korea	Inspection procedures	US
Philippines	Pork and poultry	US
Slovak Republic	Import duties on wheat	Hungary
US	Tariff-rate quota for groundnuts	Argentina
US	Imports of cattle, swine and grains	Canada
US	Safeguard on corn brooms	Colombia
	Panels	
Canada	Milk and dairy products	US, New Zealand
EU	Imports of bananas	US
EU	Beef with growth hormones	US, Canada
EU	Poultry products	Brazil
EU	Butter products	New Zealand
India	Patent protection	US
India	Patent protection	EU
India	Quantitative restrictions	US
Japan	Quarantine of agricultural products	US
Korea	Dairy products	EU
Mexico	High-fructose corn syrup	US
NAFTA Procedures		
US	Safeguards on corn brooms	Mexico
US	Sugar exports	Mexico
US	Imports of cattle, swine and grains	Canada

Source: See Part II.4 for more detail.

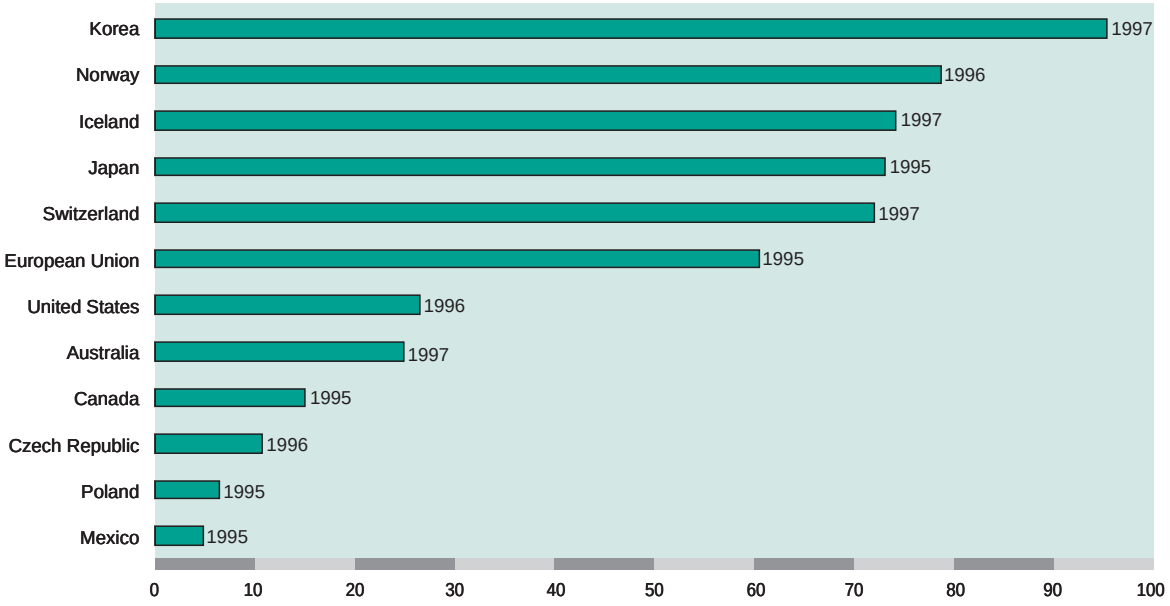
Multilateral dispute settlement mechanisms helped to resolve trade conflicts involving agricultural products. (WTO and NAFTA trade dispute developments involving agricultural products are discussed in Part II.4 of this report. Through the World Trade Organisation (WTO) dispute settlement procedures, OECD countries were party to a number of consultations and panels (Table 1.7). These trade disputes covered a broad range of policy measures seen by the requesting country to violate various Articles of GATT 1994 or related agreements [*e.g.* Agriculture Agreement, Sanitary and Phytosanitary (SPS) Agreement, Technical Barriers to Trade (TBT) Agreement, Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement]. In several cases, consultations or the panel processes are still proceeding. With respect to the ***EU*** ban on beef raised with growth hormones, the panel's findings that the EU import prohibition was inconsistent with Article 5.1 of the SPS Agreement was upheld under appeal while other findings were reversed, and the EU has to comply with the recommendations by May 1999. **Japan** notified its intention to appeal a panel finding that certain quarantine measures were inconsistent with SPS provisions. However, in February 1999, the basic findings of the panel report were upheld. In addition, both Canada and Mexico made requests under the dispute settlement procedures of the North American Free Trade Agreement (NAFTA). One request by Mexico regarding sugar exports to the US remains outstanding.

Market price support

Market price support increased in most OECD countries in 1998 as world commodity prices fell and many domestic, administered prices were raised. UR disciplines were not a constraint for most OECD countries contemplating increased support since, for most countries, the current Total Aggregate Mea-

sure of Support (AMS) was well below UR commitment levels (Graph I.16). In the **Czech Republic,** state guaranteed prices were increased for milk and bread wheat, in contrast to the fall in world prices for these commodities. With high purchase prices and no export subsidy schemes for grains, government stocks reached record high levels. Similarly, the market support for high quality wheat was extended to lower qualities in **Hungary** despite accumulating government stocks. **Korea** raised the government purchase price for rice in response to increased farm input costs associated with the devalued Won and announced its intention to develop a calf breeding stabilisation programme with deficiency payments for beef producers. In **Norway,** virtually all administered prices were increased, although the increases were generally small, while in **Turkey,** in a high inflation context and with domestic prices generally well above world levels, support prices for cereals, sugar and tobacco were raised significantly.

Graph I.16. **Current total Aggregate Measure of Support**
% of UR commitment level



Note: New Zealand total AMS = 0, Hungary and Turkey AMS below *de minimis* level. (Support amounting to less than 5% of the value of production.) The date corresponds to the latest available year for each country.
Source: WTO Secretariat.

There were also some important measures designed to move away from price guarantees and other support linked to production. Dairy support is being phased-out in **Australia.** Fresh milk markets were deregulated in New South Wales and Queensland with other States reviewing farm gate price and production control arrangements and expected to follow suit. **Iceland** abolished the administered price for sheepmeat and wool at the producer and wholesale level. In **Japan,** the government purchase price for domestic rice was reduced. **Mexico** reduced the amount of intervention buying of maize, opening the market to the private sector, and substantially lowered consumer subsidies, with the tortilla subsidy to be eliminated in 1999. Administered prices for several **Swiss** agricultural products were reduced and, with the implementation of the AP 2002 policy reforms (described in the section on Framework Laws), all price guarantees are planned to be suppressed. Intervention prices did not change significantly in the **EU** while the mandatory level of land set-aside was increased by 10 per cent for the 1999/2000 season and the requirement that land must be cropped for two years prior to eligibility was abolished, the result of an expected near doubling of grain intervention stocks.

Budgetary payments

Total budgetary payments to producers for OECD as a whole increased about 7 per cent in 1998, to an estimated US$82 billion. The increase was primarily due to higher payments under existing compensatory payment schemes, triggered by falling commodity prices, and emergency assistance programmes introduced in response to falling farm incomes. While increasing the level of support and isolating producers from world prices masks market signals and can hinder long-term structural adjustment, many of the new policy measures at least partially reflected the agreed operational criteria set down by OECD Agricultural Ministers at their meeting in March 1998 in that they are to some degree transparent, targeted, tailored, flexible and equitable (Box I.4).

However, there have also been some exceptions. Temporary assistance measures calculated by reference to production and prices of specific commodities are clearly neither targeted nor tailored adequately in the sense that they may overcompensate for actual income losses at the farm level. Neither are they likely to meet the operational criterion of equity, unless appropriate ceilings or limits are incorporated that take other income and wealth into account. Temporary assistance programmes in general may create a kind of "moral hazard" that encourages farmers to take greater risks in their production decisions than warranted by market conditions, on the assumption that government will absorb losses should they arise. Finally, long-term reform efforts could be undermined if a series of "temporary assistance measures" lead farmers to the conclusion that reductions in support and protection are reversible.

Box I.4. **Operational criteria**

At their March 1998 meeting, OECD Agriculture Ministers agreed that policy measures should seek to meet a number of operational criteria, which would apply in both the domestic and the international context, and should be:

- *transparent:* having easily identifiable policy objectives, costs, benefits and beneficiaries;
- *targeted:* to specific outcomes and as far as possible decoupled;
- *tailored*: providing transfers no greater than necessary to achieve clearly identified outcomes;
- *flexible:* reflecting the diversity of agricultural situations, be able to respond to changing objectives and priorities, and applicable to the time period needed for the specific outcome to be achieved;
- *equitable*: taking into account the effects of the distribution of support between sectors, farmers and regions.

Source: OECD, *News Release,* 6 March 1998.

Administered prices or support levels for a wide variety of agricultural commodities were raised under existing programmes in **Iceland, Korea, Mexico** and **Norway,** although in the case of Korea total budgetary outlays declined. In **Hungary,** income related budgetary payments declined as additional eligibility criteria (economic, social and employment) were added to the programme. A new **Canadian** supplemental income assistance programme is related to farm net income, not tied to any specific commodities and temporary in duration (two years). Several EU member states, including **Austria, France** and the **UK,** also introduced disaster assistance for farms in financial difficulty with fixed, short-term payments often linked to specific regions. **US** Production Flexibility Contract payments for contract crops declined in 1998 and will continue to be progressively reduced until 2002 as scheduled under the 1996 FAIR Act. The minimum prices for milk and dairy products were also reduced and will be eliminated after 1999. Also in the **US,** emergency measures for crop producers amounting to over US$5 billion were temporary and flexible with payments addressing market losses, natural disasters and "multiple-year" crop losses. As much of the new emergency income assistance in OECD countries was for 1998 and announced *ex post,* the impacts on short-term production decisions should be minimal. In the **Czech Republic,** budgetary payments for least favoured areas and promotion of extensive livestock production were extended to more general payments supporting production, with total area and headage payments more than doubling in 1998.

Agri-environmental concerns. There was less new policy development in this area in 1998 although all of the existing programmes continued, and for several of these expenditures increased. The approach to agri-environmental measures varies across Member countries depending on the relative diversity and urgency of environmental problems, budgetary resources, and style of governance. For some countries, **Mexico, Poland** and **Turkey,** where the more immediate challenges of low farm incomes, structural adjustment and trade development are priorities, agri-environmental policies have played a relatively minor role. For **Australia, Canada** and **New Zealand,** where environmental problems generally relate to soil erosion, for example, and are largely contained on farms, the emphasis is on training, community or group projects and horizontal government initiatives, such as Australia's Natural Heritage Trust and Canada's National Soil and Water Conservation Programme. The **EU, Japan** and **Korea** tend to focus more on regulations and budgetary payments to encourage producers to reduce environmental damage associated with intensive farming practices spilling over to the rest of the population, for example, water pollution, and to compensate for environmental services provided by agriculture. **Japan's** New Agricultural Basic Law is described in the section on Framework Laws. In a number of countries environmental measures are increasingly a component of all agricultural policies through mandatory environmental assessments, cross-compliance and budgetary payments with specific environmental objectives, often to generate environmental amenities such as through maintaining farming in mountainous areas or promoting extensive farming practices. The **Netherlands,** for example, introduced producer compensation measures to reduce the pig herd by 25 per cent, while **Switzerland** introduced new cross-compliance criteria for producers seeking budgetary payments. **Sweden** introduced new support programmes to reduce nutrient leaching and chemical use on farms, and to conserve local animal breeds threatened by extinction. In **Norway,** funds were made available for the development of local action plans that identify environmental protection needs and a requirement for farmers to draw up fertiliser and manure plans was introduced. **Denmark** introduced a differentiated tax on the use of antibiotics and growth hormones in feedstuffs, and doubled a tax on pesticide use, which was introduced in 1996.

In previous years, the OECD monitoring and evaluation report has observed that agri-environmental measures have had unclear objectives, been poorly targeted and lacked any overall evaluation. OECD countries have begun to address these shortcomings. (OECD work on environmental indicators is discussed in the feature on *Measuring the environmental impacts of agriculture* in Part I.4 of this report.) **Austria** replaced an existing agri-environmental programme with one more targeted to farm size and land use, and with stricter limits on fertiliser use. In **Norway,** to better target agri-environmental measures, farmers and municipalities were encouraged to co-operatively develop local plans that would identify environmental protection needs and propose suitable actions. Sustainable agriculture became a top priority of the new **Korean** government which identified specific measures to promote sustainable agriculture under the Sustainable Agriculture Promotion Act. **France** announced a new framework law for agriculture with the preservation and renewal of natural resources a central theme.

Policy developments to encourage organic farming were common to a number of OECD countries in 1998. To promote organic farming, the **Czech Republic** introduced direct producer payments and **France** launched a five-year development plan with plans to create a national "agro-bio" institute and an office for organic agriculture. In the **UK,** where consumer interest in organic products appears to be growing rapidly, budgetary payments to encourage organic farming under the Organic Aid Scheme are expected to reach £4.5 million (US$7.5 million) in 1999. Similarly, budgetary payments farming in **Korea** are targeted towards organic farmers in "water preservation areas" in which the use of chemicals and animal waste are restricted in order to preserve the quality of drinking water.

While the acreage devoted to organic farming is still very small (*e.g.* less than 1.3 per cent of EU farmland), growth in commercial food sales is forecast at over 40 per cent annually.[25] Major retail chains have entered the organic market in earnest, with Sainsbury in the UK, for example, reporting sales worth £1 million (US$1.7 million) per week. This market growth has tremendous potential for revenue enhancement and diversification (*e.g.* prices for organic products are 10-15 per cent higher than equivalent products produced from "conventional" farming methods), while offering new opportunities for smaller farms and for disadvantaged and environmentally-fragile areas. However, there are also a number regulatory problems (*e.g.* definitions, labelling, inspection, international harmonisation) associated with the production, processing and trade of organic products.

Food safety and quality. There was a considerable amount of regulatory reform in the agro-food sector in 1998, primarily aimed at greater regulatory efficiency and increased protection and information for consumers. The **EU** continued a BSE-related ban on **UK** exports of beef and certain derived products which was extended to **Portugal** towards the end of the year. **Canada** began modernising and consolidating regulations related to food inspection, agricultural inputs and animal and plant health. **Korea** and **New Zealand** centralised various food-safety related responsibilities while plans for a single, independent food agency were announced in the **UK.** The **Czech** parliament approved a new food law restricting State intervention to the setting of standards and testing while the **EU** and **Sweden** introduced new food labelling schemes. In the US, a new food safety system was introduced, raising increasing standards and requiring all federally and state inspected meat and poultry plants to adopt Hazard Analysis Critical Control Points (HACCP) schemes to improve food safety.

There has also been considerable attention paid to the use of genetically modified organisms (GMOs) in food, with approaches ranging from testing and labelling to outright bans in some countries. Probably the biggest emerging food issue is the use of bio-technology, in particular genetic engineering. For some consumers, scientific uncertainty about the long-term effects on the environment and human health of GMOs is the major concern. For others, the use of GMOs is more of an ethical issue about the way food is produced. While these new regulatory measures related to food safety have been generally well received by domestic consumers, in a number of cases such regulations can act as non-tariff barriers to trade and have given rise to international disputes. A number of countries including **Australia** and **New Zealand** maintained strict sanitary requirements on imported livestock and meat products, while an outright ban in **Turkey** allowed no livestock and meat product imports in 1998.

Rural development. All OECD countries recognise the linkages between agriculture and the rural economy and are increasing the coherence between the two policy domains. While opportunities for growth and diversification of agriculture are limited in many disadvantaged regions, there is a common approach in that structural adjustment within the agro-food sector is seen as essential to the economic growth of the sector and, therefore, it's contribution to the economic viability of rural areas. In this context, **Australia** introduced a scheme to assist low income, pension-aged farmers to transfer their farms to the next generation. **EU** expenditures on regions lagging behind in economic development remained about the same in 1998 and included payments to farmers in mountainous areas, investment aid, aid to young farmers and support for processing and marketing of agricultural products. Expenditures in **Japan** to improve rural infrastructure, such as roads and sewage, and to help establish industries in rural areas remained high but declined from 1997 levels as part of a general reduction in budgetary expenditures. **France, Italy** and **Norway** provided additional assistance to young farmers in the form of low interest rate loans, tax concessions and installation grants. A number of Member countries, such as **Australia, Canada** and **Hungary,** funded agriculture and rural initiatives developed at the regional or sub-regional level, aimed at improving innovation, diversification and marketing. In several Member countries, including **Ireland, Poland** and the **US,** sector-wide, industry-led initiatives with a focus on improving international competitiveness were reported.

Framework laws

In 1998, **France, Korea** and **Switzerland** announced new agricultural laws which set out the general framework and direction for future agricultural policy reform. The New Agricultural Basic Law in **Japan** was submitted to the 1999 Ordinary Session of the Diet. These new "strategic plans" for the sector range from a very broad identification of goals with little specific policy content to detailed programme and budgetary details, as in the case of Switzerland. While there are differences in priorities and approaches, it would appear on the basis of available information that the policy directions suggested in these framework laws attempt to address at least some of the shared goals adopted by OECD Agricultural Ministers at their March 1998 meeting (Box I.5). In March 1999, **EU member states** reached agreement on "Agenda 2000" which contains a number of elements related to agriculture, including reforms to the EU Common Agricultural Policy (the predominant framework for the new French agricultural law).

Box I.5. **OECD shared goals for the agro-food sector**

At their March 1998 meeting, OECD Agricultural Ministers outlined a set of shared goals, stressing that the goals should be viewed as an integrated and complementary whole. There was a broad consensus that OECD Member governments should provide the appropriate framework to ensure that the agro-food sector:

- is responsive to market signals;
- is efficient, sustainable, viable and innovative, so as to provide opportunities to improve standards of living for producers;
- is further integrated into the multilateral trading system;
- provides consumers with access to adequate and reliable supplies of food, which meets their concerns, in particular with regard to safety and quality;
- contributes to the sustainable management of natural resources and the quality of the environment;
- contributes to the socio-economic development of rural areas, including the generation of employment opportunities through its multifunctional characteristics, the policies for which must be transparent;
- contributes to food security at the national and global levels.

Ministers stressed that agro-food policies should seek to strengthen the intrinsic complementarities between the shared goals, thereby allowing agriculture to fulfil its multifunctional character in a transparent, targeted and efficient manner. The challenge in pursuing the shared goals is to use a range of well-targeted policy measures and approaches which can ensure that the growing concerns regarding food safety, food security, environmental protection, and the viability of rural areas are met in ways that maximise benefits, are most cost-efficient, and avoid distortion of production and trade.

Source: OECD, *News Release*, 6 March 1998.

EU: CAP *Reform* – AGENDA 2000 *agreement*

The EU Heads of States reached a global agreement at the European Summit in Berlin, March 1999 on the so called "Agenda 2000" negotiation package, which contains a reform of the EU Common Agricultural Policy (CAP). The other elements of the Agenda 2000 package deal mainly with a framework for new quinquennial structural programmes, specific measures for candidate countries to EC accession and budgetary discipline. The agreement is based on proposals by the European Commission put forward in March 1998. The proposals related to agriculture were prompted by a combination of factors, including the impact of the new disciplines agreed at the Uruguay Round, the preparation of the eastward enlargement of the EU, the anticipation of the new multilateral agricultural trade negotiations due to start by the end of 1999, domestic concerns about the preservation of the European model of agriculture, and, more generally, increasing budgetary constraints. Heads of States declared, in particular, that "the content of CAP reform will ensure that European agriculture is multifunctional, sustainable, competitive and spread throughout Europe, including regions with specific problems, that it is capable of maintaining the countryside, conserving nature and making a key contribution to the vitality of rural life, and that it responds to consumer concerns and demands as regards food quality and safety, environmental protection and the safeguarding of animal welfare". The main elements of the agreement on agriculture are described below.

a) Arable sector: cereals, oilseeds and protein crops

Intervention price. The cereals intervention price will be reduced from its present level of euro 119.19 per tonne by 15 per cent in two equal steps in the years 2000/2001 and 2001/2002. A decision upon possible further reduction in the intervention price to be applied from 2002/2003-onwards will be taken in the light of market developments. The monthly increment system used for seasonal price corrections is to be maintained.

Compensatory payments. The decrease in institutional prices will be compensated by direct payments, but only partially (at around 50 per cent), in a way similar to the direct payments instituted by the 1992 CAP reform. In the calculation of direct payments, historic reference yields are to be multiplied by

an amount per tonne. For marketing years 2000/2001 and 2001/2002, area payments will be increased from euro 54 per tonne to euro 58.5 and to euro 63 per tonne. Any consequent increase in area payments will bear the same proportion to the price reduction as those applicable in 2000/2001 and 2001/2002. A special concession was granted to Italy and Spain and a supplementary higher amount of euro 19 per tonne (drying premium) will be payable in Finland and in the northern regions of Sweden.

For oilseeds, including linseeds, the area payment per hectare will be reduced in three annual steps to align it with the cereals payment, although specific measures could be proposed if production potential deteriorates seriously. In the above calculation of area payments, the rate will fall from current rates to euro 63 per tonne for 2002/2003. As of 2002, these per tonne payments will be multiplied by the historic reference yield for cereals.

The reference price and advance payment systems for oilseeds will be abolished as of 2000/2001.

Protein crops will receive a supplementary premium. Durum wheat continues to receive, in addition to the cereals direct payment, a per hectare payment of euro 344.5 in traditional production zones and euro 138.9 elsewhere. For Portugal, maximum guarantee areas for durum wheat will be doubled from 59 000 hectares to 118 000 hectares.

Set-aside. Compulsory set-aside is retained, with the rate set at 10 per cent for all the 2000-2006 period; voluntary set-aside is maintained and extraordinary set-aside is abolished. Compensation for set-aside is set at the same rate as for arable crops.

Silage cereals. EU member states where maize silage is not a traditional crop will have the option of making grass silage eligible for the arable crops area payment and defining specific sub-base areas for grass silage. The total national base area, however, cannot be changed. The basic cereals reference yield will apply to these payments.

b) Beef and veal

Intervention price. The intervention price will be reduced from its present level of euro 2 780 per tonne to euro 2 224 per tonne by 20 per cent in three steps over the period 2000-2002. The intervention price at the end of the transition period (euro 2 224 per tonne) will be the basis for a new system of private storage. Private storage aid could be granted when – as in the pig sector- the average Community market price is less than 103 per cent of the basic price for beef. A safety net intervention system (buying-in tenders) will be set up to a level of euro 1 560 per tonne as of 1 July 2002. In addition, there is a clause that exceptional measures could be taken, including *ad hoc* intervention buying-in, before reaching the safety net level.

Premia. The basic special premium for male animals will be increased in three steps up to 2002, to euro 210 for bulls and euro 150 for steers. The annual suckler cow premium will be increased to euro 200 and will continue to be based on individual ceilings. Payments will be one-off for bulls and twice in a lifetime for steers. The premium for bulls takes into account the benefit of retaining the arable crop payment for silage maize. The milk production eligibility limit for suckler cow premium of 120 000 litres is to become optional for EU member states, as well as the 90 head per farm ceiling on special premia within the total ceiling per member state.

A slaughter premium of euro 80 is introduced for bulls, steers, dairy cows, suckler cows and heifers over the age of eight months, and of euro 50 for calves (more than one month and less than seven months, and less than 160 kg carcass weight). In addition, the so-called "Herod Premium", designed to encourage a cut in beef production by paying a premium for culled calves, will continue on a voluntary member state basis. Payments will be assessed through the EU state aid procedure and financed fully from national budgets.

Ceilings. The national ceiling for suckler cow premia is set at the highest level of utilisation of premium payments for the years 1995, 1996 and 1997, plus 3 per cent. The only exceptions are Austria, Finland and Sweden, for which the ceilings are fixed at the levels foreseen in the accession treaty. The national premium, additional to the suckler cow premium, is increased from euro 30.19 per head to euro 50 per head. A maximum 20 per cent of the suckler cow premium rights can be claimed for heifers. EU member states where more than 60 per cent of suckler cows and heifers are kept in mountainous areas

may decide to manage the payment of the suckler cow premium to heifers by allocating a part of the maximum 20 per cent of the suckler cow national ceiling to a separate national ceiling.

Regional ceilings for the special male premium are fixed on the basis of the 1996 premia applications; for Austria, Finland and Sweden the levels are set out in the accession treaty. The two payments for the special beef premium for steers are payable at ages nine months and twenty-one months, respectively.

Two ceilings for the new slaughter premium would be introduced on a per EU member state basis, one for adult animals (bulls, steers, cows and heifers) and one for calves. This will be calculated based on the number of animals slaughtered in 1995 plus exports to third countries in the same year.

Extensification. The total number of animals qualifying for the special premium and the suckler cow premium will continue to be limited to two livestock units (LU) per hectare of forage area. EU member states may choose between two formulae for granting additional extensification premia on suckler cow and special beef payments. With the first formula, the extensification premium is increased as follows: In 2000 and 2001, the premium is set at euro 33 between 2.0 and 1.6 LU per hectare and euro 66 if less than 1.6 LU per hectare; from 2002, the premium is set at euro 40 between 1.8 and 1.4 LU per hectare and euro 80 if less than 1.4 LU per hectare. With the second formula, EU member states may apply for a simple supplement of euro 100 per livestock unit where the stocking density on a holding is less than 1.4 LU per hectare.

Pasture land should represent at least 50 per cent of the total forage area declared. The definition of "pasture land" is left to each EU member state. In EU member states where more than 50 per cent of the milk is produced in mountainous areas, the extensification premium is also applicable in the case of dairy cows kept on holdings situated in these areas.

c) Dairy sector

Intervention prices for butter and skimmed milk powder will be reduced by 15 per cent.

Quotas. The Council agreed to extend the milk quota regime for a further period and to hold a mid-term review with the aim of allowing the present quota arrangements to run out. Specific quota increases totalling 1.39 million tonnes are to be implemented for Greece, Spain, Ireland, Northern Ireland and Italy in 2000/2001 and 2001/2002. In all other EU member states, quotas will be increased by 1.5 per cent from 2005/2006. This amounts to an overall increase of 2.4 per cent in quotas.

A series of changes to quota management were agreed, although they are optional at member state level. It is understood that these measures will come into force as of 1 April 2000.

Compensation. A system of payments per tonne of quota in a given reference year will be introduced to compensate for the price cuts. Compensatory payments per tonne would be supplemented by a payment from the EU financial envelope allocated to EU member states.

d) National envelopes

Two financial envelopes in the beef and milk sectors respectively which can be used for funding additional direct payments will be introduced at the individual EU member state level.

e) Wine

A new Common Market Organisation for Wine has been established and the present 23 regulations dealing with wine will be replaced with a single regulation. Intervention schemes are reduced and subsequent budgetary savings will be used for helping structural adjustment. New planting rights for EU member states have been doubled to a total of 68 000 hectares. For unlicensed plantings, a 50 per cent penalty fee per hectare has been agreed upon. A ban on new vineyard plantings – *i.e.* without planting rights – has been extended to the year 2010.

f) Rural development and agri-environmental policy

There has been agreement on an overhaul of the rural development regulations which aims at simplifying and supplementing existing schemes for investment, training, early retirement, less favoured areas, agri-environmental programmes, afforestation and the establishment of young farmers. Outside the Objective 1 regions, rural development measures will be financed from a single source: the EAGGF – Guarantee Section.

The agreement foresees that EU member states must define appropriate environmental measures to be applied by farmers as well as penalties for environmental infringement involving the reduction of direct payments. In addition, the agreement foresees allowing EU member states to modulate direct payments per farm, within certain limits, in relation to employment on the farm or overall prosperity of the holding. Savings from cross-compliance and modulation measures can be re-channelled into agri-environmental measures, early retirement schemes, afforestation and less favoured areas.

g) Structural funds

The current seven priority Objectives will be reduced to three: two regional Objectives and a horizontal Objective for human resources. The number of Community initiatives will be reduced from thirteen to three, one of which will be rural development.

h) Budgetary implications

The financial cost of the reform is estimated at euro 40.5 billion a year on average over the coming period up to 2006, excluding euro 14 billion for rural development and veterinary and plant health measures over the period.

France: Framework Act for French Agriculture

A framework bill for agriculture went before the National Assembly in October 1998. The legislation will break new ground compared with previous acts, in particular that of 1960/62. If all goes as planned, it should be passed by the National Assembly and the Senate by the end of the first semester 1999. The implementing orders will then be issued, in particular on "territorial farming contracts". Details of how these contracts will actually work in the *départements* are currently being drawn up. The new Act stems from the need to define a new framework for the development of agriculture to meet the broad expectations of the public at large. Its purpose is to redefine agriculture's role in society, and hence the goals of French agricultural policy, and to modernise the way in which that policy is implemented. It should however be noted that France, as a member of the European Union, applies the Common Agricultural Policy and that the new framework act fleshes out the broad outline laid down by the CAP.

In the new act, farm policy takes into account the multifunctional nature of agriculture and should enable the sector to fulfil three functions:

- the economic function of producing goods for the food and processing sectors;
- the social and territorial function of helping to create and preserve jobs in rural areas and ensure balanced land use;
- the function of conserving and renewing natural resources.

The main provisions of the act relate to these three functions.

With regard to agricultural production, interprofessional agreements will play a greater role in the economic organisation of the sector and a dynamic co-operative sector will be encouraged. Policies to identify and enhance the quality of food products will also be made more coherent. The innovative "territorial farming contracts" are also in line with the three functions listed above. They are individual contracts between a farmer and the authorities (the prefect of each *département*) setting out the rights and duties of each party for a period of several years, the approach being a collective one, and co-ordinated across the whole *département*. Under the terms of the contract, the farmer will receive support in return for goods or services that meet public expectations. Contracts are a way of modernising the allocation of gov-

ernment support and making it more transparent. They should also assist in decoupling support and improve patterns of government funding across the country. For 1999, FF 300 million (US$50.9 million) have already been allocated to these contracts by redeploying existing resources, in particular the EU's agri-environmental funds.

With regard to the social function of agriculture, employment will be a farm policy priority. To that end, structural controls will be redirected and stepped up to prevent the dismantling of farms that could be taken over by young people. Social security contributions will be lower for young farmers setting up in business. Formalities for hiring salaried workers will be simplified, and the status of workers and spouses working on the farm will be enhanced. This aspect will be an integral part of the territorial farming contracts.

With regard to farming's contribution to environmental protection and land use, the Act allows for the designation of protected areas on peri-urban land, making any changes in land use subject to a number of procedures. Agricultural education and research will see their mandates and organisation brought into line with the new thrust of farm policy. Finally, territorial farming contracts will take into account the contribution made by farming to the conservation and renewal of natural resources.

Preliminary evaluation. By stressing the multifunctional role of agriculture and the sustainability of natural resources, the new French framework law reflects some of the "shared goals" adopted by OECD Agriculture Ministers in 1998. Little detail is available as to which policy instruments, or overall levels of support, will be used to achieve the various objectives or anticipated levels of assistance, but references to decoupled support and the use of budgetary payments as economic incentives for the provision of positive externalities (*e.g.* environmental and rural amenities) are consistent with the long-term principles of agricultural policy reform. Of course, expected reforms to the EU Common Agricultural Policy would have a significant influence on the overall policy framework influencing the French agro-food sector.

Japan: New Agricultural Basic Law

In Japan, a series of reforms have been implemented in the agricultural sector since the beginning of 1990's. The Uruguay Round Agreement of Agriculture brought an acknowledgement from government and farmers of the need for fundamental changes in agricultural policies in Japan. The government launched a process of agricultural policy reform by establishing the Investigative Council on Basic Problems Concerning Food, Agriculture and Rural Areas in 1997 to review current policies and to establish a new law replacing the Agricultural Basic Law, a constitutional law that has been part of Japan's agricultural legislation for over 35 years. The Council, whose members were drawn from many different backgrounds including historians, economists, farmers, journalists, representatives of consumer and other industry, presented a final report to the Prime Minister in September 1998. Based on that report, the government and the ruling Liberal Democratic Party announced a more detailed action plan for the reform, scheduled to be completed in 2003.

The action plan contains general principles and ideas as well as time schedules for policy reforms in various areas. The government is expected to elaborate concrete proposals for policy measures and implement them following the plan. It will therefore be several years before a complete, concrete image of reformed agricultural policies in Japan will emerge. The New Agricultural Basic Law, however, is scheduled to be submitted to the Diet immediately in early 1999 and the reform in the rice sector announced in 1997, including an introduction of new direct payment to rice farmers [Rice Farming Income Stabilisation Program (JRIS)], has been already implemented taking the initiative in the reform.

The action plan suggests reviewing almost all the agricultural policy measures in the process of the reform. Ten subjects or themes are to be examined:

- basic rational for agricultural policy reform;
- securing a stable food supply based mainly on domestic production;
- developing food policies focusing on consumer's viewpoint;
- improving infrastructure for production, such as agricultural land and irrigation;
- fostering self-reliance of farmers;

- stabilising the farm economy;
- developing technology;
- enhancing environmental cyclic nature of agriculture;
- enhancing multifunctionality of agriculture and developing rural area;
- reviewing agricultural organisations.

Concerning *food security*, domestic agricultural production is regarded as a principal source of food supply together with stable imports and stockholding. The government intends to set a target level of domestic agricultural production. The target level will be calculated based on the assumption that domestic agricultural production can become more efficient by reducing cost, enhancing quality. A target self sufficiency ratio will also be set by the government.

Administered price policies will be re-examined with a view to improving market orientation and policy measures to *stabilise the farm economy* are to be introduced. The first step will be to revise each price policy by commodity basis and the second step will be to investigate the possibility of introducing measures which are not based on specific commodities, but on farm income.

Agri-environmental measures are also regarded as important. The action plan suggests introducing various measures, both to enhance the positive effects of agriculture and to reduce the negative effects of agriculture.

With regard to the *multifunctionality* of agriculture and rural area, the plan stresses that it is necessary to identify and properly evaluate the multiple roles of agriculture. Well-planned land use in rural areas is regarded as one of the most important conditions for enhancing their multifunctionality. A direct payment for farmers living in hilly and mountainous areas will be introduced in this context from the fiscal year 2000. The specific conditions for farmers to receive this payment will be decided by that date.

Preliminary evaluation. While it is not clear whether the total level of support, including border measures, will be reduced, these general directions have the potential to lead to results along the lines of the policy principles adopted in the OECD Agricultural Ministerial meeting in 1998. Considering the high level of support for the agricultural sector in Japan, reforms need to improve the exposure of the sector to market forces. Simplification and integration of policy measures also seems important because they should make policies more cost-effective, transparent, tailored and flexible.

Korea: Agricultural and Rural Basic Law

To cope with the agricultural market opening that is expected to accelerate as a result of the upcoming WTO negotiations on agriculture, remaining protective policy measures such as market price support and import restrictions need to be replaced by market-oriented policy measures.[26] It has also been increasingly recognised that agriculture has multiple functions, such as food safety, rural amenity and environment conservation, in addition to its primary function of producing food and fibre, and that the concept of the agricultural industry must be broadened beyond primary production to include marketing and processing.

To keep up with these internal and external changes, the Korean government has drawn up a new Agricultural and Rural Basic Law to replace the Agricultural Basic Law of 1967. This new law will be put into effect from January 2000. Reflection on a new framework law was launched in June 1997 and intensified under the new government formed in February 1998. The Committee for Agricultural Policy Reforms, which was set up to recommend the direction in which agricultural policies should evolve, played a major role in the process of reviewing and examining the draft Law. It was approved by the National Assembly in December 1998.

The Law is basically a general declaration or statement of policy principles presenting the main directions of future agricultural policies to the central and local governments, farmers and consumers. A number of agriculture-related domestic laws are scheduled to be changed to conform to the basic underlying ideas contained in the new Law.

Market principles together with the recognition of the agriculture sector's multifunctionality will influence the process of agricultural policy design and implementation. Direct payments will be emphasised. The main policy developments are:

- a stable food supply and maintenance of an appropriate level of food stockholding are stipulated as one of the most important policy objectives;
- environment-friendly farming practices are stressed and co-operation in the area of agriculture between south Korea and north Korea is encouraged in preparation for unification;
- the conservation of farmland to ensure the domestic food supply is also stipulated as one of the most important policy objectives. In addition, support to venture enterprises for the development of scientific technology and protection of intellectual property rights are ensured;
- a basis for the development of a system of geographical "labels of origin" is stipulated in order to encourage the production of local and regional food products and to provide accurate information concerning agricultural products to consumers;
- international co-operation in the field of human and technological resources and overseas direct investments are stressed. The promotion of agricultural exports is identified as a national priority;
- support for farm tourism is provided in pursuit of rural development. Market price support will be reduced while targeted and tailored direct payments will be expanded.

Preliminary evaluation. The Agricultural and Rural Basic Law provides the general framework for the development of Korean agricultural policies in the 21st century. The Law has special significance because it provides the general framework and basic criteria on which all acts and laws relating to agriculture are based. The directions reflect to some degree the policy principles adopted in the 1998 OECD Agricultural Ministerial meeting. In particular, it is notable that Korean agricultural policies are set to move towards direct payments and environment-friendly farming, and away from market price support.

Switzerland: Agricultural Policy 2002 Programme

The process of agricultural policy reform in Switzerland is scheduled to continue with the implementation of the *Agricultural Policy 2002* (AP 2002) programme. This policy reform is intended to abolish all state price guarantees and further reduce market price support for agricultural producers, establish stronger links between direct payments and environmental performance criteria, and change the allocation method for concessionary credits. The reform package is thereby intended to improve the international competitiveness of Swiss agro-food producers, respond to increased concern for the state of the environment, and facilitate structural adjustment.

The Swiss government first proposed AP 2002 in June 1996 and subsequently submitted the reform programme to Parliament. After intense debate, the legislature adopted the proposal in April 1998. A competing policy reform proposition, which called for an increase in direct payments in combination with strict farm size-based eligibility criteria, was rejected by the Swiss people in a referendum in September 1998. The transition towards AP 2002 started on 1 January 1999 (1 May 1999 for milk and dairy products) and is scheduled to be completed by 2002.

AP 2002 involves a deregulation of the agro-food sector. Producer prices and processing margins are no longer guaranteed by the government and agro-food producers are not obliged any more to deliver their output to particular collection centres (as used to be the case for milk) or purchase a certain share of their raw materials domestically (as under the previous grain milling arrangements). The state sanctioned foreign trade monopolies for certain cheeses (Union Suisse du Commerce de Fromage) and butter (Centrale Suisse du Ravitaillement en Beurre – BUTYRA) are to be dissolved during 1999 after having disposed of remaining stocks. Afterwards, private companies will engage in all dairy product trade. The milk quota system will be retained, but quotas have for the first time become transferable among producers within the mountainous and lowland zones, respectively. Border protection for agro-food producers will be adjusted in accordance with WTO commitments, but will otherwise remain unchanged.

Direct payments will be increased and more strongly linked to environmental criteria. The price supplement for milk delivered to cheese producers will increase from SF 120 (US$83) per tonne in 1999 to

SF 200 (US$138) per tonne in 2002. The payment goes to farmers in order to compensate them for prospective reductions in milk revenues. Moreover, direct payments for cows whose milk is not marketed are extended to all roughage consuming animals (excluding milk cows). With respect to so called complementary direct payments, the previously existing farm and area based payments, which were crop specific, are consolidated into a uniform area payment. Farmers in mountainous areas will continue to receive additional support payments. However, farmers have to satisfy a set of environmental minimum standards (corresponding to the previously existing "integrated production" programme) in order to be eligible for any of these direct payments under AP 2002. On the other hand, if they provide additional ecological services, such as refraining from the use of synthetic chemicals, they can receive supplementary payments.

A third central element of AP 2002 besides deregulation of the domestic market and cross-compliance of direct payments concerns subsidised credits for investments in farm buildings or improvements. The budgetary funds available for concessionary credits will be increased and their allocation method changed. Interest-free credits will no longer be available to cover the share of investment costs that can not be financed from farmer's own funds. Instead, investments will henceforth be fostered through fixed amounts of subsidised credit per unit of investment, which are independent of construction costs, and hence do not encourage over-investment to the same extent as the previous method.

AP 2002 will lead to an increase of budgetary expenditure in 1999, in particular to finance the dissolution of the foreign trade monopolies for cheese and butter. But according to a financial envelope submitted to the Parliament in November 1998, the agricultural budget for 2000-2002 will be held stable at its 1998-level of about SF 3.5 billion (US$2.4 billion).

Preliminary evaluation. While border protection remains high in Switzerland, AP 2002 is intended to improve the market orientation of agro-food producers by removing minimum guarantee prices, fixed processing margins and other state regulations, thereby allowing for a freer interaction of supply and demand in domestic agro-food markets. Similarly, the extension of direct payments for cows whose milk is not marketed to all roughage consuming animals, as well as the consolidation of various complementary direct payments into a uniform area payment leaves more room for farmers to make production decisions based on market signals rate than governmental payment rates. With respect to the agri-environmental element in AP 2002, cross compliance will probably only have a modest environmental impact, since about three-quarter of Swiss farmers have been using integrated production methods already before 1999. Moreover, payments for particular agri-environmental production methods, such as organic farming, have been granted for several years, so that AP 2002 does not introduce anything fundamentally new.

Overall, support for agricultural producers in Switzerland continues to be considerably above the OECD average, not least because of high import barriers. But AP 2002 introduces increased competition and market orientation into the domestic agro-food sector. This will help to prepare Swiss agro-food producers for a stronger exposure to international markets that could result from possible future steps of trade liberalisation and European integration.

4. POLICY FEATURES

Food safety and quality issues

Public demands for increased food safety have gained momentum across OECD countries in recent years due to a number of highly-publicised outbreaks of food-borne diseases (*e.g. BSE, E Coli 0157, salmonella, listeria*). The ban imposed by the European Union on exports of beef and certain derived products from the UK continues, limited bans on beef and live animal exports from Portugal were set to be imposed due to a rising incidence of BSE, and new cases had been reported by the Dutch authorities. With a constant stream of critical media reports about such issues as food irradiation, growth hormones and animal feed antibiotics, governments have come under intense pressure to ensure safe food at a minimum cost to consumers and industry.

In fact, consumer concerns go well beyond basic food safety. The quality of food and how it is produced, animal welfare, cultural preferences, resource sustainability and protection of the environment have all become issues in the public debate over regulation of the food industry. New production and processing methods driven by technology (*e.g.* the use of biotechnology, genetically modified organisms (GMOs), hormones and other growth promoters) have added to consumer unease. The issues are complex with the appropriate policy response especially difficult to ascertain in cases where there are persuasive consumer advocates and/or inconclusive scientific evidence of health risk. Labelling is often recommended as an appropriate solution as it allows for consumer choice while not constraining producers, but problems of establishing standards, measurement, traceability (of components) and enforcement can reduce the effectiveness as well as increase the costs involved.

Governments have responded to public pressures for more effective regulation (Box I.6). In recent years, **Canada, France** and **Ireland** have established new food agencies with varying mandates for health, safety and inspection responsibilities while plans for new food agencies in **New Zealand** and the **UK** are under consideration. In 1998, the **EU** Farm Ministers agreed to establish common standards for animal welfare (to apply in the year 2000) and a food safety campaign across all 15 EU member states was launched, aimed at improving awareness of food hygiene and food labelling. The EU also introduced new labels for *Protected Designation of Origin* (food produced, processed and prepared in a given region) and *Protected Geographical Indication* (at least one stage of production in a given region) certificates to improve marketing and consumer information. Such labels have been granted to around 500 food products since 1992. The **US** announced a new initiative to address health risks associated with food involving several federal agencies with related responsibilities and the authority of the USDA in this area has been enhanced. Mandatory Hazard Analysis Critical Control Points (HACCP) schemes to improve food safety are a key part of the US initiative.

However, consumer acceptance of risk and government approaches to food safety and quality regulation vary significantly between countries. The dispute between the **European Union** and the **United States/ Canada** on the use of growth hormones in cattle has been going on for ten years. National regulations on authorised pesticide residues differ widely. Food safety and quality control systems have different specifications and may not be recognised by trading partners. Cheese made from unpasteurised milk is widespread in **France, Switzerland** and **Italy,** where the risks have been given considerable media coverage, but consumers in other countries are less willing to accept the same level of risk. Irradiation is used on some products (*e.g.* spices, onions) and in some countries (*e.g.* **Belgium**), but not others. New animal welfare regulations (*e.g.* leghold traps, dolphin-safe fishing nets, size of battery cages for poultry), which could affect the export competitiveness of the producers concerned, have been established in several countries.

Box I.6. **Regulating biotechnology**

Perhaps the biggest emerging issue surrounding food safety and quality is the use of modern biotechnology, in particular genetic engineering. Genetic engineering is being developed with the objectives of increasing the food supply, reducing environmental damage and enhancing the healthful properties of food; and its commercial use is expanding rapidly. Total area of major, genetically modified crops was estimated at 28 million hectares in 1998 – roughly equivalent to the agricultural land area of Austria, Ireland and Japan combined. Yet attitudes towards GMOs are widely diverse, among and between farmers, consumers and governments. While the North American approach is relatively open and a 1998 Swiss referendum rejected a ban, GMOs are heavily restricted by the European Union and banned in Austria and Luxembourg. Other OECD countries such as France and the UK have imposed bans or planting restrictions on specific GM crops. GMO labelling regulations are under consideration in most OECD countries. New EU legislation will require food products to indicate GM soya or maize ingredients while Germany introduced regulations for voluntary labelling of GM-free foods.

The commercialisation of modern biotechnology has challenged the capacity of regulatory frameworks and led to the creation of trade barriers for GMOs in some countries. Trade disputes have prompted countries to look to international agreements for solutions and discussions of international harmonisation have been undertaken within the *Codex Alimentarius*, the International Organization for Epizootics, the OECD Working Group on Harmonization of Regulatory Oversight in Biotechnology, Asia Pacific Economic Co-operation Experts Group on Agricultural Technical Cooperation and the UN Environmental Programme. Harmonization addresses potential market access barriers by streamlining regulatory approval processes, which in turn can increase consumer awareness of, and confidence in, the safety and efficacy of GMOs.

Estimated Area of Genetically Modified Crops (million ha)[1]

Crop	**1997**	**1998**
Maize	3.2	8.3
Soybean	5.1	14.5
Potato	<.1	<.1
Canola	1.2	2.4
Cotton	1.4	2.5
Total	**11.0**	**27.8**

1. C. James, "Global Review of Commercialised Transgenic Crops: 1998", *IAAA Briefs*, No. 8-1998.

As part of the 1994 Uruguay Round Agreement, the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements guard against regulatory protectionism while encouraging the use of international standards (Box I.7). A number of disputes involving several OECD countries have already been brought before the WTO since the dispute settlement procedure was established in 1995, though a number of conflicts have been resolved on a bilateral basis in the desire to avoid establishment of a formal panel process. Only three panel reports have been released to date in the context of the SPS Agreement (**EU/US/Canada** hormone treated beef, **Canada/Australia** salmon imports, **US/Japan** quarantine regulations) but these WTO cases have helped to clarify some provisions of the SPS Agreement and, to a certain extent, they have provided some guidance to governments for the conception and implementation of their SPS policy. However, these judgements do not exhaust the various questions and problems that can arise from the implementation of the SPS Agreement nor are they necessarily applicable to other conflicts, each of which must be arbitrated by the WTO on a case-by-case basis. The economic stakes are high and such disputes are likely to remain a priority in the future trade agenda.

There are problems associated with the implementation of these international standards. The SPS Agreement explicitly requires Members to base their SPS measures on risk assessment as appropriate to the circumstances of the risk to human, animal and plant health in those cases where a country adopts measures different from international standards. However, there is no agreement on what constitutes "acceptable risk" and there are ongoing debates over methodological issues. Within the OECD, approaches can differ widely with some countries preferring to eliminate risk (*i.e.* sterilisation, irradiation, outright bans), while others emphasise risk control (*i.e.* HACCP). In addition, the standards accepted by

scientists do not always have an indisputable scientific foundation (in the past some standards have had to be completely revised) and scientific unanimity is seldom achievable. The SPS Agreement (Article 5.7) allows the adoption of provisional measures (precautionary principle) where relevant scientific evidence is insufficient. Moreover, a country may introduce regulations that are more stringent than international standards on cultural, moral or religious grounds only under limited conditions. The SPS Agreement does not recognise the validity of consumer concerns on these ethical grounds (although the TBT Agreement refers to other legitimate objectives (Article 2.2) where such considerations may be taken into consideration by authorising different labelling).

As expected, the mere existence of the SPS Agreements and the binding dispute settlement procedure has led to some unilateral reforms and bilateral resolutions of disagreements which will reduce trade barriers.[27] The **US** recently introduced new regulations and standards which allow the restricted import of Mexican avocados and Argentinean beef. **Japan** lifted a 46-year ban on **US** tomatoes. Regulatory reforms also resulted in acceptance of Canadian salmon by **New Zealand** and **Australian** acceptance of imported cooked poultry meats from Denmark, Thailand and the US. Many developed and developing countries are also negotiating bilateral or multilateral agreements on mutual recognition of animal and plant health legislation, inspection procedures, risk assessment procedures and test data. **Canada,** the **Czech Republic** and **New Zealand** have recently signed veterinary equivalence agreements with the EU and similar agreements are under discussion with **Australia** and the **US,** as well as **Argentina, Uruguay** and **Chile**. The Norwegian government has proposed to adopt EU veterinary legislation, thereby removing the need for border controls for meat, live animals and fish.

Box I.7. **Food safety and international agreements**

The ***Sanitary and Phytosanitary Agreement*** asserts the right of governments to introduce measures which exceed international standards where deemed necessary to protect human, animal or plant health. However, such measures must be transparent and based on scientific risk assessment. There must be equal treatment for all nations and between imports and domestic products. The SPS Agreement also encourages mutual recognition of national regulations (equivalence principle). With respect to food, it covers health risks (food safety) arising from additives, contaminants, toxins and pathogens contained in food products.

The ***Technical Barriers to Trade Agreement*** is much broader, covering all technical regulations, voluntary standards, conformity assessment procedures and any other measures not covered by the SPS Agreement. It seeks to ensure that national measures are transparent, non-discriminatory, have a legitimate aim and minimise restrictions on trade. Compliance with relevant international standards is encouraged. In terms of food, the TBT Agreement covers packaging, composition and labelling as well as quality requirements (*i.e.* production and processing methods as well as final product characteristics).

As traditional barriers to trade come down, regulations and standards can take on a more important role in trade. Standards and procedures can facilitate trade, but in some cases they may also reduce international competition, distort trade and prevent firms, notably foreign firms, from entering the market. With the strengthening of international rules, increased trade in consumer food products and the growing use of biotechnology, trade conflicts over food regulatory issues and their reform are likely to become more common. However, ignoring legitimate consumer food safety concerns would result in a falling away of their support for the process of trade liberalisation. The challenge for governments is to find the right balance between consumer protection and reducing technical barriers to trade.

Measuring the environmental impacts of agriculture

Improving environmental performance in agriculture is a key objective in agricultural policy reform programmes underway in many OECD countries. Environmental policies and regulations are increasingly impacting on the agro-food sector, while international environmental agreements, such as the Kyoto Protocol commitments to reduce greenhouse gases, could have implications for agriculture in the future.

The importance of these issues was highlighted at meetings in 1998 of OECD Agriculture Ministers and Environment Ministers. The Agriculture Ministers agreed that governments should ensure that the agro-food sector contributes to the sustainable management of natural resources and the quality of the environment. Actions are needed so that farmers take both environmental costs and benefits into account in their decisions.

This requires, *first*, better knowledge of the magnitude and trends in the environmental effects of agriculture. *Second*, improved understanding of the impact of agricultural policies on the environment, and *third*, the development of tools to monitor and evaluate policies to help facilitate their effectiveness in promoting sustainable agriculture.

To help improve information on the current impacts and trends in the environmental effects of agriculture, the OECD is developing a set of agri-environmental indicators within the Driving force-State-Response framework (Box I.8).

Box I.8. **The OECD framework to develop agri-environmental indicators**

Driving force – State – Response (DSR) framework addresses a set of questions related to causes, effects and actions of agriculture on the environment:

- What is causing environmental conditions in agriculture to change, *e.g.* changes in pesticide use (*Driving forces*)?
- What are the effects of agriculture on the environment, *e.g.* impacts on soil, water, and natural habitats (*State*)?
- What actions are being taken to respond to the changes in the state of the environment by farmers, consumers, industry and governments, *e.g.* promoting sustainable agriculture by community based approaches (*Responses*)?

The OECD is developing indicators to cover primary agriculture's:

- *use of natural resources and farm inputs:* nutrients, pesticides, water and land;
- *environmental impact on:* soil and water quality, land conservation; greenhouse gases, biodiversity, wildlife habitats and landscape; and,
- *interaction between the environment, economic and social factors:* farm management practices; farm financial resources; and socio-cultural aspects.

Source: OECD (1997), *Environmental Indicators for Agriculture*, OECD Publications, Paris.

Preliminary results

Progress in establishing indicators across different areas is variable, in particular, because research on issues such as agricultural biodiversity is relatively recent compared to, for example, farm nutrient use. Some preliminary results of the OECD agri-environmental indicator work, however, reveal that the environmental performance in agriculture has generally tended to improve over the past 10-15 years for many OECD countries, although the magnitude of improvement varies among countries (Box I.9).

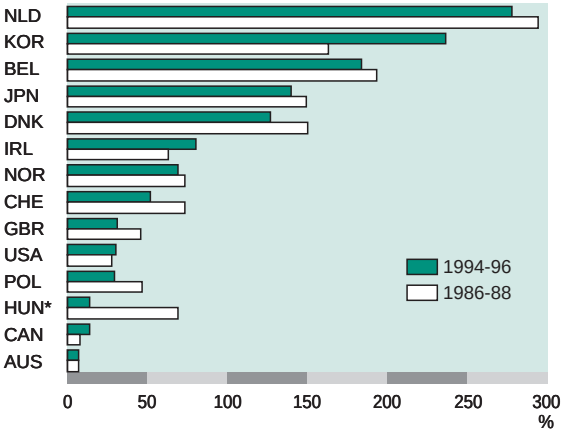
The potential *nitrogen loading* on the environment from agriculture, for example, as measured by the nitrogen soil surface balance indicator, has declined for most countries.[28] For certain countries, such as **Hungary** and **Poland,** this reduction in nitrogen surplus has been particularly large, affected by the collapse in agricultural support levels, the elimination of input subsidies and increasing debt levels in the farm sector following the transition toward a market economy.[29]

The quantities of *pesticides* used by agriculture (measured in active ingredients) have also decreased for many OECD countries. However, a change in pesticide use may not reflect a change in environmental damage from pesticides because of the variable environmental risk associated with different pesticides. Even so, research in **Denmark** and **Sweden,** for example, has revealed a close correlation between declining pesticide use and environmental risk.

Box I.9. Preliminary OECD agri-environmental indicators

Agricultural nitrogen balance

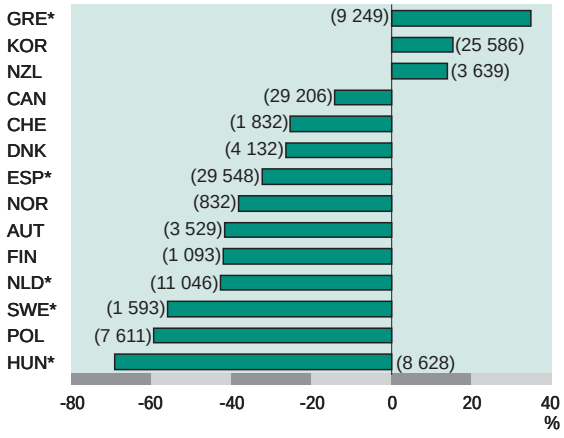
1986-88 and 1994-96, kg nitrogen/ha



Notes: Nitrogen (N) balance in kg per hectare of total agricultural land = N inputs (fertiliser, manure, etc.) minus N plant uptake, which if > 0 = N surplus; if < 0 = N deficit.
* 1986-88 to 1993-95.
Data are preliminary estimates.
Source: OECD Agri-environmental Indicator Database.

Pesticide use in agriculture

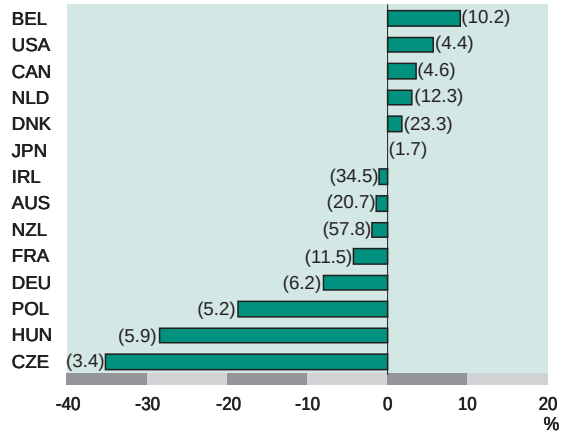
% change 1986-88 to 1994-96



Notes: 1994-96 time series are not available for Australia, Belgium, Iceland, Japan, Luxembourg, Mexico and United States.
(..) Total use of pesticides in tonnes of active ingredients 1994-96, except Canada 1994.
* Total use of pesticides in tonnes of active ingredients 1994-95.
Source: OECD, Environmental Database.

Gross emissions of greenhouse gases from agriculture

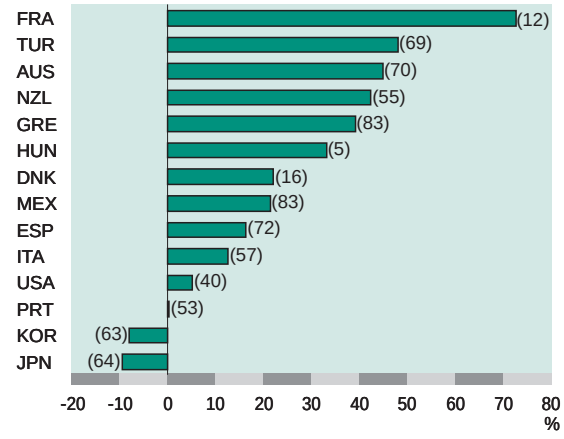
% change 1990-92 to 1993-95



Notes: Gross greenhouse gas (GHG) emission data (excluding GHG sinks) covers the main agricultural GHG gases – carbon dioxide (CO_2), methane, nitrous oxide – converted to CO_2 equivalent using Global Warming Potentials for 100 years.
(..) Share of agricultural gross emissions in total gross emissions 1993-95.
Source: OECD Agri-environmental Indicator Database.

Irrigated agricultural land area

% change 1980-82 to 1994-96



Notes: (..) % of irrigation water for agriculture in total abstractions 1995, except Greece and Italy 1980, Australia 1985, Portugal and United States 1990.
Source: OECD, Environmental Database.

There has generally been a small reduction in emissions of *greenhouse gases* from agriculture during the past six years. The contribution of agriculture in helping towards meeting national commitments under the Kyoto Climate Change Protocol might be important in the new millennium, especially for countries where the share of agricultural greenhouse gas emissions in total emissions is significant, notably for **Australia, Denmark, Ireland,** and **New Zealand,** although overall greenhouse gas emissions are low in these countries.

In the area of agricultural *water use*, there has been a substantial expansion of agricultural land under irrigation in a number of OECD countries over the last two decades. This underlines the potential future risks in view of competing and growing demands for water from farmers, industry, households and other water users.[30]

Next steps

An OECD Workshop, held in York, United Kingdom, in September 1998, led to considerable progress in both the identification and specification of policy relevant indicators which will provide a solid basis for future OECD work (Box I.10). The OECD is now moving the work into a more intensive data collection and indicator measurement phase, recognising that the process of developing indicators will be one of evolution and refinement, and that some indicators will evolve more rapidly than others. As different indicators are developed the linkages between them will be analysed to help better interpret trends in specific indicators. For example, changes in indicators of nutrient use (*driving force*), can be linked to variations in water quality (*state*) and related to the alteration in farm management practices (*responses*).

Box I.10. **The way forward: the results of the York Workshop**

Some key results of the OECD Workshop on agri-environmental indicators include:

- Developing a set of indicators for the short and long term, which command broad consensus in terms of feasibility and policy relevance.
- Recognising that indicator development is a process of evolution and refinement, and that indicators should convey the diversity in agri-environmental conditions at the sub-national level.
- Establishing some "contextual data sets", such as farm financial viability, which will be valuable in interpreting trends in agricultural sustainability.
- Continuing to draw on work underway on indicators in OECD Member countries and other international fora, as a basis to ensure that a common indicator methodology is applicable to all OECD countries.
- Emphasising the need for flexibility in using indicators for policy analysis and developing an iterative process between indicator construction, policy modelling and policy decision making.
- Stressing the importance of indicator transparency so that all "stakeholders" can understand the indicators and the policy implications based on them.

Source: OECD (1999), *Measuring the Environmental Impacts of Agriculture: The York Workshop*, Paris.

As more indicators become operational they will enrich the information in the OECD monitoring and policy analysis work. The indicators can provide essential data to measure the environmental impacts of changes in different agricultural policies, such as market price support measures and direct payments. Also the use of indicators in commodity projection work is being investigated through the OECD model for medium term agricultural commodity markets and trade (AGLINK), such as examining the implications for agricultural markets and trade of reducing agricultural greenhouse gas emissions.[31]

The OECD agri-environmental indicators are also providing a building block in developing a set of OECD sustainable development indicators, which is part of the OECD horizontal project on sustainable development.[32] The final report from this project, which is planned as an input to the UN Conference on Environment and Development in 2002, will contribute to developing a policy strategy to help achieve sustainable development with emphasis on the economic, social and environmental dimensions.

Agricultural trade developments with non-OECD economies

Over the past decade, a number of factors have contributed to closer trade links with non-member economies. High economic growth in emerging markets in conjunction with domestic policy reform as well as commitments taken in regional and multilateral trade negotiations contributed to higher world prices for many agricultural commodities during the mid 1990s. This high price environment was conducive to the creation of new trade agreements, and the deepening of existing ones, with non-OECD countries. These conditions have fundamentally changed with the financial and economic crises in 1997/98 and have given rise to concerns that momentum for future trade liberalisation could weaken.

Market developments

In 1998, trade relations with non-member countries were strongly affected by the financial and economic crises in Asia, Russia and emerging economies in Latin America. Some non-member economies were directly affected by the crisis and experienced sharp currency devaluations, capital outflows, a squeeze in the domestic credit markets, contractions in GDP and lower disposable consumer incomes. Where countries managed to escape the direct effects of the crisis, high real interest rates necessary to defend the domestic currency placed a heavy burden on domestic producers and also contributed to an overall slowdown in economic growth. In general, the effects of lower GDP and devalued exchange rates reduced imports by non-member economies and put a brake on farm exports from OECD countries. There were, however, important differences in the exposure to the crisis; a few examples may help to illustrate the differences in the impacts on agricultural trade with OECD economies.

Agricultural trade with **Russia** was heavily affected by the crisis. In 1997, with agro-food imports of US$12.7 billion, Russia was one of the major agro-food importers in the world. About 55 per cent of imports originated from OECD countries and Russia's share in total OECD agro-food exports to countries outside the OECD area increased from 6 to 17 per cent between 1992 and 1997. The acute financial crisis that erupted mid-August resulted in a strong reduction in food imports into Russia. The decline in real incomes induced a squeeze in demand for income elastic products such as meat and milk; the strong devaluation of the rouble made imports much less competitive; the collapse of the banking sector in Russia exacerbated payment problems for imports; and price and mark-up controls at the regional level made sales of imported products unprofitable.

The crises spilled-over into Brazil's agriculture. **Brazil** is a major agricultural exporter and an important trading partner for many OECD countries. It is the most important source for OECD imports of citrus, tropical beverages and soybeans, while it imports temperate zone commodities from OECD countries. The crises in Asia and Russia had largely indirect impact on Brazil's agricultural trade. High interest rates to defend the exchange rate of the "Real" *vis-à-vis* the US dollar brought about sharply rising production costs for large-scale, capital intensive producers. To offset – at least a part of – these extra costs for producers the government launched a package of measures to support agricultural exports. This included increased funds for export credits and an Export Credit Advance mechanism (ACC). These measures helped to offset the effects of the over-valued "Real" and resulted in largely unchanged agricultural trade volumes for 1998.

China, however, remained largely immune. OECD countries have become the most important export destination for China, absorbing more than 50 per cent of China's agricultural exports. Japan alone accounts for 30 per cent of China's agricultural exports, followed by Europe with about 19 per cent. At the same time, about 30 per cent of China's agricultural imports originate from OECD countries. So far, China has managed to remain immune to contagion from the crises in Asia and Russia. The Government maintains a managed exchange rate system, insulates China's currency from market forces and speculative pressure, and exercises full control over foreign trade. While these measures have helped to minimise the immediate and direct effects of the crises, there are growing concerns that China's agricultural exports may become less competitive vis-à-vis other Asian suppliers, who have benefited from exchange rate devaluations.

Trade agreements with non-member economies

Despite the financial and economic crises in 1997/98, a number of new efforts towards freer trade with non-member economies were launched or intensified in 1998. This included negotiations with

non-members on a regional basis as well as new bilateral trade agreements. The most important events in 1998 were the launch of formal negotiations for a Free Trade Area of the Americas (FTAA), a free trade agreement between Chile and Canada, the continuation of the EU-MERCOSUR trade talks and continuing developments in a number of trade agreements involving central and eastern European countries.

The launch of the FTAA

Formal negotiations for a Free Trade Area of the Americas were launched in April 1998. The draft agreement stipulates the creation of a free trade area of 34 countries of the Americas by 2005. The trade ministers of the participating countries called for the FTAA negotiations to be consistent with commitments taken in parallel in multilateral negotiations, which essentially require that free trade areas cover all trade among members and that trade barriers *vis-à-vis* outsiders not be increased. Discussions for the FTAA will proceed in nine negotiating groups, including a separate group on agriculture.

Chile's Free Trade Agreement with Canada

Chile's Congress ratified the Free Trade Agreement with Canada in July 1998. About 92 per cent of Chile's exports to Canada will face zero duty from the effective date of the agreement, including fruits, wine, fishmeal, salmon and other fish products. By 2003, almost all agricultural exports to Canada will be duty-free. As regards Canada's agricultural exports to Chile, only 45 per cent will have zero duty from the effective date onward. Among sensitive agricultural products are beef and pork, vegetable oils, peas, corn and corn products and sugar. All other products will have phase-out periods of 2 to 18 years.

Continuation of EU-MERCOSUR trade talks in 1998

In 1994 the European Commission established a two step strategy to strengthen its trade links with MERCOSUR countries. The first step was successfully concluded with the interregional framework agreement, signed in December 1995. The second step foresees the creation of an interregional association agreement, envisaged to include: partnership on political and security issues, an enhanced process of co-operation on economic and social matters, and a free trade area (FTA) for goods and services. A comprehensive review of recent trade developments and possible implications of an FTA was undertaken in 1998. While the review underlined that substantial progress has been made towards freer trade between the two regions (*e.g.* 63 per cent of EU imports are already duty free), it also revealed that agricultural trade – accounting for 80 per cent of total sensitive EU imports – could become the main stumbling block towards a successful conclusion of the FTA. With depressed prices and farm incomes in the European Union, there are growing concerns that future negotiations towards an FTA of the two blocs may become increasingly difficult. Depending on the authorisation by the EC Council, these negotiations are scheduled to commence in 1999.

Central and Eastern European Trade Agreements

An important regional trading agreement, which provides some liberalisation of agricultural products, is the Central European Free Trade Agreement (CEFTA), founded by **Hungary, Poland** and the **Czech** and **Slovak Republics** in 1992. **Slovenia** became a member in 1996, Romania in 1997 and **Bulgaria** joined in 1998. The main goal of the agreement is for a gradual reduction in impediments to trade in agro-food products leading to free trade by 2000. Depressed market conditions for agricultural and food products in the CEEC region in 1998 led to several CEFTA members raising import tariffs and introducing quotas on certain agricultural imports from the other CEFTA members. In 1998, Bulgaria completed the abolition of price controls and the liberalisation of trade in line with its obligations under the CEFTA Agreement.

In January 1997, the Baltic Free Trade Agreement (BAFTA) on agricultural and food products came into force. This agreement allows for comprehensive free trade between **Estonia, Latvia** and **Lithuania** on agricultural products of domestic origin. Since the implementation of the Agreement, trade in agricultural and food products between the three Baltic countries has increased substantially, albeit from a low level. Implementation of the agreement has also led to some convergence in farmgate and retail prices across the region, and to some extent domestic policies. The harmonisation of veterinary controls

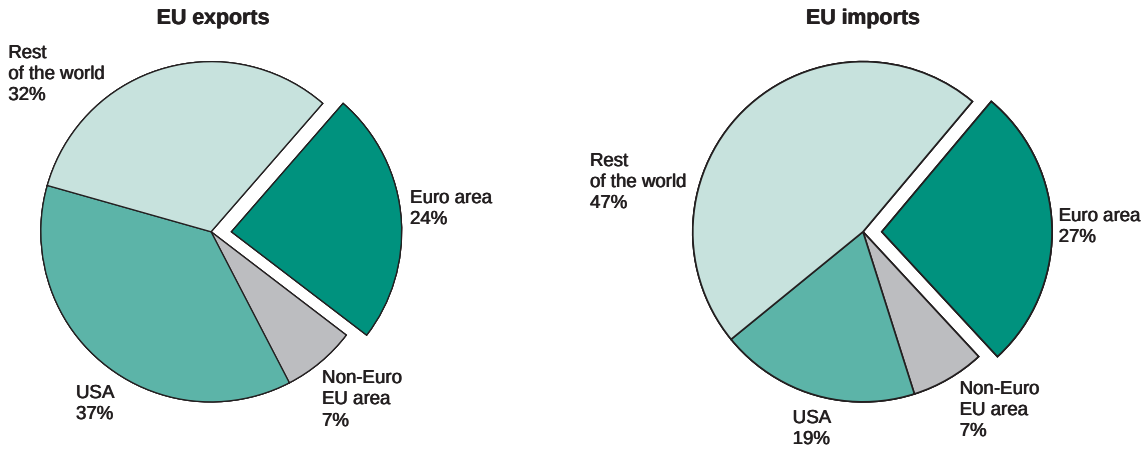
between the three countries in 1998 should further enhance the growth in trade of agro-food products between the countries. All three countries have started to implement domestic agricultural policies in line with those of the EU, with Estonia being more advanced in this respect.

Economic implications of the single European currency (euro) for the agro-food sector

With the advent of European Economic and Monetary Union (EMU) on 1 January 1999, the single European currency, euro, was introduced. On this date, the EU participating countries irrevocably fixed their exchange rates against the euro and lost sovereignty over monetary and exchange rate policies. The Euro area comprises 11 countries which account for approximately 16 per cent of global GDP, has a total population of 290 million; intra-EU trade is more important than extra-EU trade, with imports from non-EU countries accounting for about 15 per cent of GDP.

Given the economic importance of the Euro area, the introduction of the single currency will have widespread effects on all EU member states as well as on countries outside of the EU. The economic debate behind EMU centres to a large extent on judging the balance between micro-economic gains to the EU against macro-economic risks. The main potential gain is to improve the efficiency of the single market by reducing exchange rate uncertainty, improving price transparency and reducing the transaction costs of converting currencies associated with intra-EU trade. The adoption of the euro has important implications for the functioning of the EU Common Agricultural Policy (CAP) and for the competitiveness of the agro-food sector in general.[33] It provides opportunities to the agro-food sector but it also poses important challenges. The agri-monetary system will be completely phased out in three years for the participating countries. The launch of the euro creates a single currency area whose economy is comparable to that of the US (Graph I.17).

Graph I.17. **Share of Euro area in EU agricultural trade, 1996**



Notes: Agricultural trade comprises primary and processed agricultural products.
Euro area: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.
Non-Euro area: Denmark, Greece, Sweden and the United Kingdom.
For the categorisation of commodities, see notes to Table I.4.
Source: OECD, *Foreign Trade Statistics*.

Agri-monetary system: at the farm level, the most immediate effects stem from changes to the agri-monetary regime. Under the agri-monetary system which was in place until the end of 1998, the ECU was used as a unit of account for setting prices, while payments were made in national currencies using

the agricultural conversion rates, the so-called "green ECU". The agricultural conversion rates followed the evolution of the daily exchange rate. Whenever a revaluation gave rise to a significant decrease in the agricultural conversion rate, and hence in the level of prices and payments expressed in national currency, temporary financial support was granted to compensate farmers for revenue losses.

The system reduced volatility in the conversion rate applied to CAP support prices and payments. However, it was complex to administer and it had the potential to distort trade when there have been very large gaps over long periods between the value of green rates and market rates in different member States. Moreover, it has generated substantial additional costs to the EU budget amounting to ECU 1.3 billion (US$1.1 billion), or 3.2 per cent of EAGGF Guarantee Fund spending in 1997. The majority of these effects can be attributed to a few key features of the regime, in particular, the asymmetry of the system, with its bias against revaluations. The euro required an overhaul of the agri-monetary regime and new, simpler arrangements were implemented. Green rates were abolished and replaced by the market exchange rate. Frozen green rates were removed, although compensation will be paid degressively over three years.

Exchange rate risk: agro-food sector is one of the most traded sectors in OECD countries and thus is particularly sensitive to exchange rate movements. If EU member states are pursuing different monetary policies or economic conditions are different, their exchange rates will fluctuate. Uncertainty about currency values can undermine the operation of the single market. The economies of a number of EU member countries, for example, were beset by the turmoil of the exchange rates between the European currencies which took place between September 1992 and May 1995.

One of the main advantages of the euro is that it eliminates exchange rate risk and uncertainty, potentially contributing to a more stable economic environment for the participating countries. Lower exchange rate risk also implies that interest rate risk *premia* should be small, and therefore borrowing costs lower. The elimination of the exchange rate risk will particularly benefit companies which operate in several countries of the Euro zone. Small and medium size enterprises in the food processing sector who are less sophisticated in exchange rate management will benefit to a lesser extent than multinational food companies.

However, participating countries will still be at risk from the movements of the euro in trade with countries outside the Euro area. Moreover, country or region-specific, asymmetric economic shocks could pose major challenges due to the loss of sovereign monetary policy. This is particularly relevant for those regions whose economies are not diversified and are heavily dependent on one exportable sector. Nevertheless, the economic performance of the Euro area will be less sensitive to exchange-rate fluctuations than before.

Non-participating EU members might be at a competitive disadvantage in trading with the other EU countries within the Euro zone, as they have to cover both the costs of currency exchange and currency hedging. Non-participating EU member states may also face more volatile exchange rates. As external trade represents a relatively small proportion of total output for both the EU and the US, it can be argued that the exchange rate between the US dollar and the euro will be of relatively low priority to policy makers. In fact, mechanically, the creation of the euro reduces the share of "imports" for EU countries insofar as the trade between EU member states of the Euro zone is no longer paid in foreign currencies. In this situation, the currencies of the non participating EU countries could become more volatile, affected by both the dollar and the euro. However, the ultimate effect will largely depend on the specific currency in which the underlying market operates.

Intra-EU trade: one of the principal motivations of the EMU is to facilitate intra-EU trade. The euro makes it possible to improve price transparency and stability within the single market, to eliminate significant transaction costs and to generate economies of scale. Different national currencies make it more difficult for consumers to compare prices across national boundaries and make it easier for suppliers to practice price discrimination by charging different prices to customers in different EU member states. Moreover, bank charges for currency conversions, which represent an additional overhead for intra-EU trade, will be eliminated. Notwithstanding, the one-off costs of changes to administration and hardware and software systems necessary with the switch to the euro, greater competition in the services, in particular in banking and insurance, will allow reductions of charges and costs.

The relative competitive position of the upstream and downstream agro-food sectors is likely to change. With more transparent prices and no exchange rate risk, cross-border competition is expected to intensify. The increased competition that the euro will unleash may accelerate the process of rationalisation and concentration in the food processing and retail sectors. Further, distribution and purchasing arrangements in the food sector may become simpler and cheaper inside the Euro zone due to the elimination of exchange rate risk.

The euro will have differential impacts on the upstream agro-food sector, depending on the degree of tradeability of the goods in question. For those agricultural inputs which are already extensively traded within the EU such as fertilisers, it is expected that the single currency will provide opportunities for farmers to search for the cheapest sources over a wider economic area. For those inputs such as veterinary and chemical products which are tradeable within the EU but for which barriers to trade prevail, often attributable to national legislation on licensing or differences in tax regimes, completion of the single market in these inputs may also require significant regulatory harmonisation. Different legal and fiscal systems can also thwart trade in property rights to land. However, the creation of a single currency may in itself give impetus to this development by highlighting price differences. Concerning labour, it is unlikely that agricultural workers will move in significant numbers across the EU. The expectation is that agricultural labour will continue to move out of the sector into other economic activities.

The single currency may induce geographical shifts in agro-food production. In general, the incidence of country or region-specific economic disturbances is lower the more the regions are integrated with each other and diversified within themselves.[34] Some economists, however, have argued that closer economic integration could result in greater regional specialisation and thus greater vulnerability in regions of the monetary area to asymmetric shocks.[35] It is argued that regional specialisation has been limited by national obstacles to trade and high transportation costs. As the single market makes prices more transparent, the incentive to reap scale economies and agglomeration benefits may rise and production could thus be concentrated in the regions closest to largest markets.

Extra-EU trade: The creation of a single currency will also have implications for extra-EU trade. The main transmission mechanism of international trade of the euro to non-EU countries include the impact of higher growth in the Euro area, the spillover effects from the higher synchronisation of economic cycles in the EU and the use of the euro in trade invoicing. Economic growth in the EU could follow from the completion of the EMU, thereby stimulating international trade. However, this trade creation effect may be offset to a certain extent by a trade diversion effect resulting from the increased competitiveness of the Euro area countries. Furthermore, economic growth in the Euro area will increasingly affect other regions in the world due to spillover effects from higher synchronisation of business cycles within the Euro area. As a result of the higher trade interdependencies, increasing financial market integration and increasing policy convergence of economic policies within the EU, business cycles have tended to become more synchronised within the EU. In such a case cyclical fluctuations within the Euro area will increasingly affect non-EU countries. The impact of euro on non-EU countries will depend crucially on the share of these countries' trade with the countries of the Euro area in their total external trade, and on the trade elasticity of the countries' economic growth.

The potential use of the euro as a vehicle currency may induce that certain countries, particularly those which trade with the EU is important, like Eastern Europe, the Mediterranean basin and countries in Africa, could choose to limit the fluctuations of their rates of exchange by using the euro as an exchange rate anchor. Moreover, they could choose commercial contracts made out in euros, including for agricultural produce. However, it can be expected that international trade implications of the euro will be felt gradually over time.

The long-term trend of the euro depends on both domestic and international development and economic policies. While the current macroeconomic conditions are fairly favourable, there is a potential risk either of exchange rate instability between the euro and other major currencies (US dollar, yen), or of a deviations of the level of the value of the euro away from what is considered appropriate. A tight monetary policy stance, for example, would result in higher interest rates than would otherwise be justified. This would result in an inflow of capital and associated pressure on the exchange rate. This could hamper EU's export competitiveness, including agricultural trade.

NOTES

1. A detailed analysis of agricultural markets and related policy issues is presented in OECD, *The OECD Agricultural Outlook 1999-2004*, Paris, 1999.
2. OECD, *National Policies and Agricultural Trade*, Paris, 1987.
3. OECD, *Agricultural Policies in OECD Countries*, 1998; and OECD, *Modelling the Effects of Agricultural Policies*, OECD Economic Studies, Special Issue, No.13/Winter 1989-1990.
4. Corden, W.M., *The Theory of Protection*. Oxford University Press, 1971; FAO, *Agricultural Protection: Domestic Policy and International Trade*. 1973; and FAO, *Agricultural Protection and Stabilisation Policies: A Framework of Measurement in the Context of Agricultural Adjustment*, 1975.
5. All these indicators by country now cover all agricultural production, while formerly the PSE (including General Services) only covered a share of total production (corresponding to a set of common commodities indicated in Graphs I.10 and I.11) ranging from 50 per cent in Turkey to 86 per cent in Switzerland in 1998. Currently the MPS calculated for the common set of commodities is increased to all production according to the share of the common set of commodities in the total value of agricultural production, regardless of the differences of the level of market price support between the common set of commodities and other commodities. The average MPS for all commodities is thus considered as being equal to the average MPS calculated for the common set of commodities. This was the method formerly used to calculate the former "Total Transfers".
6. The value of the Producer Support Estimate (PSE) has been estimated to cover all production (and not only the common set of commodities), but excludes some measures formerly in the General Services category in the formerly titled Producer Subsidy Equivalent and now included in the GSSE (for example, research and development, marketing and promotion). The denominator of the percentage PSE includes all payments to producers. The value of the CSE covers all consumption of domestically produced commodities, but does not include the amount of the intra-sectoral transfers associated with market price support on the quantities of domestic crop production used as feed. The denominator of the percentage CSE includes the amount of budgetary transfers to consumers. The GSSE corresponds to the former General Services in the former PSE, minus the payments associated with on-farm services (for example, extension services) now included in the PSE, plus the payments formerly included only under Total Transfers (see Part II.2).
7. Changes in the percentage TSE reflect trends in the level of support to agriculture as well as in the performance of the growth of the general economy, as measured by the GDP.
8. Gross farm receipts are measured by the value of total production at domestic producer prices (cash receipts), adjusted to include budgetary transfers to producers.
9. In 1998, the rate of inflation is estimated at 8 percent in Czech Republic, 12 per cent in Poland, 15 per cent in Hungary and Mexico, and 84 per cent in Turkey (*OECD Economic Outlook*, December 1998). While the evolution of support over time in nominal terms needs to be interpreted with caution, due to the effects of inflation, the evolution in percentage terms nets out the inflation effects.
10. Although some of the PSE transfers are specific to a commodity or a specific group of commodities, other are not, but influence overall farming receipts and are related to all commodities, and have been allocated among commodities. This allocation is made in a case by case basis according to the specific implementation criteria of the policy measure in question (Part I.2).
11. See footnote 5. "Other commodities" are all commodities produced in OECD countries but not in the common set of commodities.
12. More in-depth evaluations of past policy developments are available in the background document for the 5-6 March, 1998 meeting of the Committee of Agriculture at Ministerial level, *Agricultural Policy Reform: Stocktaking of Achievements*, Paris, 1998 and the OECD publication, *Agricultural Policies in OECD Countries: Monitoring and Evaluation 1998*, Paris, 1998.

13. The impact of the Uruguay Round Agreement of Agriculture on agriculture in OECD countries is examined in (OECD), *The Uruguay Round: A preliminary Evaluation of the Impacts of the Agreement on Agriculture in the OECD Countries,* Paris, 1995.

14. For more in-depth discussion, see Tim Josling, *The Uruguay Round Agreement on Agriculture: A Forward Looking Assessment;* a consultant's report presented to the OECD Workshop on Emerging Trade Issues in Agriculture, 26-27 October 1998, Paris (workshop papers are available at www.oecd.org/agr/trade).

15. The impact of the URAA on trade in processed food products is examined in (OECD), *The Uruguay Round Agreement on Agriculture and Processed Agricultural Products,* Paris, 1997.

16. The issue of regional integration and the international trading system is examined in (OECD), *Regional Integration and the Multilateral Trading System: Synergy and Diversion,* Paris, 1995.

17. The characteristics of direct payments in agriculture, analysed on the basis of the 1987 OECD Ministerial principles, have been examined in (OECD), *Agricultural Policy Reform: New Approaches – The Role of Direct Income Payments,* Paris, 1994.

18. There can also be significant administrative costs associated with market price support and related supply controls. Administration costs are not included in the OECD Producer Support Estimate (PSE) which measures the monetary value of transfers to agricultural producers. Nor are they included under the General Services Support Estimate, which does, however, include the administrative costs associated with research, education, inspection and other general services provided to agriculture.

19. For a discussion of agriculture and water issues, see (OECD), *Sustainable Management of Water in Agriculture: Issues and Policies – The Athens Workshop,* Paris, 1998.

20. Recent OECD studies concerning agriculture and the environment include: *Environmental Indicators for Agriculture,* Paris, 1997; *The Environmental Effects of Land Diversion Schemes,* Paris, 1997; *Environmental Benefits of Agriculture: Issues and Policies* – The Helsinki Seminar, Paris, 1997; *Agriculture, Pesticides and the Environment: Policy Options,* Paris, 1997; *The Environmental Effects of Reforming Agricultural Policies,* Paris, 1998; *Co-operative Approaches to Sustainable Agriculture,* Paris, 1998; *Agriculture and the Environment: Issues and Policies,* Paris, 1998.

21. The polluter-pays-principle (PPP), as endorsed by OECD Member countries in 1974, states that the polluter should bear the cost of meeting the level of environmental protection decided upon by government. Consistency with the PPP implies that direct payments to farmers should not normally be used to compensate farmers for the cost of reducing pollution to permitted levels.

22. The relationship between agricultural policy and rural development is examined in (OECD), *Agricultural Policy Reform and the Rural Economy in OECD Countries,* Paris, 1998.

23. Regulatory reform in the economy, including the agro-food sector, is examined in (OECD), *The OECD Report on Regulatory Reform,* Paris, 1997.

24. A detailed analysis of agricultural markets and related policy issues is presented in (OECD), *The OECD Agricultural Outlook 1999-2004,* Paris,1999.

25. As reported in, *The Organic Food and Farming Report,* Soil Association, Bristol, 1998.

26. For a detailed assessment of Korean agriculture and related policy reforms, see (OECD), *Review of Agricultural Policies in Korea,* Paris, 1999.

27. For a discussion of the SPS Agreement as a catalyst for regulatory reform, see Donna Roberts, "Preliminary Assessment of the Effects of the WTO Agreement on Sanitary and Phytosanitary Trade Regulations" in *Journal of International Economic Law,* Oxford University Press, December, 1998.

28. The *agricultural nitrogen soil surface balance indicator* involves calculating the difference between all nitrogen inputs (mainly chemical fertilisers, livestock manure, nitrogen in rainfall and legume crops) and nitrogen uptake by agricultural crops (largely annual arable crops, such as cereals, and pasture used for livestock grazing). In all OECD countries this calculation shows a national nitrogen surplus (inputs of nitrogen are greater than uptake), but a nitrogen surplus only reveals the "potential" nitrogen loading on the environment (*i.e.* in the air, soil, water), as the "actual" loading or pollution will depend on a number of factors, such as local soil and climatic conditions, how and when livestock manure is spread on the soil.

29. OECD (1998), *The Environmental Effects of Reforming Agricultural Policies,* Paris.

30. OECD (1998), *Sustainable Management of Water in Agriculture: Issues and Policies,* Paris.

31. OECD (1999), *The Agricultural Outlook 1999-2004,* Paris.

32. OECD (1998), *Work on Sustainable Development,* OECD website: htttp://www.oecd.org.

33. OECD (Forthcoming 1999), *The Economic Consequences of the Implementation of the Euro for the Agro-Food Sector*, Paris.

34. There is a growing literature on the macroeconomic effects of EMU. For a comprehensive discussion of the issues involved, see (OECD), *EMU: Effects, Challenges and Policies*, Paris, 1999.

35. Krugman, P. (1991), *Geography and Trade*, MIT Press.

Part II

BACKGROUND INFORMATION

BACKGROUND INFORMATION

1. OECD MINISTERIAL COMMUNIQUÉS RELATED TO AGRICULTURAL POLICIES

In 1987, the OECD Council at Ministerial level adopted a number of principles for agricultural policy reform. These principles, reaffirmed and extended through subsequent Ministerial communiqués, provide the reference by which agricultural policy developments in Member countries are evaluated in this monitoring report. Selected text from the most relevant communiqués are presented below.

OECD Council at Ministerial level, April 1998

The OECD Council at Ministerial level met on 27-28 April 1998. The communiqué issued at the conclusion of that meeting included the following text related to agricultural policy.

Strengthening the multilateral system

(23.) In view of the upcoming WTO Ministerial, which is being held in conjunction with the 50th anniversary of the multilateral trading system, Ministers reaffirmed their strong commitment to the multilateral system. They attached the utmost importance to maintaining open markets and sustaining the momentum of liberalisation. They stressed their resolve to ensure full and timely implementation of the Uruguay Round agreements, to strictly adhere to WTO rules, and to pursue the process of broad-based trade liberalisation, including in new areas. To this effect Ministers encouraged vigorous efforts in the WTO based on the built-in agenda agreed at the end of the Uruguay Round, together with the WTO work programme as agreed at Singapore. Ministers welcomed that exploration of the possible scope and modalities for further liberalisation and rulemaking had begun and stressed the importance of advancing toward an international consensus. In this context, Ministers expressed their support for complementing existing WTO mandates by addressing remaining barriers to trade in industrial products and for further liberalisation in the information technology area. Ministers reaffirmed the OECD's important role in support of the multilateral system and the WTO's preparations for future negotiations. They recognised that further integration of developing and transition countries into the multilateral system remains a high priority, and that it is important to remain responsive to their needs. In this context, particular attention should be given to enhancing opportunities for the least developed countries, and to helping them build the capacities needed to benefit from those opportunities. Ministers also supported the early accession on commercially viable terms of applicants to the WTO, while preserving the integrity of WTO rules.

(24.) Ministers noted that OECD Agriculture Ministers had, at their March meeting, reaffirmed that, in conformity with the conditions of Article 20 of the Uruguay Round Agreement on Agriculture and including all the elements contained therein, further trade negotiations are due to continue the ongoing process towards the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform. Ministers also noted that Agriculture Ministers had adopted a broad set of shared goals and policy principles covering all aspects of agricultural policy reform, and that those Ministers had: stressed that agro-food policies should seek to strengthen the intrinsic complementarities between the shared goals, thereby allowing agriculture to manifest its multifunctional character in a transparent, targeted and efficient manner; and had agreed that the challenge in pursuing the shared goal is to use a range of well-targeted policy measures and approaches which can ensure that the growing con-

cerns regarding food safety, food security, environmental protection and the viability of rural areas are met in ways that maximise benefits, are most cost-efficient, and avoid distortion of production and trade.

(28.) Ministers noted with satisfaction the 20th anniversary of the Export Credit Arrangement. It has proved to be a highly successful means of achieving rules-based disciplines on export credits. They welcomed the positive efforts undertaken in the area of premia following the adoption of the 1997 Guidelines. Ministers regretted, however, that an Understanding covering agricultural export credits has not been concludes, but remain convinced that the appropriate forum in which to continue debating the matter is proved by the meetings of the Participants to the Arrangement. Noting the outstanding undertaking on this issue in the Uruguay Round Agreement on Agriculture, they urged the Participants to reach an agreement as soon as possible and to report back on this matter at their 1999 Ministerial meeting.

OECD's current and future challenges

(37.) Ministers agreed that the achievement of sustainable development is a key priority for OECD countries. They encouraged the elaboration of the Organisation's strategy for wide-ranging efforts over the next three years in the areas of climate change, technological development, sustainability indicators, and the environmental impact of subsidies. They welcomed the Shared Goals for Action adopted by OECD Environment Ministers at their April meeting. Ministers recognised that all OECD countries, on the basis of their differentiated responsibilities, need to play their part in combating climate change by implementing national strategies, including measures such as clear targets and effective regulatory and economic measures, as well as through international co-operation. In this regard, OECD analysis will be critical in helping Member countries find the most efficient and effective ways to meet Kyoto targets. Ministers asked the OECD to enhance its dialogue with non-member countries in these areas and to engage them more actively, including through shared analyses and development of strategies for implementing sustainable development. Ministers further noted that, as part of the Shared Goals, Environment Ministers stressed the crucial importance of strong environmental policies in the implementation of sustainable development. Ministers agreed to interpret the term "sustainable" as including social and environmental, as well as economic, considerations. The Organisation is well-placed to exploit its multidisciplinary expertise in this area and to pursue the integration of economic, environmental and social policies to enhance welfare. In this regard, Ministers stressed the importance of promoting effective integration of environmental consideration in the multilateral system.

OECD Committee for Agriculture at Ministerial level, March 1998

(1.) The OECD Committee for Agriculture met at Ministerial level on 5-6 March 1998 in Paris, under the chairmanship of Mr. J. van Aartsen, Minister for Agriculture, Nature Management and Fisheries, The Netherlands. The Vice-Chairs were Mr J. Anderson, Minister for Primary Industries and Energy, Australia, Mr D. Glickman, Secretary of Agriculture, United States, Mr Y. Shimamura, Minister for Agriculture, Forestry and Fisheries, Japan, and Mr F. Fischler, Commissioner for Agriculture and Rural Development, European Commission. Prior to the meeting the Chair had a useful exchange of views with the International Federation of Agricultural Producers and the Confederation of European Agriculture.

(2.) The world is adapting to the challenges of globalisation and evolving public expectations. Ministers judged it timely to examine the future role of the agro-food sector and related policies in the light of recent developments, in particular the outcome of the Uruguay Round Agreement on Agriculture, and of the World Food Summit. Most OECD countries have adjusted their agricultural policies over the last decade, and many are actively exploring new initiatives. Ministers undertook to further the process of the reform of agricultural policies as agreed in the 1987 OECD Council, through adoption of a set of shared goals and policy principles. In this context, Ministers noted that, in conformity with the conditions of Article 20 of the Uruguay Round Agreement on Agriculture (URAA)[1] and including all the elements contained therein, further trade negotiations are due to continue the ongoing process towards the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform.

Progress has been made in agricultural policy reform…

(3.) Ministers took note of the report prepared by the OECD Secretariat ***Agricultural Policy Reform: Stocktaking of Achievements*** as a good basis for discussion. They acknowledged that progress has been made since 1987, but more remains to be done. According to OECD Secretariat calculations, support to agricultural producers, as measured by the Producer Subsidy Equivalent, has fallen from an OECD-wide average of 45 per cent of the value of production in 1986-88 to an estimated 35 per cent in 1997. During the same period, total transfers from consumers and taxpayers due to agricultural policies decreased from a share of 2.2 per cent of GDP to 1.3 per cent, reaching a level of US$280 billion in 1997. There has been some shift away from price support towards direct payments and other policy measures that are less distorting to production and trade, that allow a greater influence of market signals, and are more efficient in the targeting of support. OECD countries have developed agricultural policy measures to address environmental, rural development and structural adjustment issues, and more attention has been paid to the impact of agricultural policy reforms on the agro-food sector as a whole. The growing importance of these issues had been identified by OECD Agriculture Ministers in 1992.

(4.) The 1994 Uruguay Round Agreement was a major step on the path of agricultural policy reform, bringing agricultural trade policies and associated domestic policies within the scope of a comprehensive framework of multilateral trade disciplines. Domestic and trade policy reform efforts have contributed to a reduction in the serious problem of over-production that characterised the 1980s, to gains in economic efficiency, to an improvement in the functioning of world commodity markets, and a closer relationship between developments in domestic and world markets.

… but more needs to be done…

(5.) Nonetheless, Ministers recognised that policy reform is an on-going process, that policy reform is not complete and therefore more needs to be done. Progress in policy reform has been uneven across countries and commodities, and the pace of reform has been affected by social and economic factors. While some countries have made substantial reforms, in others the agricultural sector is still substantially supported and is not sufficiently responsive to market signals. Some commodity sectors continue to be subject to production-limiting programmes, which can have positive and negative economic impacts. Although decreasing, market price support remains the major form of support in most OECD countries. And much support is linked to current production. Many agricultural policies still involve substantial costs to consumers and taxpayers. In many cases they either do not achieve their intended outcomes or do not do so in the most efficient and equitable ways.

(6.) In many cases, agricultural trade is subject to relatively high import tariffs. The use of export subsidies has been subject to discipline under the URAA, but remains a contentious issue. Export credits for agricultural products are not yet disciplined. Technical barriers to trade, sanitary and phytosanitary measures, labels of origin, quality standards, and export and import monopolies have also become important trade policy issues. Ministers recalled that agricultural trade policy measures are closely linked to domestic agricultural policy measures, and that the further reform of domestic and trade policies has to be compatible. In this context, Ministers noted that agricultural policy also needs to give due consideration to non-trade concerns, as referenced in Article 20 of the Uruguay Round Agreement on Agriculture.

… and new challenges are emerging

(7.) Ministers took note of the report prepared by the OECD Secretariat ***Agricultural Policy: The Need for Further Reform,*** and its suggested policy approaches, as a valuable contribution to the discussion on advancing the policy reform process. Ministers stressed that a major challenge for agriculture and the agro-food sector in OECD countries is to meet the growing demand for adequate and safe supplies of food in efficient and sustainable ways, while recognising the diversity of agricultural, economic and social situations and public preferences concerning the role of the agro-food sector across OECD countries.

(8.) On-going structural adjustment, innovation, and a tendency in some countries or sectors towards vertical co-ordination with upstream and downstream industries are important developments, with implications for farm incomes. Many farmers have responded to these developments, and to market sig-

nals, by adopting different farm practices, developing alternative products and supplying new markets. The income sources of many farm households are becoming more diversified. Problems of low farm incomes mainly affect specific farmers and less-favoured regions, or occur during periods of severe and sudden income loss. Producers in some countries, which previously had a high level of price support and protection, could face increased price variability. Providing appropriate safety nets and associated measures in least production-and trade-distorting ways would allow governments to assist in particular the most vulnerable farmers, in cost-efficient ways.

(9.) As globalisation advances, foreign investment in agro-food industries is increasing and trade in agricultural goods is expanding rapidly, particularly for processed products. There are closer agricultural trade and investment relations between OECD and non-OECD countries, especially some Asian and South American countries, which are emerging as major players in agricultural markets. The OECD area also has a responsibility to contribute to world food security, and Ministers stressed the importance of the 1996 World Food Summit declaration on global food security and the plan of action agreed upon. Food security requires a multifaceted approach involving national and international efforts, including: ensuring the eradication of poverty, sufficient food production, and a fair and market-oriented world trade system.

(10.) Beyond its primary function of supplying food and fibre, agricultural activity can also shape the landscape, provide environmental benefits such as land conservation, the sustainable management of renewable natural resources and the preservation of bio-diversity, and contribute to the socio-economic viability of many rural areas. In many OECD countries, because of this multifunctional character, agriculture plays a particularly important role in the economic life of rural areas. There can be a role for policy where there is an absence of effective markets for such public goods, where all costs and benefits are not internalised. The reform of agricultural policy according to the principles agreed upon in the OECD in 1987, including well-targeted policy measures, will enable the sector to contribute to the viability of rural areas and address environmental issues, while enhancing efficient and sustainable resource use in agriculture.

(11.) Rapid development and dissemination of new technologies, including biotechnology and information technology, is providing not only challenges but also opportunities for the agro-food sector. But there is growing public concern about food quality standards and food safety, including the effects of new technologies; animal welfare standards in agriculture; and those cases where agriculture causes environmental damage, such as degradation of water, soil and habitats. Most of these issues have trans-boundary and trans-sectoral dimensions. For many of them there is a need for further research, a better understanding of current scientific knowledge, and better information to consumers.

Ministers outlined their Shared Goals…

(12.) Against this background Ministers outlined a set of ***Shared Goals,*** stressing that the goals should be viewed as an integrated and complementary whole. There was a broad consensus that OECD Member governments should provide the appropriate framework to ensure that the agro-food sector:

- is responsive to market signals;
- is efficient, sustainable, viable and innovative, so as to provide opportunities to improve standards of living for producers;
- is further integrated into the multilateral trading system;
- provides consumers with access to adequate and reliable supplies of food, which meets their concerns, in particular with regard to safety and quality;
- contributes to the sustainable management of natural resources and the quality of the environment;
- contributes to the socio-economic development of rural areas including the generation of employment opportunities through its multifunctional characteristics, the policies for which must be transparent;
- contributes to food security at the national and global levels.

(13.) Ministers stressed that agro-food policies should seek to strengthen the intrinsic complementarities between the shared goals, thereby allowing agriculture to manifest its multifunctional character in a transparent, targeted and efficient manner. The challenge in pursuing the shared goals is to use a range of well-targeted policy measures and approaches which can ensure that the growing concerns regarding food safety, food security, environmental protection and the viability of rural areas are met in ways that maximise benefits, are most cost-efficient, and avoid distortion of production and trade.

… adopted a set of policy principles…

(14.) Ministers viewed future public policy as contributing to the achievement of the shared goals through appropriate well-targeted policy measures to accompany competitive, market-led developments in the agro-food sector. They noted that agricultural policy cannot be isolated from influences that are shaping the economy of which the agricultural sector is a part, and saw a clear need to ensure that agricultural policies are compatible and mutually reinforcing with broader economy-wide policies in areas such as social welfare, employment, environment and regional development.

(15.) In striving to realise the shared goals, Ministers adopted a set of ***policy principles,*** while recognising that governments will want to retain flexibility in the choice of policy measures and in the pace of reform, taking into account the diverse situations in Member countries. These principles, which build on the agricultural policy reform principles agreed by OECD Ministers in 1987 and reiterated by Agriculture Ministers in 1992, are as follows:

- reaffirm the support for Article 20 of the Uruguay Round Agreement on Agriculture* and the commitment to undertake further negotiations as foreseen in that Article and to the long-term goal of domestic and international policy reform to allow for a greater influence of market signals:

  *"Recognising that the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform is an ongoing process, members agree that negotiations for continuing the process will be initiated one year before the end of the implementation period, taking into account:

  a) the experience to that date from implementing the reduction commitments;

  b) the effects of the reduction commitments on world trade in agriculture;

  c) non-trade concerns, special and differential treatment to developing country Members, and the objective to establish a fair and market-oriented agricultural trading system, and the other objectives and concerns mentioned in the preamble to this Agreement; and

  d) what further commitments are necessary to achieve the above mentioned long-term objectives";

- address the problem of additional trade barriers, emerging trade issues and discipline on export restrictions and export credits;
- strengthen world food security in particular through the actions agreed in the Rome Declaration and Plan of Action of the 1996 World Food Summit;
- promote innovative policies that facilitate responsiveness to market conditions by agricultural producers;
- facilitate improvement in the structures in the agricultural and agro-food sectors, taking into account the needs of farmers affected, in particular those in disadvantaged regions;
- enhance the contribution of the agro-food sector to the viability of the rural economy through, for example, efficient and well-targeted agricultural policy measures, facilitating the mobility of labour, new market opportunities, alternative uses of land (both within and outside agriculture), and the provision of rural amenities;
- take actions to ensure the protection of the environment and sustainable management of natural resources in agriculture by encouraging good farming practices, and create the conditions so that farmers take both environmental costs and benefits from agriculture into account in their decisions;

- take account of consumer concerns by improving the effectiveness and reliability of food safety regulations, strengthening standards on origin and quality, and improving the content and availability of information to consumers, within the framework of international rules;
- encourage increased innovation, economic efficiency, and sustainability of agro-food systems through, *inter alia*, appropriate public and private research and development efforts, respect for the protection of intellectual property, and improvements in public infrastructures, information, advice and training;
- in a manner fully consistent with paragraph 13 of this communiqué, preserve and strengthen the multifunctional role of agriculture in order to combat territorial imbalances, to encourage the sustainable management of natural resources and to favour diverse farm development strategies.

(16.) Ministers agreed to seek innovative ways and appropriate institutional frameworks to integrate public, private and co-operative initiatives, which take into account local and regional conditions. They agreed that in designing and implementing cost-effective policy measures, these should be regularly monitored and evaluated with respect to their stated objectives. Ministers also agreed that policy measures should seek to meet a number of operational criteria, which would apply in both the domestic and the international context, and should be:

– *transparent:* having easily identifiable policy objectives, costs, benefits and beneficiaries;

– *targeted:* to specific outcomes and as far as possible decoupled;

– *tailored:* providing transfers no greater than necessary to achieve clearly identified outcomes;

– *flexible:* reflecting the diversity of agricultural situations, be able to respond to changing objectives and priorities, and applicable to the time period needed for the specific outcome to be achieved;

– *equitable*: taking into account the effects of the distribution of support between sectors, farmers and regions.

… and outlined a role for the OECD

(17.) In order to contribute to the achievement of the shared goals, Ministers agreed on a number of priority areas for future work by the OECD, which they recommended be reflected in the overall programme of work determined by the OECD Council. Ministers asked the OECD to:

- *develop the analysis and analytical tools* to monitor and evaluate developments in agricultural policies against the shared goals, policy principles, and operational criteria of policy measures;
- *continue and strengthen* the analysis of main agricultural markets and trade developments, taking into account market developments in non-OECD countries;
- *examine* ongoing and new agricultural trade and trans-boundary policy issues and their impacts, provide analytical support, as appropriate, to the process of agricultural trade liberalisation, without duplicating the work of the WTO. In this connection, Ministers noted the contributions that the OECD Committees, within their existing work programmes, might make to the process of information exchange and analysis now underway in the various WTO Committees, while avoiding unwanted duplication with work in other fora;
- *identify and analyse existing and new policy approaches* to address issues related to structural adjustment in the agro-food sector, rural development, farm incomes, farm employment, income risk management, and food security and food safety;
- *foster sustainable development* through analysing and measuring the effects on the environment of domestic agricultural and agri-environmental policies and trade measures;
- *promote an active policy dialogue with non-member countries* in particular those that are relevant players in agricultural production and trade;
- *improve the dialogue with non-government organisations*, in particular those representing farmers, other actors in the agro-food sector including consumers, and those concerned with agriculture and the environment.

(18.) Ministers recommended that the communiqué be drawn to the attention of the OECD Ministerial Council.

OECD Committee for Agriculture at Ministerial level, March 1992

(1.) The Committee for Agriculture of the OECD met at Ministerial level at the Château de la Muette on 26 and 27 March 1992, under the chairmanship of Mr. K.-E. Olsson, Minister of Agriculture of Sweden. The other Members of the Bureau were Mr. S. Crean, Minister for Primary Industries and Energy of Australia, Mr. R. MacSharry, Member of the Commission of the European Communities with responsibility for Agriculture and Rural Development and Mr. E. Madigan, Secretary of Agriculture of the United States.

(2.) The Ministers[2] discussed the current situation and likely future developments in agricultural policies and markets. They considered the state of policy reform and its domestic and international dimensions. They recognised that it was necessary to examine in a coherent manner the relationships among structural adjustment in the agricultural sector, environmental issues, and rural development, and any measures used to address them. They also discussed the significant changes occurring in parts of the world and how these affect the agricultural relationships between the OECD countries and non-member countries.

The reform of agricultural policies

(3.) Ministers confirmed all the agricultural reform principles set out in 1987 and reaffirmed in subsequent meetings of the OECD Council at Ministerial level. They reaffirmed the commitment to the long-term objective of the reform. They noted the very limited and uneven progress that has been made in implementing the 1987 principles.

(4.) Ministers reaffirmed the commitment of their Governments to the achievement of a swift and successful conclusion of the Uruguay Round negotiations under the General Agreement on Tariffs and Trade. To this end, they stressed the need for a further political impetus to bring to conclusion the negotiating process currently under way. They recognised that agriculture is one of the most important elements in the negotiations, and that the resolution of the outstanding issues in this sector, among others, is therefore essential. A successful conclusion of the negotiations will represent a major multilateral contribution towards the implementation of the agricultural reform agreed upon in 1987, and subsequently. In contrast, there would be significant down-side risks for the world trading system and costs for the world economy of a failure to conclude quickly the Uruguay Round. It will be important to assess in depth the various impacts of reform. In this regard, Ministers stressed the fruitful role that the Organisation has played in the preparation of the negotiations and requested it to continue its analytical function following their conclusion.

(5.) Ministers stressed the central function of agriculture and the rest of the agro-food sector as a provider of food and raw materials, including raw materials for new uses, and its role as a source of employment. As a user of land and other natural resources, agriculture is a major custodian of the environment. In order for agriculture and the rest of the agro-food sector to fulfil these multiple functions and to contribute to overall economic growth, adjustment is necessary. In this context, the reform of agricultural policies is essential to ensure a more market-oriented agricultural system producing high quality products and to contribute to trade liberalisation, and to promote environmentally sustainable agriculture. In addition to policies within the sector, appropriate policies outside the sector, such as macro-economic policies, including monetary policies, contributing to sustained economic growth, and labour market policies, are also necessary to facilitate the adjustment of agriculture and the rest of the agro-food sector.

(6.) Many of the agricultural policy measures currently in use are costly. The large consumer, taxpayer and other costs of agricultural policies are a continuing source of concern.[3] While successful in achieving some stated objectives, many policy measures have limited success in achieving some of their aims, such as improving farm incomes and aiding disadvantaged rural areas. In some countries, policies have resulted in burdensome production surpluses with consequent negative effects on international markets, in particular for food exporting countries. Measures to control production have, in some cases, reduced market imbalances, but they have to be applied in an appropriate mix with other policy instruments in

order to be able to address the fundamental need for adjustment in agriculture and an improved allocation of resources. Despite recent improvements in the balance of supply and demand, the medium-term outlook is one of continuing surpluses for many commodities in the OECD area. This prospect makes the reform of policies even more urgent. Ministers noted with appreciation the work done by the Organisation in monitoring developments in the agricultural policies of Member countries, in analysing medium-term market outlook, in assessing the domestic and international implications of policies, including those in the income field, and in analysing the ways and means of implementing policy reform. With the increasing need for reform, Ministers requested the continuation and deepening of work in these areas.

Structural adjustment

(7.) Ministers agreed that adjustment of the agricultural sector in order to make it more viable necessitates greater market orientation through progressively less distorted market signals, a progressive reduction in assistance, and enhanced self-reliance by producers. While noting that meaningful reform would have benefits for the economy as a whole as well as for the agro-food sector, Ministers recognised that such reform would also impose hardship, in certain OECD countries, on segments of the population and on some regions heavily dependent on agriculture. Some of those adversely affected will be capable of accommodating adjustment on their own. Others will need appropriate help to transform their farm operations and off-farm activities in order to remain viable, or to seek other alternatives. In addition, analysis of the economic utilisation of agricultural products for non-food purposes should be enhanced. In any event, any measures taken should not erect further impediments to structural change, but should reduce economic distortions, and adhere to the principles of transparency and efficiency. They should strengthen competitiveness in the agro-food sector as a whole. To clarify the choices involved, Ministers requested that the Organisation strengthen its work on structural adjustment in the agro-food sector with a view to evaluating appropriate measures which could be used to support reform.

Agriculture and the environment

(8.) Ministers stressed the growing importance of the two-way relationships between agriculture and forestry on the one hand, and the environment on the other hand, and the fact that both sectors contribute both positively and negatively to the environment. They recognise that in some countries many of the most valuable landscapes have been shaped and preserved by agricultural and sylvicultural activities. Such activities, in all countries, could contribute increasingly and positively to environmental sustainability, and the conservation of rural resources. The sectors will also be affected increasingly by environmental changes largely outside their control and by policy responses to those changes, such as those associated with the threat of global warming. It was agreed that agricultural policy reform could be beneficial for the environment, and that a new set of responses may be needed to internalise environmental costs and benefits into agricultural decision-making. The new set of responses encompasses both regulatory and market-based solutions, for example, environmental management agreements, financial measures, research and development initiatives, and the pricing of previously unpriced environmental services. Ministers noted that the polluter pays principle should be applied to the extent possible, as indicated by OECD Environment Ministers[4] among others. They also stressed the need for transparent policy responses to reduce economic and trade distortions. Ministers endorsed the view that the international dimensions of environmental impacts or the policy responses to them can best be addressed through multilateral approaches. Finally, Ministers endorsed the need for further analysis by the Organisation of the linkage between agriculture and the environment and its implications for policy.

Rural development

(9.) Rural development relates to a broad range of social as well as economic dimensions. Agriculture is a major part of the rural economy in OECD countries. Ministers emphasised that rural development should be addressed primarily through an integrated rural development policy, rather than only through agricultural policy. The primary focus of rural development policy should be the reduction of impedi-

ments to, and the promotion of, viable economic activities. Such a focus would contribute to efficient adjustment in agriculture. This in turn would improve the long-term viability of the agricultural sector and its economic and social contribution to rural areas.

(10.) Ministers noted the work underway in the Organisation on the inter-related issues of agricultural reform, the environment, and rural development, and stressed the need for an integrated approach to these issues.

Implications of developments in non-member countries

(11.) Ministers noted the growing importance of relationships between the OECD countries and non-member countries, and the major changes in some of these relationships in recent years. They affirmed the need for further expansion of dialogue on agricultural issues between the OECD countries and non-member countries. In this context, Ministers discussed the need to provide food aid in specific circumstances, to provide technical assistance for the development of the agro-food sector as a whole, and within the multilateral system to improve access to OECD markets as a contribution to the process of economic reform in non-member countries. They suggested a deepening of the monitoring and analysis of developments in non-member countries, and their implications for the OECD countries and world markets.

(12.) Ministers noted the increased emphasis being placed by the OECD on central and eastern European countries (CEECs). The agro-food system has an important role to play in their transition to a market economy. Ministers encouraged the expansion of co-operation, particularly in the form of technical assistance by OECD countries, to aid this process by facilitating the transition to an efficient, market-oriented private agro-food sector. They noted the concrete steps already taken by the OECD countries in this regard. They welcomed the opportunity for dialogue provided by their meeting with the Agricultural Ministers of the Partners in Transition (PIT) countries, held on 26 March. In relation to the Commonwealth of Independent States (CIS), Georgia, and the Baltic States, Ministers noted that, in the short-term, food aid will be vital to prevent hardship, particularly among poorer segments of the population in food-deficit areas, while it is necessary to ensure that such aid does not impair the development of the food and agricultural sectors of these countries. Ministers endorsed the need for continued co-ordination among OECD countries in the provision of food aid and technical assistance.

(13.) Ministers recognised that the increasingly diverse situations in developing countries require different policy responses. They noted the role that OECD countries play in the development process and as markets for developing country exports. Ministers reaffirmed the commitment to assist in the improvement of the food situation in developing countries by helping to strengthen the agro-food sectors in those countries, and by pursuing food aid efforts. They recognised that agricultural policy reform, in both the OECD countries and in the developing countries, should aid, in the long run, the development process.

OECD Council at Ministerial level, May 1987

The Council of the OECD met at Ministerial level on 12 and 13 May 1987. The following is the full text of the section on agriculture in the communiqué issued at the conclusion of that meeting:[5]

The 1987 OECD Ministerial Principles for agricultural policy reform

(19.) "The joint report of the Trade and Agricultural Committees[6] was approved. This important work clearly highlights the serious imbalances that prevail in the markets for the main agricultural products. Boosted by policies which have prevented an adequate transmission of market signals to farmers, supply substantially exceeds effective demand. The cost of agricultural policies is considerable, for government budgets, for consumers and for the economy as a whole. Moreover, excessive support policies entail an increasing distortion of competition on world markets; run counter to the principle of comparative advantage which is at the root of international trade and severely damage the situation of many developing countries. This steady deterioration, compounded by technological change and other factors such as slow economic growth or wide exchange rate changes, creates serious difficulties in international trade, which risk going beyond the bounds of agricultural trade alone.

(20.) "All countries bear some responsibilities in the present situation. The deterioration must be halted and reversed. Some countries, or groups of countries, have begun to work in this direction. But, given the scope of the problems and their urgency, a concerted reform of agricultural policies will be implemented in a balanced manner.

(21.) "Reform will be based on the following principles:

a) The long-term objective is to allow market signals to influence by way of a progressive and concerted reduction of agricultural support, as well as by all other appropriate means, the orientation of agricultural production; this will bring about a better allocation of resources which will benefit consumers and the economy in general.

b) In pursuing the long-term objective of agricultural reform, consideration may be given to social and other concerns, such as food security, environmental protection or overall employment, which are not purely economic. The progressive correction of policies to achieve the long-term objective will require time; it is all the more necessary that this correction be started without delay.

c) The most pressing need is to avoid further deterioration of present market imbalances. It is necessary:

- on the demand side, to improve prospects as much as possible inside as well as outside the OECD area;
- on the supply side, to implement measures which, by reducing guaranteed prices and other types of production incentives, by imposing quantitative production restrictions, or by other means, will prevent an increase in excess supply.

d) When production restrictions are imposed or productive farming resources withdrawn by administrative decision, these steps should be taken in such a way as to minimise possible economic distortions and should be conceived and implemented in such a way as to permit better functioning of market mechanisms.

e) Rather than being provided through price guarantees or other measures linked to production or to factors of production, farm income support should, as appropriate, be sought through direct income support. This approach would be particularly well suited to meeting the needs of, amongst others, low-income farmers, those in particularly disadvantaged regions, or those affected by structural adjustment in agriculture.

f) The adjustment of the agricultural sector will be facilitated if it is supported by comprehensive policies for the development of various activities in rural areas. Farmers and their families will thus be helped to find supplementary or alternative income.

g) In implementing the above principles, Governments retain flexibility in the choice of the means necessary for the fulfilment of commitments.

(22.) "The Uruguay Round is of decisive importance. The Ministerial Declaration of Punta del Este and its objectives provide for the improvement of market access and the reduction of trade barriers in agriculture and will furnish a framework for most of the measures necessary to give effect to the principles for agricultural reform agreed upon by OECD Ministers, including a progressive reduction of assistance to and protection of agriculture on a multi-country and multi-commodity basis. As agreed in paragraph 16,[7] the Uruguay Round negotiations will be vigorously pursued and comprehensive negotiating proposals tabled over the coming months, in this as in other fields. In the Uruguay Round, appropriate account should be taken of actions made unilaterally.

(23.) "In order to permit a de-escalation of present tensions and thereby enhance prospects for the earliest possible progress in the Uruguay Round as a whole, OECD governments will carry out expeditiously their standstill and rollback commitments and, more generally, refrain from actions which would worsen the negotiating climate: they will, *inter alia*, avoid initiating actions which would result in stimulating production in surplus agricultural commodities and in isolating the domestic market further from international markets; additionally, they will act responsibly in disposing of surplus stocks and refrain from confrontational and destabilising trade practices.

(24.) “Agricultural reform is not solely in the interests of Member countries. Developing countries which are agricultural exporters will benefit from a recovery on world markets. Developing countries which are importers of agricultural produce will be encouraged to base their economic development on more solid ground, by strengthening their own farm sector.

(25.) “Agricultural reform poses vast and difficult problems for Member countries. Strengthened international co-operation is needed to overcome these problems. The OECD will continue to contribute to their solution by deepening further its work; by updating and improving the analytical tools it has begun to develop and which will prove particularly valuable in many respects; by monitoring the implementation of the various actions and principles listed above. The Secretary-General is asked to submit a progress report to the Council at Ministerial level in 1988.”

2. MEASUREMENT OF SUPPORT TO AGRICULTURE

Introduction

The OECD has since 1987 been measuring support to agriculture using the Producer and Consumer Subsidy Equivalent (PSE/CSE) method defined in 1982.[8] The method incorporated the monetary value of transfers associated with all policy measures affecting agriculture grouped into four main categories: *i)* Market Price Support, *ii)* Direct Payments, *iii)* Reduction of Input Costs, and *iv)* General Services. There was, at that time, a relatively small number of policy measures within each of these categories, which were appropriate for a detailed analysis of their economic and trade effects. Other transfers associated with measures affecting agriculture but not included in these categories, were added to calculate Total Transfers associated with agricultural policies.[9]

The "subsidy equivalent" was initially defined as "the monetary value that would be required to compensate farmers or consumers for the loss of income resulting from the removal of a given policy measure".[10] However, the OECD indicators measure transfers from taxpayers and consumers to producers arising from policies, and corresponds to a broader definition. While the initial definition is an estimate of support in terms of farm income loss or subsidy equivalent to producers, the OECD indicator has always been an estimate of support in terms of transfers to producers (PSE) and overall transfers associated with policies which support agriculture (Total transfers). Although both OECD definitions of PSE and Total transfers include the "subsidy element", they do not separately identify it.

Therefore, in order to make the names of the indicators reflect as closely as possible the underlining definitions and to make them consistent with one another, OECD countries agreed to replace "subsidy equivalent" by "support estimate" and use the following nomenclature: Producer Support Estimate (PSE), Consumer Support Estimate (CSE), General Services Support Estimate (GSSE) and Total Support Estimate (TSE). The objective being to make the indicators more consistent (across countries, policy measures, and over time), transparent (providing as much information as possible), useful and timely (for policy purposes), and more pragmatic (simple to understand and calculate).

With the reform of agricultural policies in OECD countries, the number and complexity of policy measures has increased significantly, limiting the appropriateness of the original PSE categories for the analysis of policies. This was particularly the case of the Direct Payments category, which have increasingly embraced a wider range of measures providing direct transfers to farmers for achieving different objectives and with different eligibility conditions. A given objective may be achieved through different measures, whose economic impacts depend very much on the way they are implemented. Therefore, a comprehensive policy evaluation of recent policy measures needs grouping them according to their implementation criteria, independently of their objectives and effects. This is the basis of the new OECD classification presented in this Part.

This part explains the coverage, definitions, criteria of classification and methods of calculation of the four OECD indicators of support associated with agricultural policies: PSE, CSE, GSSE and TSE. The next section presents the method of decomposing PSE/CSE to calculate the contribution of each component to the country PSE or CSE change. The last section provides definitions for full-time farmer equivalents and for agricultural land.

The work on implementing the new classification, which is presented by the first time in this report, was undertaken by the Secretariat in close co-operation with Member countries. It was not only the opportunity to "reclassify" policy measures, but also to "clean up" the data bases and calculations for each country, in order to ensure consistency. The detailed results for all countries are available in the "cook books" in the Electronic Data Product, *OECD PSE/CSE* Database.

Although the Secretariat has made an effort to ensure consistency on the treatment and completeness of coverage of policies, this exercise should be seen as a dynamic process and the results included in this report have to be seen as preliminary. As in the past, future annual exercises will offer the opportunity to revise the calculations for the entire period in the light of more updated information on policy measures.

Definitions and methods

Classification and definitions

The new OECD classification of total transfers associated with agricultural policies (TSE), groups the policy measures into three main categories: transfers to producers individually (PSE), transfers to consumers individually (CSE), and transfers to general services to agriculture collectively (GSSE) as in Box II.1.

I. Producer Support Estimate (PSE): *an indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at farm gate level, arising from policy measures which support agriculture, regardless of their nature, objectives or impacts on farm production or income.*

The PSE measures support arising from policies targeted to agriculture relative to a situation without such policies, *i.e.* when producers are subject only to general policies (including economic, social, environmental and tax policies) of the country. The PSE is a gross notion implying that any costs associated with those policies and incurred by individual producers are not deducted.[11] It is also **a nominal assistance** notion meaning that increased costs associated with import duties on inputs are not deducted. But it is an indicator **net** of producer contributions to help finance the policy measure (*e.g.* producer levies) providing a given transfer to producers. The PSE includes implicit and explicit payments such as price wedges on output or inputs, tax exemptions, and budgetary payments, including those for remunerating non-market goods and services. Therefore, the indicator measures more than the "subsidy element". Although **farm receipts** (revenue)[12] are increased (or farm expenditure reduced) by the amount of support, the PSE is not in itself an estimate of the impacts on farm production or income.

A. Market Price Support (MPS): *an indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers arising from policy measures creating a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farmgate level.*

Conditional on the production of a specific commodity, MPS includes the transfer to producers associated with both production for domestic use and exports, and is measured by the price gap applied to current unlimited production (1. *Based on unlimited output*); or to current limited production (2. *Based on limited output).* The MPS is **net** of financial contributions from individual producers through producer levies on sales of the specific commodity or penalities for not respecting regulations such as production quotas (3. *Price levies);* and in the case of livestock production is net of the market price support on domestically produced coarse grains and oilseeds used as animal feed (4. *Excess feed cost*).

B. Payments based on output: *an indicator of the annual monetary value of gross transfers from taxpayers to agricultural producers arising from policy measures based on current output of a specific agricultural commodity or a specific group of agricultural commodities.*

Conditional on producing a specific commodity or a specific group of commodities, it includes payments per tonne, per hectare or per head of animals to current unlimited (1. *Based on unlimited output*), or limited (2. *Based on limited output*) production.

C. Payments based on area planted/animal numbers: *an indicator of the annual monetary value of gross transfers from taxpayers to agricultural producers arising from policy measures based on current plantings, or number of animals of a specific agricultural commodity or a specific group of agricultural commodities.*

Conditional on planting, or animal numbers of a specific commodity or a specific group of commodities, it includes payments per hectare or per head to current unlimited (1. *Based on unlimited area or animal numbers)*, or limited (2. *Based on limited area or animal numbers)* area planted or animal numbers.

D. Payments based on historical entitlements: *an indicator of the annual monetary value of gross transfers from taxpayers to agricultural producers arising from policy measures based on historical support, area, animal numbers, or pro-*

duction of a specific agricultural commodity or a specific group of agricultural commodities without obligation to continue planting or producing such commodities.

Conditional on being a producer of a specific commodity or a specific group of commodities at the time of introduction of the payment, it includes payments based on historical plantings/animal numbers or production of such commodities (1. *Based on plantings/animal numbers or production*); and payments based on historical support programmes for such commodities (2. *Based on historical support programmes*).[13]

E. Payments based on input use: *an indicator of the annual monetary value of gross transfers from taxpayers to agricultural producers arising from policy measures based on the use of a specific fixed or variable input or a specific group of inputs or factors of production.*

Conditional on the on-farm use of specific fixed or variable inputs, it includes explicit and implicit payments affecting specific variable input costs (1. *Based on use of variable inputs*); the cost of on-farm technical, sanitary and phytosanitary services (2. *Based on use of on-farm services*); or affecting specific fixed input costs, including investment costs (3. *Based on use of fixed inputs).*

F. Payments based on input constraints: *an indicator of the annual monetary value of gross transfers from taxpayers to agricultural producers arising from policy measures based on constraints on the use of a specific fixed or variable input or a specific group of inputs through constraining the choice of production techniques.*

Conditional on the application of certain constraints (reduction, replacement, or withdrawal) on the on-farm use of specific variable inputs (1. *Based on constraints on variable inputs*); or fixed inputs (2. *Based on constraints on fixed inputs*); or based on constraints on the use of a set of farm inputs through constraining the choice of production techniques of marketed commodities for reducing negative externalities or remunerating farm inputs producing non-market goods and services (3. *Based on constraints on a set of inputs*).[14]

G. Payments based on overall farming income: *an indicator of the annual monetary value of transfers from taxpayers to agricultural producers arising from policy measures based on overall farming income (or revenue), without constraints or conditions to produce specific commodities, or to use specific fixed or variable inputs.*

Conditional on being an eligible farm(er), it includes payments to compensate for farm income fluctuations or losses (1. *Based on farm income level)*; or for ensuring a minimum income guarantee (2. *Based on established minimum income)*.[15]

H. Miscellaneous payments: *an indicator of the annual monetary value of all transfers from taxpayers to agricultural producers that cannot be disaggregated and allocated to the other categories of transfers to producers.*

Conditional on being an aggregate of payments to producers which cannot be disaggregated due, for example, to a lack of information, it includes payments funded by national governments (1. National payments), or state, regional, prefectural, or provincial governments (2. Sub-national payments).

II. General Services Support Estimate (GSSE): *an indicator of the annual monetary value of gross transfers to general services provided to agriculture collectively, arising from policy measures which support agriculture, regardless of their nature, objectives and impacts on farm production, income, or consumption of farm products.*

Conditional on being an eligible private or public general service provided to agriculture collectively, including collective actions for agri-environmental purposes, it includes taxpayers transfers to: improve agricultural production ***(I. Research and development);*** agricultural training and education ***(J. Agricultural schools);*** control of quality and safety of food, agricultural inputs, and the environment ***(K. Inspection services);*** improve of off-farm collective infrastructures, including downstream and upstream industry (L. *Infrastructures*); assist marketing and promotion ***(M. Marketing and promotion);*** meet the costs of depreciation and disposal of public storage of agricultural products ***(N. Public stockholding);*** other general services that cannot be disagreggated and allocated to the above categories due, for example, to a lack of information ***(O. Miscellaneous).*** Unlike the PSE and CSE transfers, these transfers are not received by producers or consumers individually, and do not affect **farm receipts** (revenue) or consumption expenditure by their amount, although they may affect production and consumption of agricultural commodities.

III. Consumer Support Estimate (CSE): *an indicator of the annual monetary value of gross transfers to (from) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures which support agriculture, regardless of their nature, objectives or impacts on consumption of farm products.*

Box II.1. **Classification of policy measures included in the OECD indicators of support**

I. Producer Support Estimate (PSE) [Sum of A to H]

A. Market Price Support
1. Based on unlimited output
2. Based on limited output

B. Payments based on output
1. Based on unlimited output
2. Based on limited output

C. Payments based on area planted/animal numbers
1. Based on unlimited area or animal numbers
2. Based on limited area or animal numbers

D. Payments based on historical entitlements
1. Based on historical plantings/animal numbers or production
2. Based on historical support programmes

E. Payments based on input use
1. Based on use of variable inputs
2. Based on use of on-farm services
3. Based on use of fixed inputs

F. Payments based on input constraints
1. Based on constraints on variable inputs
2. Based on constraints on fixed inputs
3. Based on constraints on a set of inputs

G. Payments based on overall farming income
1. Based on farm income level
2. Based on established minimum income

H. Miscellaneous payments
1. National payments
2. Sub-national payments

II. General Services Support Estimate (GSSE) [**Sum of I to O**]

I. Research and development

J. Agricultural schools

K. Inspection services

L. Infrastructure

M. Marketing and promotion

N. Public stockholding

O. Miscellaneous

III. Consumer Support Estimate (CSE) [**Sum of P to S**]

P. Transfers to producers from consumers

Q. Other transfers from consumers

R. Transfers to consumers from taxpayers

S. Excess Feed Cost

IV. Total Support Estimate (TSE) [**I + II + R**]

T. Transfers from consumers

U. Transfers from taxpayers

V. Budget revenues

The CSE includes explicit and implicit consumer transfers to producers of agricultural commodities, measured at the farmgate (first consumer) level and associated with: market price support on domestically produced consumption ***(P. Transfers to producers from consumers);*** and transfers to the budget and/or importers on the share of consumption that is imported ***(Q. Other transfers from consumers);*** and is **net** of any payment to consumers to compensate them for their contribution to market price support of a specific commodity ***(R. Transfers to consumers from taxpayers);*** and the producer contribution (as consumers of domestically produced crops) to the market price support on crops used in animal feed ***(S. Excess feed cost).*** When negative, transfers from consumers measure the implicit tax on consumption associated with policies to the agricultural sector. Although consumption expenditure is increased/reduced by the amount of the implicit tax/payments, this indicator is not in itself an estimate of the impacts on consumption expenditure.

IV. Total Support Estimate (TSE): *an indicator of the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures which support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products.*

The TSE is the sum of the explicit and implicit gross transfers from consumers of agricultural commodities to agricultural producers net of producer financial contributions (in MPS and CSE); the gross transfers from taxpayers to agricultural producers (in PSE); the gross transfers from taxpayers to general services provided to agriculture (GSSE); and the gross transfers from taxpayers to consumers of agricultural commodities (in CSE). As the transfers from consumers to producers are included in the MPS, the TSE is also the sum of the PSE, the GSSE, and the transfers from taxpayers to consumers (in CSE). The TSE measures the overall cost of agricultural support financed by consumers (***T. Transfers from consumers***) and taxpayers ***(U. Transfers from taxpayers)*** net of import receipts ***(V. Budget revenues).***

Criteria of classification

a) How to define measures to be included in the PSE, CSE or GSSE?

The general criterion to determine whether to include policy measures in *PSE*, *CSE* or *GSSE* is if the implementation of the measure provides transfers to agricultural producers individually *(PSE*), to (from) consumers of agricultural commodities individually (*CSE*), or to the general services provided to agriculture collectively (*GSSE).* Therefore, the *TSE* includes all transfers included in the three other indicators (excluding double-accounting).

In the case of *PSE* (transfers to producers) it is necessary for an individual farmer to take decisions or actions to produce goods or services, to use factors of production, or to be defined as an eligible farm(er) to receive a transfer, which therefore change gross farm receipts (revenue) by the amount of the transfer. In the case of *CSE* (transfers to/from consumers) it is also necessary for consumers to take decisions or actions to consume agricultural commodities to receive/provide a transfer, which therefore change gross consumer expenditure by the amount of the transfer. *GSSE* transfers do not depend on any decisions or actions of individual farmers or consumers, are not received by individual producers or individual consumers, and do not affect farm receipts (revenue) or consumption expenditure by their amount.

Therefore, the **general criteria** for classifying policy measures included in each of the indicators composing the *TSE* requires responses to the following sequence of questions:

First, does the policy measure create a transfer to (from) consumers of agricultural commodities? If yes, consider it under *CSE* and also proceed to the following question; if not, proceed to the following question;

Second, does the policy measure (including those creating a transfer to/from consumers) create a transfer to producers individually based on goods and services produced, on inputs used or on being a farm(er)? If yes, consider it under *PSE*; if not, proceed to the following question;

Third, does the policy measure create a transfer to general services provided to agriculture collectively? If yes, consider it under *GSSE*; if not, do not consider it in the *TSE* calculation.

b) How to classify transfers to producers in the PSE?

The implications of policy measures on variables such as production, consumption, trade, income, employment and the environment depend primarily on the way policy measures are implemented. Therefore, to be helpful for policy analysis, policy measures to be included in the PSE are classified according to implementation criteria. For a given policy measure, the ***implementation criteria*** are defined as *the conditions under which the associated transfers are provided to farmers, or the conditions of eligibility for the payment*. However, these conditions are often multiple. Thus, the criteria used to classify payments to producers is defined in a way that facilitates: the analysis of policies in the light of the "operational criteria" defined by OECD Ministers of Agriculture in 1998; the assessment of their impacts (on for example, production, consumption, income, employment, and the environment) through for example the Policy Evaluation Matrix (PEMs); and the classification of new policy measures in a consistent way across countries, policy measures and over time.

Policy measures with environmental eligibility conditions illustrate the importance of the PSE classification based on implementation criteria. *Cross-compliance* payments are defined as measures to support specific agricultural commodities conditional on respect of some environmental constraints. *Cost-sharing* payments are defined as measures to support specific environmental activities or outcomes through the respect of some constraints on agricultural production. Although in both cases the payments may be provided per farm, hectare or animal, their main implementation criteria are not the same, and therefore, these payments should not be considered under the same category.[16]

The **criteria** for classifying each of the policy measures to be included in the *PSE*, into a specific category of measures requires responding to the following sequence of questions:

First, does the policy measure provide an implicit or explicit payment to individual producers on the basis of their overall farming receipts or income, and independently of the commodities they produce, or the fixed and variable inputs they use? If yes, consider it under *G. Payments based on overall farming income;* if not, proceed to the following question;

Second, does the policy measure affect the domestic market price (to consumers and producers) of a specific commodity? If yes, consider it under *A. Market price support*; if not, proceed to the following question;

Third, does the policy measure provide a payment to agricultural producers conditional on production of a specific commodity or a specific group of commodities? If yes, consider it under *B. Payments based on output;* if not, proceed to the following question;

Fourth, does the policy measure provide a payment to agricultural producers conditional on planting (or animal numbers of) a specific commodity or a specific group of commodities? If yes, consider it under *C. Payments based on area planted/animal numbers;* if not, proceed to the following question;

Fifth, does the policy measure provide a payment to agricultural producers based on historical support, area, animal numbers, or production of a specific commodity or a specific group of commodities without obligation to continue planting or producing such commodities? If yes, consider it under *D. Payments based on historical entitlements;* if not, proceed to the following question;

Sixth, does the policy measure provide an explicit or implicit payment to individual producers using a specific input (variable or fixed) or a specific group of inputs to produce agricultural commodities? If yes, consider it under *E. Payments based on input use;* if not, proceed to the following question;

Seventh, does the policy measure provide an explicit or implicit payment to individual producers conditional on the application of certain constrains (reduction, replacement, or withdrawal) on the use of specific variable or fixed inputs, or based on constraints on the use of a set of inputs through constraining the choice of production techniques, including the remuneration of farm inputs used to produce non-market goods and services? If yes, consider it under *F. Payments based on input constraints;* if not, consider it under *G. Payments based on overall farming income*, which includes transfers to individual producers conditional on being an eligible farm(er), but without any requirement to produce specific commodities or use specific fixed or variable inputs.

These criteria are mutually exclusive and have to be applied to each policy measure in the above order.[17] Although a given policy measure may be conditional on several of the above criteria, it would be

classified under the first applicable criteria. The following section includes some classification rules, which help to implement the general criteria.

Rules for classification

a) How to classify transfers associated with Market Price Support?

Border measures on imports and exports, together with on-farm and public stockholding, domestic and foreign food aid measures, and consumption subsidies create a price wedge (gap) between domestic and border prices.[18] Transfers to producers (from consumers) through domestic prices for commodities higher than border prices (*price wedge or gap*) are included (+) under *PSE*, and (–) under *CSE*. Transfers to producers (from taxpayers) through **export subsidies** (the same price wedge or gap) are included in the PSE.

But while transfers from taxpayers for **on-farm stockholding** are transfers to producers included in the *PSE*, transfers from taxpayers for the operational costs of public purchasing agencies and the **public stock** depreciation and disposal costs are *not* in themselves transfers to producers and are included in the *GSSE*. Transfers to processors (first consumers) to compensate them for paying domestic prices higher than the border prices and **consumption subsidies** in cash or in kind to various consumption levels are included under the *CSE*. However, when these subsidies also cover imported food, only the share attributable to domestic production is included under the *CSE* (see Box II.2).

b) On-farm services in PSE or services to agriculture in the GSSE?

On-farm services in the PSE are explicit or implicit payments reducing the prices paid by farmers for services provided to them individually and therefore affecting farm receipts by the amount of the payment. This includes typically extension services and technical assistance to farmers, as well as pest and disease control on farmers' crops and livestock, through for example animal vaccination. **General services to agriculture** in the GSSE are explicit or implicit payments to general services provided to agriculture as a whole, which are not received by producers or consumers individually, and therefore do not affect farm receipts or consumption expenditure by the amount of the payment. This includes payments to institutions for research, the control of quality of food and agricultural inputs (through for example quarantaine) or the control of the environment quality in agriculture.

c) Input subsidies in the PSE or transfers for infrastructure in the GSSE?

Input subsidies are typically explicit or implicit payments reducing the price paid by farmers for variable inputs (for example, fertilisers, feed, seeds, energy, water, transportation, insurance), provided to farmers through a given policy instrument or a set of instruments, including interest concessions, tax rebates and budgetary transfers to input industries to provide lower input prices for farmers.

In the absence of such instruments and with input industries (or services) providing inputs at price fully reflecting depreciation and operational costs, there are neither input subsidies (in the PSE) nor transfers for infrastructure (in the GSSE). Otherwise, **PSE transfers to producers** associated with the policy measures are, for example, the budget receipts forgone in the case of tax rebates and interest concessions (implicit payment), or the annual budgetary expenditure to compensate industry (banks) for losses associated with lower input prices paid by farmers (explicit payment). Such transfers could in principle also be measured by the gap between the price (interest or tax rate) actually paid by farmers and the price (rates) paid by others in the domestic market.[19]

However, public expenditure is sometimes also used with the intention for increasing the competitiveness of the sector as a whole through improving infrastructure related to input, processing and marketing industries. It is for example the case of Regulation 355/77 (replaced by Regulations 866/90 and 867/90) for improving infrastructure related to processing and marketing of agricultural products in the European Union. Such transfers are not as such received by farmers and are included in **Infrastructures** in the GSSE and added to those in the PSE to estimate the overall support to agriculture (TSE).

Box II.2. **Transfers associated with market price support**

Consider the case of a country where there are border measures and government purchasing agencies (GPAs) importing, and buying and selling in the domestic market in order to maintain the domestic price close to an administered domestic price higher than the world border price.

In the case of exported commodities (Figure II.1.), farmers sell all their production to domestic consumers (D2) and GPAs (S2-D2) at an average producer price (Pp) higher than the world reference price (Pr). The quantities purchased by the GPAs are sold in the same year in the domestic market at the average price Pp, offered as ***domestic food aid*** at the opportunity cost of Pp, sold in the world market (with ***export subsidies***) at the average price Pr, offered as ***foreign food aid*** at an opportunity cost of Pr, or kept in ***public storage*** for later sale.

As in a given year domestic consumers and GPAs purchase all domestic production at the average price (Pp) higher than the price at which the GPAs export the commodity (Pr), the transfers to producers associated with *MPS* to the commodity is measured by the area abcd = (Pp-Pr)*S2 and considered under ***I.A. Market Price Support.*** Where the area abfg = (Pp-Pr)*D2 measures the share of *MPS* financed by consumers considered under ***I.A MPS*** in the PSE, and ***III.P. Transfers to producers from consumers*** in the CSE; and area gfcd = (Pp-Pr)*(S2-D2) measures ***transfers to producers from taxpayers,*** *i.e.* the share of *MPS* financed by taxpayers considered under ***I.A MPS*** in the PSE (through food aid, export subsidies, or public storage).

The *CSE* is the share of *MPS* financed by consumer [area abfg = (Pp-Pr)*D2] (***III.P. Transfers to producers from consumers)*** *minus* consumption subsidies in cash or in kind, and price compensating aids to processors financed by taxpayers (***III.R. Transfers to consumers from taxpayers***). The total of the transfers associated with *MPS* are therefore obtained by adding to the *MPS* in the *PSE* [area abcd = (Pp-Pr)*S2], those under marketing and stockholding in the *GSSE*, and the consumption subsidies in cash and price compensation in the *CSE*.

In the case of imported commodities (Figure II.2.), both, domestic production (S2) and imports (D2-S2) are sold in the domestic market at the average producer price (Pp). But in both cases price compensation is provided by Government to processors (first consumers) to help them to stay competitive in the world market of processed products, and some consumption subsidies in cash and in kind are also provided. The quantities domestically produced and those imported by the GPAs are sold in the same year in the domestic market at the average price Pp, offered as ***domestic food aid*** at the opportunity cost of Pp or as ***foreign food aid*** at the opportunity cost of Pr, or kept in ***public storage*** for later sale.

In these conditions, the transfers to producers associated with MPS to the commodity is measured by area abcd = (Pp-Pr)*S2 and considered under ***I.A Market Price Support*** in the PSE and ***III.P. Transfers to producers from consumers*** in the CSE. While this area also represents the transfers from consumers to producers, the area dcfg = (Pp-Pr)*(D2-S2) measures the transfers from consumers to the budget through import receipts or as rents to importers or exporters due to tariff quotas ***(III. Q. Other transfers from consumers or IV.V. Budget revenues)***.

The *CSE* is measured by the area abfg = (Pp-Pr)*D2 (***III.P. Transfers to producers from consumer*** and ***III.Q. Other transfers from consumers)*** **minus** the consumption subsidies in cash or in kind, or price compensation financed by taxpayers ***(III.R. Transfers to consumers from taxpayers)***. The total of transfers associated with *MPS* are therefore obtained by adding to the *MPS* in the *PSE* [area abcd = (Pp-Pr)*S2], those under marketing and stockholding in the *GSSE*, and the consumption subsidies in cash and price compensating aids in the *CSE*, *minus* the transfers from consumers to the budget and/or importers.

In both cases, exported and imported commodities, to provide such transfers to producers through *MPS*, other transfers are generated, mainly in the form of operational costs of GPAs, and stock depreciation and disposal costs of public stockholding. However, although these transfers contribute to create the *price gap* received by producers, they are not in themselves a transfer to producers. They are transfers to general services provided to agriculture considered in the *GSSE* under ***II.M. Marketing and promotion*** in the case of the operational costs of GPAs, and ***II.N. Public stockholding*** in the case of the stock depreciation and disposal costs, which are in most of the cases dead-weight losses.

While most agricultural inputs in the OECD are provided through private investment, the off-farm provision of water for irrigation is usually based on public investment. Although in this case the initial investment is financed by taxpayers, it is not included in the PSE or GSSE. In both cases of public or private investment, and like for any other input, the question is to know if the price for water paid by farmers covers all the industry costs or not.[20] If the answer is no, the annual budgetary expenditure to compensate industry for operational costs associated with lower input prices for farmers is included in the PSE, while

Figure II.1. **Exported commodities**

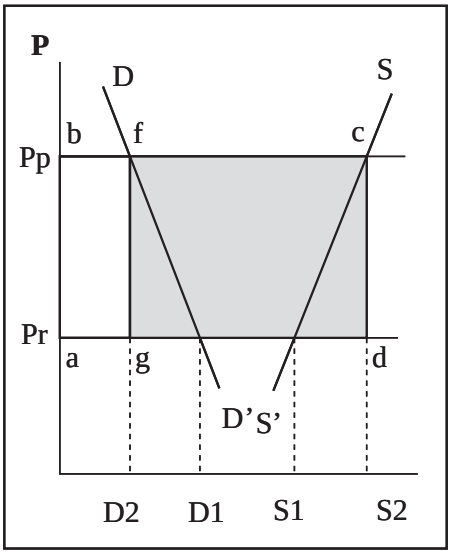
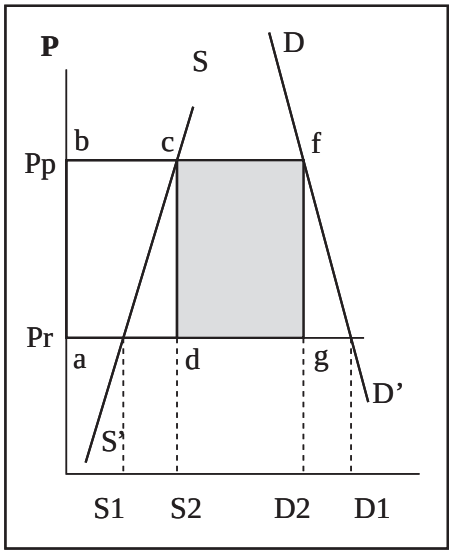


Figure II.2. **Imported commodities**



public expenditure for maintaining or improving collective infrastructure related to input, processing and marketing industries is considered in the GSSE.

d) How to treat taxes and levies?

The PSE and CSE are defined as net of producer contributions to help financing policy measures providing support to them. This is one of the reasons why the **excess feed cost** is calculated and deducted from the market transferts to producers and to (from) consumers. The PSE and CSE are calculated relative to total production and consumption, *i.e.* including quantities domestically produced and used as feed. Therefore, the MPS for feed crops domestically produced and consumed by livestock producers is included as negative in the PSE for livestock and the CSE for crops. This avoids double-counting when aggregating the PSE/CSE for crops and livestock.[21]

In the same way, the receipts from **production taxes and levies** to finance a given measure are also deducted from the total amount of the payment provided to producers through such policy measures. However, the receipts from taxes and levies on purchases of inputs or penalties on farmers resulting from economy-wide regulations, for example for reducing environmental pollution, are not considered in the PSE calculation. This because the PSE is a "nominal assistance" notion, meaning that increased costs associated with import duties on inputs are not deducted; and a "gross" notion, meaning that increased costs to farmers associated with the policy measure are also not deducted. Therefore, achieving the level of environmental quality (through good agricultural practices) as required by regulations should be at the expense of farmers, and a payment for reducing pollution is support to help farmers to reach the required environmental quality (see Box II.3).

Methods of calculation

a) PSE and TSE by country

To calculate the PSE and the TSE for a given country, the only PSE/TSE component that has to be calculated by commodity is the share of Market Price Support financed by consumers. This is because all

Box II.3. **The case of negative support**

The notion of the PSE as a "gross" measure allows for cases of negative support. This is the case of agricultural policy measures which tax producers relative to what would happen in the absence of such measures, *i.e.* if only general economy-wide policies were in place. The typical example of negative support is an export tax or any other agricultural policy measure discouraging exports and imposing a domestic price lower than world prices.

Under the notion of the PSE as a "nominal assistance" measure, taxes applied to producers in the context of general economy-wide policies applied in a country are not included as negative support. For example, V.A.T. or other general taxes on purchases of inputs, and taxes on salaries for social protection, or taxes on inputs for environmental protection are not considered as negative support, except if the rates applied to agricultural producers are different from those resulting from the general tax, social and environmental policies. In such case, the difference between a lower rate for producers and the general rate would mean support, while the difference between a higher rate and the general rate would mean negative support. A consistent and comprehensive PSE coverage of such cases would need more work on social, tax and environmental policies.

Therefore, a producer who, confronted with the general requirement in a country to respect a given environmental quality, bears the costs incurred in eliminating pollution caused by his production activity, is respecting the Polluter Pays Principle, and is not subject to negative support. Neither is a producer paying a pollution tax, which represents the cost incurred for polluting. But, if a producer receives a payment to compensate for the costs incurred in eliminating pollution, such a payment is considered as support.

the other PSE/TSE components are explicit or implicit budgetary expenditure. For the calculations by country, the OECD had been using two different methods in the past: one for the PSE/CSE covering a share of the agricultural production (method A); and another for the Total transfers covering total agricultural production (method B). This has created some inconsistency in the calculation of the indicators.

As shown in this section, both methods are source of potential errors, due to a lack of information on MPS for all commodities. However, the error associated with method B tends to be lower. Moreover, method B improves consistency across country calculations, as well as across all indicators as they are expressed on the same basis, namely the total value of production, for all countries. Therefore the OECD agreed in 1998 to use method B for both the PSE/CSE and the TSE calculations.

Method A. The OECD calculation of the PSE for a given country was the sum of: *i)* the MPS for the commodities produced in the country from a list of 13 common commodities (cereals, rice oilseeds, sugar, milk, beef and veal, pigmeat, poultry, sheepmeat, wool, and eggs); *ii)* the budgetary payments specific to the common commodities; and *iii)* other budgetary expenditure (in particular, General Services) allocated to the common commodities accounting to their share in the total value of agricultural production. For 1998, the percentage shares of the total value of agricultural production covered by the 13 common commodities were:

	%		%
Switzerland	86	United States	65
Norway	84	Hungary	64
Canada	79	Mexico	63
Iceland	78	European Union	60
Australia	72	Japan	57
New Zealand	72	Korea	55
Czech Republic	66	Turkey	48
Poland	65		

The support provided to the original common set of commodities is not necessarily representative of the support to all commodities (the agricultural sector) in all countries. This is particularly the case of countries where: *i)* the common set of commodities represents a small share of the total value of produc-

tion; *ii)* or the level of market price support for the common set of commodities is significantly different from the one for the omitted commodities; *iii)* or both. Moreover, the budgetary expenditure not specific to the common commodities was proportionally reduced to their share in the total value of agricultural production. This constitutes a potential source of error of over-or under-evaluation according to the pattern of support in each country. Moreover, the results of this method were not consistent across countries in so far as they refer to different shares of production.

Method B. In calculating Total Transfers associated with agricultural policies, the OECD method of calculation has consisted of considering the actual total budget transfers associated with agricultural policies and the average Market Price Support of the common set of commodities proportionally increased to all commodities (*i.e.* to the total value of production of the whole agricultural sector) according to their share in the value of production.[22] While method B is consistently applied across countries, it may also over- or under-estimate the MPS according to the countries as with method A. To reduce such error it would be enough to estimate the MPS for the main commodities not included in the common set of commodities, for each country.

The percentage PSE calculated through both methods (A and B) is the same. But in absolute terms, the potential error associated with "method B" is lower than the one associated with "method A". This is because "method A" reduces both the MPS and part of total budgetary expenditure (General Sevices in particular) to the common set of commodities, while "method B" considers the actual budgetary expenditure, and only increases the MPS of the common set of commodities to all commodities. In addition, as the share of MPS in the total support of most of the OECD countries tends to decrease and the share of budgetary payments tends to increase, the error associated with "method A" will increase, while it will decrease with "method B".

Moreover, "method B" of calculation avoids the need to reduce the general budget transfers in the GSSE to the different shares of production covered by the common set of commodities in each country, and allows the presentation of the calculations for each indicator and country for the total value of production or the whole agricultural sector. This is why "method B" is now the method used for the calculation of PSE, GSSE, CSE and TSE as defined in previous sections.

b) PSE and CSE by commodity

The calculation of any indicator by commodity needs to have a precise meaning to be useful for policy analysis. In a given year, the allocation of a transfer to specific commodities has a policy meaning only when such a transfer depends on individual farmers or consumers decisions or actions influencing farm receipts or consumer expenditure and affecting commodity production or consumption to some extent. As shown in this section, only the calculation of the PSE and CSE by commodity has a meaning useful for policy analysis.

All transfers included in the CSE are transfers to (from) individual consumers of a specific commodity and affect consumption decisions of that commodity. Therefore, there is no specific conceptual or practical difficulty in the CSE calculation by commodity. All transfers included in the PSE of a given country are transfers to agricultural producers individually that implicitly or explicitly increase gross farm receipts. However, although some of these transfers are specific to a commodity or a specific group of commodities, other are not, but influence overall farming receipts and are related to all commodities, and have been allocated among commodities. However, such an allocation is made in a case by case basis according to the specific implementation criteria of the policy measure in question.

Market price support, Payments based on output, and Payments based on planted area/animal numbers are by definition commodity-specific. Payments based on historical entitlements are provided to producers of a specific commodity or a specific group of commodities at the moment of introduction of the payment. In some cases the payment rates are specific to livestock and/or arable crops, and vary with natural production conditions. These payments are, as far as possible, allocated to the commodities currently produced by regions/producers eligible for such payments.

Payments based on input use and *Payments based on input constraints* also affect production decisions concerning the limited group of commodities that a given farm can produce using the inputs in question. As

most of these programmes are input specific (and often specific to regions), they are allocated to the limited group of commodities that can be produced from the inputs and in the regions in question. *Payments based on overall farming income* allow farmers to produce any agricultural commodity, but by increasing overall farm receipts, they also influence farmers' decision to stay in the sector. As most of the programmes in this category are in practice region specific in their basic conditions or implementation, they are as far as possible allocated to the relevant commodities.

However, it should be made clear that some of these allocations to commodities are only a proxy for the payments received by producers of such commodities in a given year. That is especially the case of the *Payments based on historical entitlements* and the *Payments based on overall farming income*. Therefore, more than for any other group of payments in the PSE by commodity, in the case of these payments attention should be drawn to the fact that there is no direct link between the amount allocated to each commodity and the level of production of that commodity.

Finally, transfers included in the *TSE* of a given country include transfers to individual producers and consumers, and transfers to general services provided to agriculture collectively (*GSSE*). Although some of the *GSSE* transfers, for example, for research, may be intended for work on specific commodities, they do not affect farm receipts or consumer expenditure in such a way that the amounts involved can be directly attributed to producers or consumers. Therefore, the *GSSE* transfers are not allocated to commodities, as such transfers do not depend on the decisions or actions of any individual farmer or consumer affecting the production or consumption of specific commodities in a given year.

c) Percentage PSE/CSE and producer/consumer NAC

The PSE by country and by commodity can be expressed in monetary terms – the **PSE**; as a ratio to the value of total gross farm receipts,[23] measured by the value of total production (at farm gate prices), plus budgetary support – the **percentage PSE;** or a ratio to the value of total gross farm receipts valued at world market prices, without budgetary support – the **producer NAC** (Nominal Assistance Coefficient).

In algebraic form, these PSE expressions can be written as follows:

$$\%PSE = I.PSE / (Q.Pp + PP) \times 100 \quad (1)$$

$$(100 - \%PSE) = Q.Pb / (Q.Pp + PP) \times 100 \quad (2)$$

$$[1/(100 - \%PSE) \times 100] = [\%PSE/(100 - \%PSE) + 1] = [(I.PSE/Q.Pb) + 1] = NACp \quad (3)$$

where,

PP = Payments to producers = *I. PSE – I.A. Market Price Support* = Σ I.B to I.H (see Box II.1)

Q.Pp = value of production at producer prices

Q.Pb = value of production at border prices

In other words, the above equations can be explained as follows:

- for example, a percentage PSE of 60 per cent, expresses the share of transfers to agricultural producers in the total value of gross farm receipts (as measured by the PSE), or the share of gross farm receipts derived from policies [equation (1)]; hence
- some 40 per cent of gross farm receipts is derived from the market without any support [equation (2)]; and
- the value of gross farm receipts is 250 per cent of (or 150 per cent higher than) what they would be if entirely obtained at world prices without any budgetary support [equation (3)] – a producer NAC of 2.50.

All transfers included in the CSE are implicit taxes or explicit budgetary transfers to consumers of agricultural commodities affecting consumer expenditure (valued at farm gate) of agricultural commodities. Therefore, *the CSE by country and by commodity can be expressed in monetary terms – the **CSE**; as a ratio to the total value of consumption expenditure on commodities domestically produced, measured by the value of total consumption (at farm gate prices), minus budgetary support to consumers – the **percentage CSE**; or as a ratio to the total value of consumption expenditure on commodities domestically produced valued at world market prices, without budgetary support to consumers – the **consumer NAC**.*

In algebraic form, the CSE expressions can be written as follows:

$$\%CSE = III.CSE/(Qc.Pd - TC) \times 100 \quad (4)$$

$$(100 - \%CSE) = Qc.Pb/(Qc.Pd - TC) \times 100 \quad (5)$$

$$[1/(100 - \%CSE) \times 100] = [1 + \%CSE/(1 - \%CSE) + 1] = [(III.CSE/Qc.Pb) + 1] = NACc \quad (6)$$

where,

TC = taxpayer transfers to consumers = *III.R. Transfers to consumers from taxpayers* (Box II.1)

Qc.Pd = value of consumption at domestic prices (at farm gate)

Qc.Pb = value of consumption at border prices

In other words, the above equations can be explained as follows:

- for example, a percentage CSE of 60 per cent, expresses the share of transfers to (from) consumers in the total consumption expenditure on agricultural commodities (as measured by the CSE), or the share of the consumption expenditure created by policies [equation (4)]; hence
- some 40 per cent of total consumption expenditure is derived from the market without any market support to domestic agricultural producers [equation (5)]; and
- the amount of consumption expenditure is 250 per cent of (or 150 per cent higher than) what it would be if entirely created at world market prices without any budgetary support to consumers [equation (6)] – a consumer NAC of 2.50.

The consumer NAC measures the **consumer price differential** or the ratio between the price paid by consumers (at farm gate) and the border price. When the price paid by consumers (at farm gate) is on average the producer price, and there are no consumption subsidies, the consumer NAC also measures the **producer price differential.** In all the other cases, this differential or the ratio between the producer and border prices can only be measured through the MPS calculation, as the ratio between the unit MPS and the border price.

d) Percentage GSSE and TSE

For a given country or commodity, the calculation of any of the indicators in percentage terms needs to have a precise meaning. This is the case when both the numerator and the denominator have an economic meaning, and the value of the transfers in the numerator can be seen as an integral part of the denominator.[24] Moreover, as percentage indicators take account of the effect of inflation on both numerator and denominator, this effect is eliminated. As a result percentage indicators are more representative and appropriate measures of support for analysis over time and across countries.

The **percentage GSSE** is defined as the share of support to general services provided to agriculture in the total support to agriculture (TSE), the rest being the support to individual producers and consumers of domestic agricultural commodities. In a situation of public support to agriculture, the higher the percentage GSSE, the lower the share of support affecting individual decisions on domestic production and consumption of agricultural commodities.

The TSE contains taxpayers transfers that are a component of the total current government expenditure, and transfers from consumers which are a component of the total domestic consumption expenditure. But, both of these transfers, from taxpayers and consumers, are included in Gross Domestic Product (GDP). Therefore, the **percentage TSE** is defined as the share of total support to agriculture in the total GDP. The higher the percentage TSE, the larger the share of national wealth used to support agriculture.

The method for decomposing the PSE and CSE

The purpose of decomposing total PSEs and CSEs is to facilitate the evaluation of year-to-year changes in these aggregate indicators. The procedure allows the analyst to identify the relative importance of the various PSE and CSE components in explaining the overall year-to-year changes in PSEs and CSEs, while condensing a large volume of data into a compact format. The basic approach for the decomposition procedure was presented in the 1992 edition of the *Monitoring and Outlook* report. The following

description reiterates the fundamental aspects of decomposition in the light of some methodological adjustments that became necessary with the new classification of PSEs/CSEs this year.

The decomposition procedure expresses the total PSE for a given country in terms of its components: a *production quantity* component and a *unit* (*i.e.* per-tonne) *PSE* component. The unit PSE is in turn broken down into its *unit value* components, namely *market price support* and *budgetary payments*. The budgetary component is subsequently disaggregated according to the PSE classification criteria (payments based on *output, area planted or animal numbers, historical entitlements, input use, input constraints, overall farming income,* and *miscellaneous*). Market price support is further decomposed into a *domestic producer price (net of levies)* component, an *excess feed cost* component, and a *world market price in national currency* component. The latter in turn is made up of an *exchange rate* component and a *world market price in US dollars* component.

Similar to the PSE decomposition procedure, the CSE is broken down into a *consumption quantity* component and a *unit CSE* component. The unit CSE is made up of *unit market transfers* and *unit budgetary transfers. Unit market transfers* in turn are separated into a *consumer price* component, an *excess feed cost* component, and a *world market price in national currency* component. The latter is broken down into an *exchange rate* factor and a *world market price in US dollars* factor.

For each PSE component, the contribution of any change in that component, in terms of percentage points, to the overall change in percentage PSE is calculated and presented in a "tree" figure (the "branch" with the seven budgetary payment components is condensed into a table in order to improve the readability of the overall figure). The contribution of an individual component can also be interpreted as the change in total PSE that would have occurred if nothing else but the respective component had changed. Some further insight can be gained by investigating some intermediate decomposition components or sub-trees. In particular, the sum of the contributions along the branches of a sub-tree equals the contribution of the trunk of that sub-tree. For example, the contribution of the *unit market price support* component is the sum of the *domestic producer price*, the *world market price in national currency*, and the *excess feed cost* components. Hence, it is possible to determine which component contributed to the change in *unit market price support* to what extent. The presentation and interpretation of the CSE decomposition is similar to that of the PSE tree.

For the derivation of the tree, it is proceeded as follows. For total PSE and for each of its components, year-to-year percentage change Fisher ideal indices are calculated for the aggregate of each country, for the aggregate of each commodity, and for the OECD as a whole.[25] Aggregation across countries (commodities) is done by weighting these country (commodity) indices for each individual PSE and CSE component. Weighted Fisher ideal indices are calculated from weighted Laspeyres and Paasche indices.[26] The weights used are component specific. For example, the OECD aggregate index is calculated as the weighted sum of Member country total PSE indices, where the weights are the country shares in the total PSE for the OECD. Each country's share of OECD budgetary payments is used for the BP_u index; its share of OECD production valued at MPS prices is used in the OECD price index of commodities for which market price support is not zero (*i.e.* MPS commodities), and so on. The weights are evaluated at base period prices for the Laspeyres indices and at current period prices for the Paasche indices.

Algebraically the decomposition analysis for PSEs, in terms of component contributions, can be represented as follows:

$$\Delta PSE = \Delta PSE_u + \Delta Q + \Delta PSE_u \cdot \Delta Q \qquad (1)$$

$$\Delta PSE_u = S_{mps} \cdot \Delta MPS_u + S_{bp} \cdot \Delta BP_u \qquad (2)$$

$$\Delta BP_u = S_{po} \cdot \Delta PO_u + S_{pn} \cdot \Delta PN_u + S_{ph} \cdot \Delta PH_u + S_{piu} \cdot \Delta PIU_u + S_{pic} \cdot \Delta PIC_u + S_{pfi} \cdot \Delta PFI_u + S_{pm} \cdot \Delta PM_u \qquad (3)$$

$$\Delta MPS_u = (S_{pd} \cdot \Delta Pd - S_{pwnc} \cdot \Delta Pw_{nc} - S_{efc} \cdot \Delta EFC) / S_{mps} \qquad (4)$$

$$\Delta Pw_{nc} = \Delta XR + \Delta \$Pw + \Delta XR \cdot \Delta \$Pw \qquad (5)$$

where,

– Δ indicates the percentage change in the nominated variable;

– MPS_u is unit market price support (per tonne);

– BP_u are unit budgetary payments (per tonne);

– PO_u are unit budgetary payments based on output (per tonne);

– PN_u are unit budgetary payments based on area or numbers (per tonne);

– PH_u are unit budgetary payments based on historical entitlements (per tonne);

– PIU_u are unit budgetary payments based on input use (per tonne);

– PIC_u are unit budgetary payments based on input constraints (per tonne);

– PFI_u are unit budgetary payments based on overall farming income (per tonne);

– PM_u are unit miscellaneous payments (per tonne);

– EFC_u is excess feed costs per unit (per tonne);

– S_{mps}, and S_{bp} are, respectively, the shares of market price support, and budgetary payments in total PSE;

– S_{po}, S_{pn}, S_{ph}, S_{piu}, S_{pic}, S_{pfi}, and S_{pm} are the shares of the different budgetary payment sub-categories (indicated by their subscript) in total budgetary payments;

– S_{pd}, S_{pwnc}, and S_{efc} measure the value of production (calculated at domestic and border prices, respectively) and of excess feed costs as a share of total PSE;

– *XR* is the exchange rate in units of domestic currency per US$;

– *$Pw* is the implicit border price in US dollars; it is calculated as the difference between domestic prices and unit market price support.[27]

Equations (2) and (3) show that the change in *unit PSE* and *unit budgetary payments* are equal to the sum of the percentage changes in their components weighted by the shares of those components. However, as the changes are expressed by Fisher ideal indices, the above expressions are not exact. To avoid any inconsistencies, approximation techniques are used to preserve the additivity of the decomposition formulas.

The decomposition analysis is based on the assumption that components of assistance are independent of one another, which is a useful simplification but needs to be interpreted carefully. In some cases different components might be related. For example, changes in domestic producer prices might have an influence on excess feed costs. Moreover, the analyst should bear in mind that all changes in PSEs and CSEs are expressed in nominal terms. Inflation differentials among countries are not corrected for. Hence, countries with high inflation rates tend to have a stronger influence on the decomposition results than countries where prices are relatively more stable.

Definition of full-time farmer equivalent and agricultural land

All forms of farm labour – farmers, hired employees and unpaid family workers – are included in the calculation of *total transfer per full-time farmer equivalents (FFE)* to the extent that information is available. The FFE numbers are taken directly from national data for Australia, Austria (until 1994), Canada, the European Union and Norway. For Finland (until 1994), Iceland, Japan, New Zealand, Sweden (until 1994), and the United States, the FFE numbers are calculated on the basis of the European Union Annual Work Unit (2 200 hours of working time in agriculture each year). For Switzerland the number of farmers is drawn from the OECD's *Labour Force Statistics*, and has been used in place of the FFE. It should be noted that for methodological reasons FFE numbers could not be calculated for Poland and Turkey. Where data for 1997 or for earlier years were not available, they were estimated by the OECD Secretariat.

In the calculation of the PSE *per hectare of agricultural land*, the agricultural land area in each country has been measured as the sum of the area of arable land and land under permanent crops and permanent meadows and pastures (from FAO data). It should be noted that agricultural land area data for Iceland are not available. Where data for 1997 or for earlier years were not available they were estimated by the OECD Secretariat.

3. AGRICULTURAL POLICY DEVELOPMENTS

This Part provides detailed background information on agricultural policies for each OECD country using a standard format. The main policy instruments are described, followed by a summary of the changes in the level and composition of support to agriculture. Policy developments in 1998 are then highlighted, including information on policy developments in the European Union member States. For the first time, quantitative estimates of support to agriculture for the 1986-1998 period are based on a new OECD classification scheme which provides increased detail on the different types of direct payments and information on general government services. An overall evaluation of these developments against the OECD Ministerial principles for agricultural policy reform (presented in Part II.1) is provided in Part I.3, *Agricultural Policies in OECD Countries: Monitoring and Evaluation 1999*.

Australia

Main policy instruments. The Commonwealth government[28] supports agriculture through budgetary-financed general programmes such as Agriculture – Advancing Australia (AAA) and the Natural Heritage Trust (NHT) (Table II.1). The AAA is an integrated policy initiative aimed at increasing profitability, competitiveness and sustainability in agriculture and encouraging communities and farmers to be more innovative and financially self-reliant. The AAA package replaces the Rural Adjustment Scheme (RAS) and related programmes, and the Action Plan for Australian Agriculture (formerly the Business Plan for Australian Agriculture) was launched in 1998. Programmes under the NHT contribute towards sustainable agriculture and natural resource management. Other budgetary measures mainly include contributions for research and development and tax concessions that are used to smooth taxable income from one year to another and encourage land and water conservation investments.

Dairy is the only sector receiving significant support. State governments set farm gate prices for fresh milk and operate a mix of pooling and quota arrangements. Commonwealth marketing arrangements assist the producers of manufacturing milk used to make dairy products. The Domestic Market Support Scheme includes a levy paid by manufacturers on manufacturing milk (manufacturers receive a rebate on milk used to produce dairy products for the export market and pass the levy on to consumers for products sold on the domestic market). The funds raised by the levy are used to assist producers of manufacturing milk. The Domestic Market Support scheme is to be terminated in 2000. The Australian Wheat Board (AWB), Australian Barley Board (ABB) and Queensland Sugar Corporation hold monopoly export powers, although ABB may lose the monopoly status in 2001 and the wheat export monopoly arrangements will be altered to separate regulatory and commercial functions after privatisation of the AWB on 1 July 1999. These revised wheat monopoly arrangements will be reviewed under the National Competition Policy by 2000. Tariffs protect producers of certain types of cheese, processed fruit and vegetables.

Support to agriculture (Tables III.20-22, Figure III.2). As measured by the percentage PSE, support has been very stable over the last decade. In 1998, it is estimated to have remained at 7 per cent, which is less than one-quarter of the OECD average. The total PSE hardly increased in 1998 as the increases in market price support (MPS) for milk were counterbalanced by decreases in overall budgetary support. The MPS for milk accounts for about half of total support to producers. The producer NAC of 1.07 suggests that 1998 gross farm receipts were 7 per cent higher than at world market prices, without budgetary support.

The tax on consumers associated with agricultural policies has also been stable since 1986-88. At 6 per cent, the percentage CSE is less than one-third of the OECD average. The CSE increased from 5 per cent to 6 per cent in 1998 due to an increase in the MPS for milk. Australian domestic prices are closely aligned with world prices. The consumer NAC estimates that consumption expenditures would have

Table II.1. **Australia: Expenditure on selected Agriculture – Advancing Australia and Natural Heritage Trust programmes relevant to agriculture and the rural sector**

Programme	Annual expenditure			
	1997/98		1998/99	
	A$ mn	US$ mn	A$ mn	US$ mn
Agriculture – Advancing Australia (AAA)				
Farm Business Improvement Programme (FarmBis)	–	–	14.8	9.3
Farm Family Restart Scheme	11.1	8.2	41.1	25.8
Rural Communities Programme	–	–	11.8	7.4
Farm Household Support Scheme (transitional arrangement)	0.4	0.3	5.1	3.2
Farm Management Deposits Scheme	–	–	20	12.6
Rural Adjustment Scheme (transitional arrangement)	81.9	60.8	29.5	18.5
Exceptional Circumstances Relief Payment Scheme (*)	90	66.8	39.7	24.9
Natural Heritage Trust (NHT)				
National Landcare Programme	86.7	64.4	92.2	57.9
Murray Darling Basin	29.5	21.9	38.4	24.1
National Rivercare Initiative	6.2	4.6	17.8	11.2
Farm Forestry Programme	3.1	2.3	9.8	6.2
National Land and Water Resources Audit	7.2	5.3	7	4.4
National Weeds Strategy	3.5	2.6	3	1.9
National Feral Animal Control Programme	2	1.5	0.9	0.6
Total AAA and NHT expenditure related to agriculture	321.6	238.7	331.1	207.9

(*) The figures for 1997-98 refer to expenditure under the former exceptional circumstances scheme.
Source: Department of Agriculture, Fisheries and Forestry – Australia, Canberra, 1998.

been 6 per cent lower if total consumption had been at world prices. Support to general services to agriculture (GSSE) has doubled over the last decade, but their share in the TSE has remained fairly constant, just below 30 per cent in 1998. Overall, transfers from taxpayers and consumers associated with agricultural policies, as measured by the TSE, are estimated at A$ 2.75 billion (US$1.7 billion), which is 4 per cent higher than in 1997 and represents about 0.5 per cent of GDP.

Policy developments

Wheat. The Australian Wheat Board will be replaced by a grower private company in July 1999, with two subsidiaries (concerned with domestic and export marketing) having a capital base provided by the Wheat Industry Fund converted into shares in the parent company. Government underwriting of the AWB's borrowings and the levy financed Wheat Industry Fund (WIF) will cease in June 1999. Remaining wheat legislation, which continues the wheat export monopoly arrangements, and state grain marketing legislation will be reviewed by 1999-2000 under National Competition Policy Guidelines.

Milk is supported through the Domestic Market Support Scheme, but all states are currently reviewing the farm gate price and fresh market milk supply arrangements. Post-farm gate milk markets in New South Wales and Queensland were already deregulated in 1998 and 1999, respectively. The remaining states may follow similar post-farm gate arrangements once their reviews are completed. These reviews are being undertaken at the same time the Domestic Market Support is being phased out, with termination scheduled for 30 June 2000. The dairy sector is the most highly supported agricultural commodity sector in Australia, but even though the PSE was 31 per cent in 1998 and CSE 28 per cent, these figures are about half the OECD average.

Meat and livestock. Meat and Livestock Australia Ltd (MLA) began operating in July 1998, replacing three statutory authorities – the Australian Meat and Livestock Corporation, the Meat Research Corporation and the Meat Industry Council. MLA operates as a producer-controlled red meat marketing, research and development company. It delivers services under contract to other sectors of the industry, including processors and livestock exporters. The change, decided by the industry and the government, is

designed to reduce government intervention and provide ownership to primary producers, processors and live exporters, enabling them to determine the future of their own industries.

The National Livestock Identification System (NLIS) was introduced as a means of maintaining and improving market access through improving traceback and traceforward capability. The Commonwealth government works closely with states and industry to facilitate the implementation of NLIS.

The National Pork Industry Development Program, which began in 1997 and is providing A$ 10 million (US$6.3 million) over three years [A$ 4 million (US$2.5 million) in 1998-99], is intended to help the industry improve its international competitiveness and encourage a shift from a domestic focus to an export focus. In addition, an A$ 8 million (US$5 million) Pigmeat Processing Grants Program was introduced in 1998 to provide grants to companies investing in new plant and equipment aimed at improving their efficiency. It also provided A$ 1 million (US$0.6 million) under the FarmBis Program to establish a national pig industry initiative focusing on improving the risk management skills of producers and adoption of best practice in production and marketing.

Wool. With the Wool International Amendment Bill 1998, the federal government froze sales from the wool stockpile from October 1998 to end June 1999 in order to allow Wool International to support and commit funds to privatisation. Wool International will be replaced by a private shareholding company in July 1999, with shares allocated on the basis of individual equity entitlements in the stockpile. The new company will take over all the assets and liabilities of Wool International. It will be a new entity, established under the Corporations Law, and will be commercially operated and grower-controlled through their equity and without Commonwealth involvement.

Implementation of Agriculture – Advancing Australia continued in 1998 with the introduction of the new ***Farm Business Improvement Program*** (FarmBis, in AAA), a grants programme assisting farmers to undertake further training to improve the management of their businesses (Table II.1). FarmBis has a budget of A$ 50 million (US$31.4 million) over 3 years, with A$ 14.8 million (US$9.3 million) provided in 1998-99. ***Property Management Planning*** (PMP, also in AAA and part of NLP/NHT) assists farmers in developing better strategies to deal with risks associated with climatic fluctuations, market volatility and new marketing arrangements, land and water degradation, and social and economic pressures. The government will spend some A$ 40 million (US$25.1 million) on this four-year programme ending in 2001. Both FarmBis and PMP are jointly funded by the federal and state governments and administered by the states.

Through the AAA package, welfare assistance has been available to eligible farmers under the ***Farm Family Restart Scheme*** (FFRS) and the ***Exceptional Circumstances Relief Payment Scheme*** (ECRP) since December 1997 (Table II.1). The total funding of FFRS is A$ 121.4 million (US$76.2 million) with support in 1998-99 estimated at A$ 41.1 million (US$25.8 million). It is tailored to assist low-income farmers who cannot borrow against their assets by giving them access to improved welfare support, as well as adjustment assistance for those who wish to leave the industry. It includes income support for a maximum period of one year, adjustment assistance for those wishing to leave farming, access to professional advice on the future viability of the farm business, and other forms of counselling. The FFRS has replaced the former ***Farm Household Support Scheme.*** Debts of some A$ 5.1 million (US$3.2 million) incurred by farmers under the former scheme have been waived by the government.

Expenditure through the ***Exceptional Circumstances Relief Payment Scheme*** (ECRP), which provide assistance to farmers experiencing severe drought and other extreme adverse events, are expected to reach A$ 40 million (US$25.1 million) during 1998-99. The new support framework does not distinguish between drought and non-drought exceptional circumstances (whereas different criteria were used under the former programme). Support via interest rate subsidies is provided for farm businesses with prospects of long-term viability but whose future is at risk because of exceptional circumstances. Income support is subject to an income test and off-farm assets test and paid as interest subsidies that are to be phased down gradually from 100 per cent in 1998-99 to 50 per cent in 2001-2002. Income support is also provided through concessional access to AUSTUDY/Family Allowance, Family Payment and the Health Care Card.

Farm Management Deposit Scheme (FMD) in the AAA package is a tax-linked savings scheme that helps farmers deal with uneven income streams. FMDs enable farmers to set aside income in good years to establish cash reserves to help them meet costs in low-income years. The estimated cost of FMD is A$ 20 million

(US$12.6 million) in 1998-99 (Table II.1). The FMDs are to be run on a fully commercial basis by financial institutions and replace the Income Equalisation Deposit Scheme (IED) and Farm Management Bonds (FMBs). The limit on holdings is A$ 300 000 (US$188 400) per taxpayer and the investment component is 100 per cent, compared with 61 per cent for IEDs. Eligibility is restricted to farmers with a taxable non-farm income of not more than A$ 50 000 (US$31 400). Interest is paid at market rates and taxable in the year earned. Deposits are fully tax deductible in the year of deposit and taxable when withdrawn.

Water reforms are to be implemented by 2001 and will include consumption-based water pricing and full-cost recovery, the reduction or elimination of cross-subsidies, clarification of property rights, allocation of water for the environment, trading in water rights and institutional reform. They are aimed at benefiting farmers through greater certainty in water allocations and security of water supply. Infrastructure maintenance will be fully accounted in water prices and water entitlements may be traded. Devolution of responsibility should give irrigators direct influence on services and ensure that water delivery matches production needs. This, in turn, is intended to encourage irrigators to use water more efficiently and further reduce costs.

Elements of the ***National Landcare Program*** (NLP, part of NHT) address flood plain management and provide the option of extended income tax concessions to encourage investment in on-farm landcare works. Also under the NHT, A$ 3 million (US$1.9 million) is being spent in 1998-99 on implementing the National Weeds Strategy [A$ 3.5 million (US$2.2 million) in 1997-98] to reduce the detrimental impact of nationally significant weeds and A$ 0.9 million (US$0.6 million) for the National Feral Animal Control Strategy [A$ 2 million (US$1.3 million) in 1997-98] for the effective management of feral animals.

Trade. In order to meet its Uruguay Round commitments Australia has converted all remaining quantitative restrictions in agriculture to tariffs and removed export subsidies on cheese, sugar and tobacco. The quarantine measures remain relatively strict. Since October 1997, the import of both uncooked and cooked pigmeat has been allowed in from Canada, but only of uncooked pigmeat (for cooking on arrival) from Denmark. Import arrangements for cooked chickenmeat were also changed in late 1997 to allow imports from the United States, Denmark and Thailand. Implementation of the government's A$ 76 million (US$47.7 million) response to the review of the Australian Quarantine and Inspection Service continued, with A$ 20 million (US$12.6 million) allocated in 1998-99 to areas such as import risk analysis, pre-border activities to keep quarantine risks offshore, border control activities and enhanced monitoring and surveillance. The Australian wool industry is currently investigating chemical residues in relation to the processing of raw wool in Australia. This is in response to concerns from the EU regarding the possibility of residues in Australian wool exported to the EU for later stage processing.

The ***Natural Heritage Trust*** (NHT) is the largest environmental scheme ever undertaken by an Australian government, with total funding of A$ 1.25 billion (US$0.8 billion) over five years. It is jointly administered by Environment Australia and Agriculture, Fisheries and Forestry Australia and focuses on land, vegetation, rivers, coasts and marine, and biodiversity. The key agriculture-related objectives are sustainable agriculture, natural resource management and conservation. The land management initiatives include National Landcare Program (NLP), National Land and Water Resources Audit, National Feral Animal Control Strategy, National Weeds Strategy and Advanced Property Management Planning. At A$ 280 million (US$176 million), the NLP receives the most funding in this area. The programmes on native vegetation include Bushcare: the National Vegetation Initiative and Farm Forestry. With total funding of A$ 330 million (US$207 million), Bushcare aims at reversing the long-term decline in the quality and extent of Australia's native vegetation. The NHT will dedicate A$ 260 million (US$163 million) to projects to improve water quality and the ecological health of river systems (Murray-Darling 2001 and National Wetlands Program), and almost A$ 100 million (US$63 million) to Rivercare activities (National Rivercare Program). Expenditure on agriculture-related NHT programmes increased from A$ 138 million (US$103 million) in 1997-98 to A$ 169 million (US$106 million) in 1998-99 (Table II.1).

The ***Rural Communities Program*** (RPC, part of AAA) is tailored to meet community needs and provides grants for community development, community counselling and other needs identified by local communities. To date 232 services have been provided from approved grants totalling over A$ 16.8 million (US$10.6 million) over a three-year period. The ***Rural Plan*** (part of AAA) is a strategic planning initiative which encourages rural-based industries to work together at the regional level in develop-

ing business plans to further regional growth. It commenced in August 1998 and will run for four years at a cost of A$ 10 million (US$6.3 million). The ***National Action Plan for Rural Women,*** that outlines best practice strategies in recognising women as leaders and decision-makers, was launched in 1998.

Introduced in September 1997, for a period of three years, the ***Retirement Assistance for Farmers Scheme*** (RAFS, also in the AAA) assists low-income, pension-aged farmers to transfer their farms to the next generation and gain immediate access to the aged pension. The legislation to implement RAFS was passed in June 1998 and processing applications began in August 1998. Eligibility criteria apply and farmers are advised to seek professional advice before leaving farming.

There were no subsidies in 1998 for the ***Australian Quarantine and Inspection Service*** (AQIS), which is responsible for carrying out export inspection and charges for its services to recover the costs. The reforms to meat inspection systems enhance food safety, while also boosting the industry's efficiency and competitiveness. In 1998-99, A$ 9.3 million (US$5.8 million) will be spent to continue the reform of the Commonwealth's meat inspection programme.

The Department of Agriculture, Fisheries and Forestry spent approximately A$ 148 million (US$93 million) on ***rural research and development*** in 1998-99 (including A$ 126 million (US$79.1 million) to match industry R&D levies; A$ 11 million (US$6.9 million) on the Land and Water Resources R&D Corporation; and A$ 11 million (US$6.9 million) on the Rural Industries R&D Corporation. Total government expenditure on agriculture-related R&D is estimated at A$ 331 million (US$208 million) in 1998-99, when budgetary outlays by all ministries are taken into account.

Canada

Main policy instruments. Federal and provincial governments are jointly responsible for the implementation of agricultural policies. Roughly half of total budgetary expenditure on agricultural measures is provided by provincial governments. Supply management, price support and trade measures are the main support instruments in the milk, poultry and egg sectors, which are mainly located in eastern Canada. Farm income stabilisation programmes, involving funding from both federal and provincial governments and producers, apply to all agricultural commodities except those covered by the supply management system. National and regional adaptation programmes are being developed with increasing attention being given to innovation, marketing, environmental protection, food safety, human resource capacity building and rural development.

Support to agriculture (Tables III.23-25, Figure III.3). As measured by the percentage PSE, support has declined over the last decade due to a marked decline in both market price support and payments based on output, on area planted and on input use. However, in 1998, the PSE increased, mainly due to higher market price support for milk as world price decreased and to higher crop insurance payments. As a result, the percentage PSE is 16 per cent compared to 14 per cent in 1997 and represents less than half the OECD average. The producer NAC of 1.19 suggests that 1998 gross farm receipts were 19 per cent higher than at world prices, without budgetary support.

Declining market price support was the main reason for the reduction, since 1986-88, in the tax on consumers associated with agricultural policies. At 16 per cent in 1998, the percentage CSE is 80 per cent of the OECD average. The CSE increased by 12 per cent in 1998 due mainly to a rise in the market price support for milk. The consumer NAC estimates that consumer expenditures would have been 19 per cent lower if total consumption had been at world prices. Government expenditures on general services to agriculture (GSSE) have been falling since the beginning of the 1990s representing around a quarter of the Total Support Estimate (TSE) in 1998. Overall, transfers from taxpayers and consumers associated with agricultural policies, as measured by the TSE, are estimated at C$ 6 366 million (US$4 290 million) representing about 0.8 per cent of GDP.

Policy Developments

Dairy products. No major policy changes were implemented in the dairy sector in 1998. The sector continues to be the least reformed and most heavily supported agricultural sector in Canada, accounting for around 50 per cent of Canada's total support and 80 per cent of all market price support. Industrial

milk production continues to be restricted through the use of production quotas determined by the Canadian Milk Supply Management Committee. The Market Sharing Quota for the 1998/99 dairy year was increased by 4.3 per cent compared with the previous year, in line with anticipated increases in demand. The federal dairy subsidy, which now covers less than 10 per cent of the target price of industrial milk is being phased out over a period of five years starting in February 1998 when it was reduced to C$ 3.04 per hl (C$ 29.5 per tonne). The target prices for industrial milk increased by C$ 1.25 per hl (C$ 12.1 per tonne) to C$ 55.55 per hl (C$ 539.3 per tonne) in February 1998 and the support price for butter and skimmed milk powder also increased to C$ 4 431 and C$ 5 382.7 per tonne respectively. This, combined with a decline in the world price led to a 16 per cent rise in market price support for milk.

Poultry. The commercial quota for turkey in 1999/2000 will be 4.9 per cent greater than the quota established for the previous year. The quota for chicken increased by 5.6 per cent in 1998 on an annualised basis.

Cattle. Breeding livestock producers in designated areas of Alberta, Nova Scotia, Ontario and part of Saskatchewan who had to sell all or part of their herds in 1998 due to drought will be eligible for a one-year tax deferral on 1998 income from these sales.

Hogs. In November 1998, a C$ 50 000 (US$33 693) flexible loan programme for Alberta hog producers was announced as part of a re-designed package of bridge financing options to assist producers in dealing with an industry-wide credit crisis. The programme does not involve a subsidy. Interest and debt can be deferred, but are capitalised into the loan. A short-term loan programme was also implemented in Saskatchewan to assist hog producers with cash flow problems. As well, in November 1998, the Premier of Prince Edward Island offered a short-term pricing action plan to support the Island's hog industry. The plan includes a deferred loan repayment scheme, bridge financing, and extended eligibility under the Agriculture Disaster Insurance Program. The overall impact on these measures will be a cash flow relief of between C$ 45 to C$ 50 per hog.

Federal/provincial agreements, which govern the development, implementation and administration of stabilisation programmes (NISA, crop insurance and province-based companion programmes to income protection measures) and which were scheduled to terminate at the end of 1998/99, were extended for one year pending further policy discussions and negotiations about the longer term. The ***Net Income Stabilization Account*** (NISA) programme now offers an interim withdrawal mechanism. In 1998 Saskatchewan crop insurance extended coverage levels and offered insurance to alfalfa seed and chick-pea producers.

On the same terms as other businesses and private households, New Brunswick, Ontario and Quebec farmers who suffered losses due to the January 1998 ice storm received indemnities under ***national disaster assistance programmes.***

To address the 1998 farm income crisis, an ***Agricultural Income Disaster Assistance Programme (AIDA)*** has been announced in December 1998. It is a two-year national programme of C$ 900 million (US$606 million) covering a maximum of 70 per cent of the average gross margin for all commodities as a whole over the three previous years. A cap of C$ 175 000 per farm will be placed on federal payments. The federal share of the programme will be delivered under the same rules across the country. Existing similar provincial programmes will guide delivery of the provincial share of AIDA. The provincial contribution could add up to C$ 600 million (US$404 million) as provinces are expected to share costs on the same basis as the core stabilisation programmes (*i.e.* to provide 40 per cent of total expenditures). All provinces have agreed to participate, except Nova Scotia which has yet to decide.

Trade. Regarding the implementation of Uruguay Round commitments, 13 tariff-quotas out of 21 were filled during the calendar year 1997 and the marketing year 1997/98. The under-filled tariff quotas represented imports of 2 per cent of the quota for margarine, 88 per cent for yoghurt, 63 per cent for cream, 83 per cent for dry whey, 27 per cent for wheat, 12 per cent for barley and 58 per cent for barley products. Canada was involved in a number of trade dispute panels involving agricultural commodities during 1998 (Part II.4). In March 1998, a WTO dispute settlement panel was established to hear complaints by the United States and New Zealand about Canada's pricing of milk for export uses by the Canadian dairy industry. The US also complained about Canada's implementation of its tariff quota on fluid milk. The panel has not yet released its report.

In March 1998, Canada decided to waive a self-imposed restriction limiting the use of credit sales for certain agricultural commodities exported to Korea. Canada and the EU signed an agreement on veterinary and health standards for trade in live animals and animal products, fish and fish products in December 1998. Canada continues to work with other countries in the development of equivalency agreements of inspection systems. Canada and the United States agreed to an Action Plan to improve bilateral trade. It includes increased dialogue on trade issues and exchange of information on market conditions, harmonization of regulations on pesticides, quarantine, and health and safety requirements, and facilitation of grain transportation across the border.

The ***National Soil and Water Conservation Program,*** announced in June 1997, received C$ 10 million (US$6.7 million) to be paid to adaptation councils, processors and producer groups in 1997/98 and 1998/99 for the protection and enhancement of soil and water resources used in agriculture. The ***Hog Environmental Management Strategy*** launched in 1997 by Agriculture and Agri-Food Canada and the Canadian Pork Council in order to find effective and affordable solutions to the environmental issues related to hog production, was developed in 1998 at the federal level. The federal government dedicated C$ 1 million (US$0.7 million) to be matched by industry funds to conduct research and develop technologies. The funding for those two projects is provided through the Canadian Adaptation and Rural Development (CARD) programme.

The ***Canadian Adaptation and Rural Development*** (CARD) programme, launched in 1995 for a four-year period, will continue into the next millennium. The new adaptation priority areas will be innovation, marketing, environmental protection, food safety, human resource capacity building and rural development. Under CARD, the government established industry-led Adaptation Councils in each of the provinces and territories of Canada to set priorities, to review and allocate funding to projects and to manage projects. The establishment of those Adaptation Councils was completed in 1998. National initiatives are being developed to address the six adaptation priority areas.

The funding and coverage of ***wildlife compensation programmes*** in Saskatchewan was extended as of April 1998. The federal and provincial government made a one-time contribution of C$ 27.8 million (US$18.7 million). In 1998, the ***Canadian Food Inspection Agency*** developed a strategy and action plan for modernising and/or consolidating federal legislation relating to food inspection, agricultural inputs and animal and plant health. In February 1998, Agriculture and Agri-Food Canada released a *Biodiversity Action Plan* in agriculture which was developed from the Convention on Biological Diversity signed by more than 100 countries in Rio de Janeiro in June 1992. An ***Agri-Food Research and Development Matching Investment Initiative*** was designed to raise the level of agri-food research and development investment by over C$ 70 million (US$47 million) a year by the turn of the century.

Czech Republic

Main policy instruments. There is price regulation for bread wheat and milk. In the case of bread wheat the State Fund for Market Regulation (SFMR) concludes forward purchase contracts and provides advance payments to farmers before the sowing period. After harvest it operates intervention purchases at guarantee prices. In the dairy sector, processors are required to pay farmers a minimum price for milk in order to be eligible for export subsidies. The prices of other products, such as beef, pigmeat, poultry, sugar and oilseeds are supported through import tariffs. In addition to direct export subsidies for milk, the export of some other commodities is assisted by export credit subsidies. Credit subsidies and guarantees on loans from commercial banks, which are administered by the Support and Guarantee Fund for Farmers and Forestry (SGFFF), provide credit support to agriculture. Increasingly direct payments are provided to farmers, mainly in less-favoured areas. These payments are mainly targeted to promote extensive cattle production on grassland and suckler cow premia. In 1998, the government introduced direct payments for dairy cows. Tax concessions are accorded to farmers and the processing industry, the most important being the tax concession for the production and sale of biofuel. Taxes are levied on ruminant animals to reduce ammonia emissions. Legal limitations are imposed on farmers in the protected areas (land surrounding drinking water reservoirs, ground water protection areas, National parks and reserves, etc.). The government sup-

ports agricultural training and education, research and extension, and plant and animal breeding. Rural development measures focus mainly on village infrastructure and communal services.

Support to agriculture (Tables III.26-28, Figure III.4). As measured by the percentage PSE, support declined by three-quarters between 1989 and 1995, mainly due to a sharp decrease in market price support. From 1995 to 1997 the percentage PSE remained rather stable with a slight decline in 1997, due mainly to a drop in market price support. In 1998, the percentage PSE is estimated to have increased to 17 per cent (from 10 per cent in 1997), which is roughly half the OECD average. In 1998, PSE increased by 82 per cent, the combined effect of increases in market price support (mainly for grains and milk) and in direct payments (area and headage payments). The share of market price support in total support increased from half in 1997 to almost two-thirds in 1998. After the long-run decline in the period 1986-1997, the increase of the producer NAC in 1998 to 1.22 suggests that 1998 gross farm receipts were 22 per cent higher than at world prices without any support.

Until 1990, the budgetary support to consumers partly offset the transfers from consumers to producers. Since 1991, the CSE reflects changes in MPS only. The percentage CSE was estimated to be 11 per cent in 1998, around half of the OECD average, having more than doubled, mainly due to a rise in MPS for milk and grains. The consumer NAC increased to 1.12, implying that consumer expenditures would have been 12 per cent lower if total consumption had been at world prices. The general services support estimate declined slightly in 1998, mainly due to a drop in infrastructure expenditures. The Total Support Estimate (TSE) increased by 63 per cent and reached 1.5 per cent of GDP in 1998.

Policy Developments

Grains. For bread ***wheat*** the private storage scheme introduced for the marketing year 1997/1998 was abolished for the marketing year 1998/1999 and the system of forward contracts with advanced payments used in previous years was reintroduced. The state procurement price for bread wheat – used both for the forward purchasing contracts and for state purchases – was fixed at CKr 4 000 (US$124) for 1998/1999 (Table II.2). There was a limit set for forward purchasing contracts and, as in the previous year, there were no limits set for the quantities of bread wheat sold to intervention. During the first 11 months of 1998 the SFMR bought into its stocks 789 000 tonnes (total of forward purchases and intervention). The fall in world grain prices limits the possibilities of the SFMR to sell its stocks on the world market. The SFMR ceased intervention buying 18 October 1998 and opened a tender for export of 165 000 tonnes of bread wheat. There are no export subsidy schemes for grains and UR commitments limit their introduction. Selling the grains at a loss would threaten the financial sustainability of the Fund in the coming years. The SFMR expenditures in 1998 more than doubled as the cost of intervention on the wheat market increased almost four times. In order to cover its expenditures in 1998 the SFMR contracted a loan from commercial banks of Ckr 3.2 billion (US$98 million), which represents 60 per cent of total fund expenditures.

Milk. For 1998 the minimum price for milk was raised by 10 per cent (Table II.3). An estimated surplus of dairy products, equivalent to 645 000 tonnes of milk (24 per cent of total production), was exported with subsidies amounting to CKr 1.2 billion (US$37 million) which is an increase of 8 per cent over 1997.

Other products. In 1998 the SFMR continued to provide subsidies for ***potato starch*** at a rate of CKr 5 500 (US$170) per tonne for a maximum quantity of 8 000 tonnes. To be eligible for export subsidies potato starch producers have to buy 5.5 tonnes of starch potatoes for each tonne of exported starch at the minimum price of CKr 1 500 (US$46) per tonne. The total amount of export subsidies for potato starch exports was estimated at CKr 31 million (US$1 million). The SFMR also decided, on an *ad hoc* basis, to buy the private stocks of unsold *hops* from 1995-1997, but storage costs are borne by growers. The government also agreed to pay subsidies of CKr 40 000 (US$1 220) per tonne of hops exported. The overall expenditures are estimated at CKr 35 million (US$1.1 million).

Headage and area payments introduced in 1995 to encourage specialised beef production (suckler cow premia and payments per calf of meat race) and the payments for grassland in LFAs (with limited stocking density) were re-organised in 1998 into a new scheme. A generalised agricultural area payment was introduced, the level depending on the administrative land price. The new system of payments is intended as a support to farming in general (maintenance of the landscape), organic farming and, in LFAs,

Table II.2. **Czech Republic: Government procurement prices and quantities for bread-wheat**

	1997		1998		Change in CKr values from 1997 to 1998
	CKr/tonne	US$/tonne[7]	CKr/tonne	US$/tonne[7]	%
Procurement price	3 900[1]	123	4 000[2]	124	3
Advance payment	3 000[3]	95	1 500[4]	46	–50
	'000 tonnes		'000 tonnes		
Maximum forward purchase quantity[5]	–		300		n.c.
Actual forward purchase quantity	187		262		40
Actual intervention quantity	0		527		n.c.
	CKr mn	US$ mn	CKr mn	US$ mn	
Total intervention cost[6]	764	24	3 625	112	374

n.c.: not calculated.
1. Price valid in October 1997; this price increased in monthly increments of CKr 30 to CKr 4 140 in June 1998.
2. Price valid for all the crop year 1998/99 (July to June).
3. Advance payment to farmers made by milling companies under the private storage scheme.
4. Advance payment to farmers made by the SFMR under the forward purchase contracts.
5. Quantity approved by the SFMR before the 1998 harvest. There were no forward purchases limits under the private storage scheme in 1997.
6. SFMR net expenditures of wheat market regulation in a given year.
7. Conversion uses OECD annual exchange rates (January to December).
Source: State Fund for Market Regulation, Prague, 1998.

Table II.3. **Czech Republic: Minimum prices and export subsidies for milk**

	1997		1998		Change in CKr values from 1997 to 1998
	CKr	US$[2]	CKr	US$[2]	%
Minimum price[1]/litre	6.8	0.21	7.5	0.23	10
Export subsidy (mn)	1 112	35	1 200	37	8

1. The price paid by dairies to farmers for first-quality milk in order to be eligible for export subsidies.
2. Conversion uses OECD annual exchange rates (January to December).
Source: State Fund for Market Regulation, Prague, 1998.

to livestock activities (meat type beef cattle and sheep). The support to farms in LFAs is conditional on an animal density between 0.1 and 1 livestock unit per hectare. Direct payments to bee-keeping and flax production are maintained as separate programmes. In addition the government introduced a headage payment of CKr 2 500 per year for dairy cows producing more than 4 500 litres per year (on condition of a minimum of 5 dairy cows per farm). In the LFAs these payments are conditional on a maximum stocking density of 1 livestock unit per hectare. In total, 1998 expenditures on direct payments more than doubled over 1997, with headage payments increasing nearly four-fold (Table II.4).

Payments based on input use concern mainly the credit subsidies and loan guarantees administered by the Support and Guarantee Fund for Farmers and Forestry (SGFFF). The credit facilities are available for investment as well as working capital. Payments extended to farmers from the SGFFF (in the form of credit subsidies) declined by 11 per cent compared with 1997. Since SGFFF started to operate in 1994 the (cumulative) amount of credits extended to agriculture reached CKr 55 billion (US$1.7 billion) in 1998. However, the amount of new credits granted dropped from the peak of CKr 14.6 billion (US$460 million) in 1997 to CKr 9.2 billion (US$281 million) in 1998 (10 months). More specifically, the SGFFF ceased to provide guarantees for investments in agricultural machinery and reduced the guarantees for working capital (from 50 to 30 per cent). The amount of mature guaranteed loans that were not

Table II.4. **Czech Republic: Area and headage payments**

	1997		1998		Change in CKr values from 1997 to 1998
	CKr	US$[7]	CKr	US$[7]	%
Acreage payments[1] (mn)	1 669	53	2 925	91	75
Payment/hectare	2 500/3 300[5]	79/104	200-3 600[6]	6-112	n.c.
Headage payments meat type cattle[2] (mn)	278	9	482	15	73
Payment/suckler cow	4 000	126	–	–	n.c.
Payment/suckler calf	3 000	95	2 400/6 400	74/198	n.c.
Headage payments dairy cows[3] (mn)	–	–	810	25	n.c.
Payment/ dairy cow	–	–	2 500	77	n.c.
Headage payments sheep[4] (mn)	–	–	35	1	n.c.
Payment/sheep	–	–	880	27	n.c.
Total headage payments (mn)	278	9	1 327	41	377
Total acreage and headage payments	1 947	61	4 252	132	118

n.c.: not calculated.
1. Payments for grassland in less-favoured areas in 1997; in 1998 payment per hectare of agricultural land for the whole territory, differentiated according to the official price of land.
2. In 1997, payments for suckler cows and calves in less-favoured areas with official land prices lower than CKr 2/m^2; in 1998, payments only for calves in areas with official land prices lower than CKr 4/m^2 (rates differentiated according to the official land price).
3. Payments per head of dairy cow with milk yield over 4 500 l/year. In areas with official land prices lower than CKr 4/m^2, the payment is subject to a limitation of one livestock unit per hectare of feed crops.
4. Payment per sheep in areas with the official land price lower than CKr 3.1/m^2.
5. Higher rate if the official land price is less than CKr 3.1/m^2; lower rate if the official land price is between CKr 3.11 and CKr 3.5/m^2.
6. A flat rate of CKr 200/ha is paid for all agricultural area with official land prices higher than CKr 4/m^2. In the areas with prices within CKr 2-4/m^2 the rate per ha increases gradually to CKr 3 600/ha.
7. Conversion uses OECD annual exchange rates (January to December).

Source: Research Institute of Agricultural Economics, Prague, 1998.

repaid by farmers increased again in 1998 reaching 4.11 per cent of the total guaranteed amount in 1998 (more than double the ratio in 1997). As in previous years the government partly wrote-off and extended the repayment period for the reimbursable financial assistance extended from the budget during 1991-1993. Payments for forestation by farmers, the restoration of vineyards, hop gardens and orchards were increased by 72 per cent over 1997.

Market access. In 1998 the Czech Republic lowered import tariffs in accordance with the URAA and, to enable minimum and current market access, opened a total of 31 tariff rate quotas (TRQ). TRQs for cereals and molasses were cancelled. As in the previous years a system of automatic import licences was implemented in 1998. During 1998 the government started initiatives to further protect the domestic market, including controls of imported agro-food products and custom declarations.

Export measures. In 1998 direct export subsidies were used only in the case of milk products. As in 1997 export of some other products (sugar, malt, poultry, eggs, etc.) was supported by interest rate subsidies on export credits provided by the SGFFF within the framework of *Export* programme. At the beginning of 1998 the *Export* programme was extended to support investments in machinery, technology and licence purchase of export oriented processors of pigmeat and poultrymeat, including pre-export financing of production. In order to control the exports of some agro-food products the government maintains a system of non-automatic export licences. In May 1997 the Ministry of Industry and Trade published a new list of products subject to the licence procedure. The list includes a wide range of important agro-food products such as: live cattle and pigs, beef, pigmeat, milk powder, grains and grain products, oilseeds, sugar, etc.

Trade agreements. Within the European Agreement (EA) with the EU, preferential tariff rate quotas were set for the import of specific agro-food products from the EU. The government introduced temporary protection measures against apple imports from the EU in the form of an import quota of 24 000 tonnes, but this was cancelled on 21 May 1998, after retaliatory measures were applied by the EU. Within the Central European Free Trade Agreement (CEFTA) the tariff rates used for the preferential trade

with Slovenia were changed (1 April 1998). No major commitments to further liberalise the agro-food trade were reached during the 1998 CEFTA meetings. On the contrary, in 1998 there were several actions taken unilaterally by various CEFTA countries to limit imports from other CEFTA members, resulting in trade disputes among CEFTA members. In mid-September 1998, the Czech Government imposed an additional tariff of CKr 2 290 (US$71) per tonne of wheat imported from Hungary. Hungary claimed the tariff was discriminatory and submitted a complaint to WTO. In November the Czech Government lifted the import duty on Hungarian feed wheat after an agreement was reached on a tariff quota for Hungarian exports (80 000 tonnes of feed wheat), for bread wheat the import duty will be maintained until end April 1999. As part of the same deal the Czech Republic (CR) will increase its preferential import quota for Hungarian wine by 2 million litres a year. Also in 1998, the free agro-food trade under the Customs Union with the Slovak Republic was subject to quota limitations. Czech exports to Slovakia were limited by quotas imposed by the Slovak Government on beer, non-alcoholic beverages, fruit juices, processed vegetables, jams and spirits. The Czech Government introduced an annual limit of 3 500 tonnes on Slovak sugar exports to CR in October 1998.

There are no specific ***agri-environmental policies*** applied in the Czech Republic. However, some of the direct payments mentioned earlier are intended to promote (or maintain) the environmental benefits of agriculture mainly in the LFAs (maintenance of the landscape, extensive beef and sheep production on grassland, afforestation, etc.). In 1998, the government introduced direct payments of CKr 46 million (US$1.4 million) to promote organic farming.

The new ***Agricultural Act*** (which came into force in November 1997) sets out provisions for compensation to farmers in protected regions and other areas with regulated farming conditions (one-fifth of farmland is located in such areas). However, no compensation schemes were introduced in 1998. New legislation regulating the use of fertilisers came into force in September 1998 ***Law on Fertilizers*** *(No. 156/1998*). The legislation sets out the conditions for introduction of Fertilizers into circulation and their use as well as the jurisdiction of the supervision bodies in the area of control and sanctions. Taxes levied on ruminant animals to reduce ammonia emissions were reduced in 1998. The new tax rates differentiate between "progressive" forms of housing (*e.g.* housing on loose litter or with natural ventilation) and "non-progressive" forms (*e.g.* with forced ventilation). Overall the tax collected in 1998 is to be a half of that collected in 1997 (CKr 50 million instead of CKr 100 million).

From 1 January 1998 new ***tax concessions*** were granted to individual farmers as 20 per cent of investments in agricultural and forestry machinery can be deducted from their income tax base. The land tax relief for owner-occupied family farms applied up to 1997 (CKr 10 million) but was cancelled in 1998. Interest subsidies to small and medium-sized agro-food enterprises declined by 12 per cent CKr 1 billion (US$30.5 million) in 1998. The Czech Parliament approved a ***new food law,*** which restricts the state's role to issuing a list of standards for food products and their selective sampling and testing. A penalty of up to CKr 5 million (US$155 000) may be imposed on processors who fail to meet the state standards. In July 1998 the Czech Republic and EU signed the agreement on ***Equivalence of Veterinary and Phytosanitary Regulations*** (ending four years of negotiations and legal preparation), which represents a major step forward in harmonising legislation between the EU and the CR.

European Union

Main policy instruments. Agricultural support is primarily based on market price support, although the importance of direct payments has been growing following the 1992 CAP reform. Market price support is provided through administered prices, export subsidies and tariffs. Price support policies are often combined with production quotas and set-asides. A mixture of all these measures is used in the cereals sector. In accordance with the 1992 CAP reform, direct payments for cereals and oilseeds are based on historic, regional yields and paid on condition that producers set aside a defined percentage of the land; small producers are exempted from the set-aside requirement. Payments are also made for the land set aside. There are no administered prices for oilseeds. Administered prices and production quotas are used for dairy and sugar in conjunction with import protection and export subsidies. The support system for beef involves administered prices, intervention purchases, direct payments based on fixed, reference livestock numbers subject to limits on stock density, import protection and export subsidies. For sheep-

meat, the support system comprises a pricing system based on a ewe premium and import tariffs. In accordance with the UR agreement, trade measures consist of tariff-rate quotas, over-quota tariffs and export subsidies that are limited in value and volume. A number of measures are aimed at structural adjustment, rural development, marketing and promotion, research and extension, input subsidies and the environment, and are either co-financed or are entirely financed by EU member states. The BSE crisis and the continuing controversy over the use of genetically modified organisms (GMO) have heightened public concerns on food safety and food quality. In 1998, because of sharp declines in pigmeat prices, a number of *ad hoc* payments were made, particularly at the national level. A package of measures, *Agenda 2000*, outlining changes to common policies, including the CAP, into the next century was agreed by the EU Council of Agricultural Ministers in March 1999 (for details see Part I.3).

Support to agriculture (Tables III.29-31, Figure III.5). Overall, support to producers as measured by the percentage PSE has declined over the last decade, particularly between 1992-97. This downward trend is attributable mainly to a decrease in direct payments based on output, some of which were replaced by area payments, and a sharp increase in world wheat prices in the late 1980s. The decline was more pronounced in 1996 and 1997 because of the sharp drop in market price support for wheat due to high world prices and to the imposition of export taxes. Caution should be exercised in making comparisons over time especially in the total PSE because of successive enlargements of the EU.

In 1998, according to the provisional estimates, the total PSE increased by 20 per cent and the percentage PSE by 7 percentage points to 45 per cent. The percentage PSE is now 22 per cent higher than the OECD average. Market price support increased by about 40 per cent mainly due to the re-introduction of export subsidies for cereals and the decline in world milk prices. Market price support accounts for about 60 per cent of total support as measured by the PSE. A key feature in 1998 was the sharp fall in world prices which more than offset the decline in domestic producer prices, plus the decline in per unit budgetary payments and the depreciation of the ECU against the US dollar. The producer NAC of 1.83 suggests that gross farm receipts (including support) were 83 per cent higher than at world market prices, without budgetary support.

The move towards direct payments as a result of the 1992 CAP reform led to a significant decline over time in the tax on consumers as measured by the CSE. In 1998, reflecting the fall in world prices, total CSE increased by more than 40 per cent and the percentage CSE increased by 9 percentage points to 32 per cent, or 12 percentage points higher than the OECD average. The consumer NAC estimate in 1998 of 1.48 indicates that consumption expenditure was 48 per cent higher than at world market prices. Support for general services to agriculture has increased over the past few years, representing around 6 per cent of the TSE in 1998. Overall, transfers from taxpayers and consumers associated with agricultural policies, as measured by the TSE, are estimated at ECU 127.2 billion (US$142.3 billion), representing 1.4 per cent of GDP.

Policy Developments

Intervention prices in the main commodity sectors of cereals, sugar, milk and dairy products, beef, pigmeat and sheepmeat were unchanged from 1997/98 levels. The intervention price for rice was cut by 5.3 per cent. The level of monthly increments in cereal intervention prices was maintained unchanged.

The mandatory level of ***land set aside*** for commercial farmers was increased from 5 per cent in 1998/99 to 10 per cent for the 1999/2000 season. Penalty set-aside for exceeding national base areas will continue to be suspended for 1999/2000. Furthermore, the requirement to have cropped land for two years before it becomes eligible for compulsory and voluntary set-aside was abolished.

The main ***budgetary payments*** used in the EU apply to the cereal, oilseed, beef and sheepmeat sectors. In 1998, EU direct payments increased by around 15 per cent to ECU 23.2 billion (US$25.9 billion) compared with 1997. Of this amount, almost 7 per cent is for *agri-environmental* measures. The system of national registers of producer rights for ***durum wheat*** was replaced with a system of Maximum Guaranteed Areas (MGA); the MGAs proposed by the EC were increased by 4 per cent and the specific aid for traditional zones was reduced by 4 per cent.

The MGA for ***oilseeds*** exceeded the threshold level for a second consecutive year. Advance payments were cut in those member states which overshot their national MGA in the previous year. This cut is

Table II.5. **European Union: Selected institutional prices**

Product	1997/98		1998/99		Change in ECU price 1997/98 to 1998/99 %
	ECU/t[1]	US$/t	ECU/t[1]	US$/t	
Cereals[2]	119	135	119	133	0
Rice	333	378	316	353	–5.3
Oilseeds[3]					
Sugarbeet[5]	48	54	48	53	0
Milk[2]					
Skimmed milk powder	2 055	2 330	2 055	2 298	0
Butter	3 282	3 721	3 282	3 670	0
Beef and veal[4]	3 475	3 940	3 475	3 886	0
Pigmeat[5]	1 509	1 711	1 509	1 688	0
Sheepmeat[5]	5 041	5 715	5 041	5 637	0

Notes: Marketing year July/June for cereals, rice, oilseeds, sugarbeet and milk; April/May for beef and veal and sheepmeat; and November/October for pigmeat.
1. Prices in market ECU.
2. Intervention prices.
3. There are no institutional prices for oilseeds.
4. Intervention price for beef carcass R3 grade.
5. Basic price.

Source: Agra-Europe, *CAP Monitor,* London, 1998.

Table II.6. **European Union: Area and headage payment rates**

	1997/98		1998/99		Change in ECU price 1997/98 to 1998/99 %
	ECU/t	US$/t	ECU/t	US$/t	
Cereals and oilseeds					
Area payment[1]					
Cereals	54.34	61.61	54.34	60.77	0
Oilseeds[2]	433.50	491.50	433.50	484.79	0
Set aside payment[1,3]	68.83	78.04	68.83	76.97	0
	ECU/head	US$/head	ECU/head	US$/head	
Beef					
Suckler cow premium[4]	144.90	164.29	144.90	162.04	0
Special beef premium[5]	108.68	123.22	108.68	121.54	0
Deseasonalisation premium[6]	72.50-18.11	82.20-20.53	72.50-18.11	81.08-20.25	0
Extensification premium[7]	36.20	41.04	36.20	40.48	0
Calf processing premium[8]	120.75	136.90	120.75	135.04	0
Sheepmeat					
Ewe premium	Basic price minus market price		Basic price minus market price		
Additional ewe premium/LFAs	5.5	6.24	5.5	6.15	0

Notes: Marketing year July/June for cereals and oilseeds, April/May for beef and sheepmeat.
1. Converted to a per hectare basis by multiplying by historic regional yields.
2. This amount is reviewed in the course of the marketing year (January) to take into account a possible gap between the reference price (ECU 196.8 per tonne) and the observed price, with a franchise of 8 per cent.
3. Only those producing more than 92 tonnes of arable crops are required to set-aside land.
4. An additional ECU 24.2 funded by the EU is paid in Greece, Ireland and Northern Ireland. The suckler cow premium is subject to individual limits on the number of eligible animals, determined with respect to an historic reference year. Subject to maximum stocking density.
5. Male animals only, paid twice in the life of an animal, subject to limit of 90 head in each age bracket, and to regional or individual quota limits. Subject to maximum stocking density.
6. Payable on a degressive basis from January 1 to April 20.
7. Available in addition to the suckler cow and special beef premium, if stocking density is less than 1.5 livestock units per hectare.
8. Paid for every male calf disposed of before it reaches the age of 20 days.

Source: Agra-Europe, *Cap Monitor,* London, 1998.

designed to avoid producers having to repay part of the payment when final payments are made, as well as complying with the Blair House agreement. The penalties are cumulative and should be rolled forward if the EU overshoots its MGA for two consecutive years.

Table II.7. **European Union: Agri-environmental payments from EAGGF Guarantee Fund (Reg. 2078/92)**

Million ECU

	1993	1994	1995	1996	1997	1998[a]	Total 1993-98
Austria				541.0	259.5	273.3	1 073.8
Belgium				1.5	1.3	2.5	5.3
Denmark		1.5	3.0	5.8	5.4	8.1	23.8
Finland				256.6	134.7	138.8	530.1
France	67.1	73.1	106.2	118.9	147.9	70.5	583.7
Germany	36.6	122.6	223.4	231.7	263.0	258.3	1 135.6
Greece				1.5	8.5	6.1	16.1
Ireland			19.0	43.4	97.6	121.2	281.2
Italy			54.4	41.5	368.5	120.8	585.2
Luxembourg					4.2	2.1	6.3
Netherlands	0.8	0.8	4.2	7.6	12.2	12.7	38.3
Portugal		12.0	38.6	40.0	49.1	65.6	205.3
Spain	8.3	13.8	15.7	32.8	39.4	55.0	165.0
Sweden				43.4	82.7	101.7	227.8
United Kingdom	9.7	7.2	20.1	25.5	37.0	46.3	145.8
Total	122.5	231.0	484.6	1 391.2	1 511.0	1 283.0	5 023.3

a) Appropriations.
Source: Commission of the European Union, Brussels, 1998.

Reforms to the EU ***rice*** sector were introduced in 1997/98 with compensatory area payments made in return for cuts of 15 per cent over five years in the intervention price for paddy rice. These compensatory payments which are set for the EU as a whole, relate to a MGA and are converted into payments for rice farmers on the basis of average annual, historic national yields for the period 1993/94-1995/96 (1992/93-1994/95 for Spain and Portugal). Compensation for the reduction in the intervention price for rice will be extended to rice for seeds. Penalties apply if the MGA is exceeded. In addition, standards for rice sold into intervention have been established.

Compensation may be granted to ***dairy*** producers farming on leased land who were prevented from receiving a milk quota in 1984 under the so-called "SLOM" rules. The producers concerned will receive between ECU 9.2 (US$10.3) and ECU 12.4 (US$13.9) per 100 kg for each year that they were kept out of dairy production.

Headage payments for ***beef*** and ***sheepmeat*** were unchanged as were the regional ceilings for the special premium and the individual ceilings for the suckler cow premium. The deseasonalisation premium for beef animals will be fully EU-financed in 1999. Measures taken in connection with the BSE crisis continued and new criteria for BSE risk assessment are being discussed. In 1998, EU BSE expenditures are estimated at ECU 834 million (US$933 million). As from the 1998 marketing year, the amount of the premium payable to producers of ***ewes and goats*** in Less Favoured Areas (LFAs) and mountainous areas, the so-called "rural world premium", increased from 70 to 90 per cent. In response to the falling trends in prices, exports refunds for ***pigmeat*** increased. Private storage aid per tonne of pigmeat, proportional to the storage period, was introduced. Following an outbreak of swine fever, exceptional measures were being implemented in a number of member states, particularly in The Netherlands and Denmark.

The EU Maximum Guaranteed Quantity (MGQ) for ***olive oil*** was overshot by 60 per cent. A new support regime applied for a transitional period from November 1998 to end October 2001, includes an increase in the MGQ by 32 per cent to 1 777 million tonnes. This MGQ will be divided into National Guaranteed Quantities (NGQs). Production aid is fixed at ECU 1 322.5 per tonne (US$1 479) per tonne. If production in a member state is less than its NGQ in a marketing year, 20 per cent of the unused NGQ may be shared among member states, while the remaining 80 per cent may be rolled over into the member state's own NGQ for the following year; the schemes of aid for small producers and consumption aids were abolished; intervention buying-in arrangements were replaced by a system of private storage; from 1 November 2001, aid will be granted only to oil from groves existing on 1 May 1998.

To encourage the production of higher quality ***tobacco,*** a varying proportion of the total premium will be granted to each producer according to quality as determined by the producer price. Furthermore, a quota buy-back scheme was set up to assist producers who decide to leave the sector. However, a maximum of 25 per cent of quota production in "sensitive production areas" may be excluded from the buy-back scheme.

A package of measures designed to maintain the distillation of ***wine*** into alcohol for the drinks industry and measures for the restructuring of vineyards were agreed. The prohibition on new planting is extended until 31 August 2010, although some new plantings, within limits, may be granted by member states until 2003. Aid for wine renewal up to ECU 450 million (US$503 million) will be available to growers. The wine reform will increase the budget cost from ECU 0.8 billion (US$0.9 billion) in 1998 to an estimate of ECU 1.2 billion (US$1.3 billion) in 2003.

With a view to improving consumption of ***apples*** and ***citrus fruit,*** thirteen promotion measures, totalling ECU 13.5 million (US$15.1 million), across nine member states were approved. The scheme will be 60 per cent-financed by the EU. Some modifications were made to the ***cotton*** support regime to encourage contract ginning and to ensure that advance payments are closer to final payments. Special temporary measures for ***hops*** were implemented. These measures, which are optional and valid for a five-year period, involve the payment by producer groups of a financial contribution. For ***hemp,*** area aid was cut by 7.5 per cent to ECU 662.88 (US$741) per hectare.

In 1998, ***EAGGF Guidance expenditure*** amounted to about ECU 3.7 billion (US$4.1 billion), almost the same amount as in the previous year. On this amount, nearly 70 per cent is for Objective 1 regions (those lagging behind in economic development). Specific measures include compensatory payments to farmers in mountain areas, investment aid, aid to young farmers, support for processing and marketing of agricultural products.

Some modifications in order to better evaluate the impact of ***agri-monetary*** movements on incomes and limit, as far as possible, over-compensation were made covering the period 1 May 1998 to 31 December 1998. New agri-monetary arrangements came into effect on 1 January 1999 with the introduction of the euro. The new procedures replace the existing green rates with transitional arrangements for the four member states not participating in the euro currency area (Denmark, Greece, Sweden and the United Kingdom).

Trade. As a consequence of BSE, the ban imposed by the EU on exports of beef and certain derived products from the United Kingdom continued. The ban was also extended to Portugal. The EU was involved in some trade dispute panels concerning agricultural commodities in 1998 (see Part II.4).

In implementing the UR commitments, there was a decrease in the rate of tariff quota fill in marketing year 1997/98 compared to the previous year. Tariff quotas were under-filled in 1997/98 for a number of products, including sheepmeat, wheat, barley screenings, mushrooms, manioc, sweet potatoes, oranges, apricots and meat of swine. Export subsidy commitments for rice, olive oil, beef and wine were rolled-over from previous years. The EU remained within its UR limit for subsidised exports for most products, but exhausted the permitted volume for cheese, other milk products, fresh and processed fruits and vegetables, and was close to the permitted levels for beef and poultrymeat. The EU also remained well within its UR limit for domestic support, with its 1995 total AMS level around 60 per cent of commitments.

Following the changes in the banana regime announced in early 1998 to make the regime compatible with international trade commitments, the EC agreed to reduce the tariff on the extra autonomous quota of 353 000 tonnes to ECU 75 per tonne (US$84 per tonne) from the original proposal of ECU 300 per tonne (US$336 per tonne). In retaliation for an import quota on EU apples introduced by the Czech Republic, trade concessions on imports of pig and poultrymeat were suspended.

The EU established a tariff rate quota for imports of malting barley from the US in compensation for markets lost when Austria, Finland and Sweden joined the EU in 1995. The annual quota of 50 000 tonnes applies for 1997 and 1998 and will benefit from a 50 per cent reduction in the import tariff. In response to US action to impose a quota on wheat gluten imports, the EC announced a tax on imports of US corn gluten used in animal feed. Import duties of ECU 5 per tonne (US$5.6 per tonne) are to be imposed on 2.73 million tonnes a year, representing the estimated cost to the EU of the US quota on wheat gluten

shipments. This quantity represents about half the annual exports of US corn gluten to the EU in an average year. The new EU duties will not take effect until 1 June 2001, around the time the US wheat gluten quota is due to expire. This delay is due to the fact that the US wheat gluten quota was applied as a "safeguard measure" to prevent disruption of the domestic market and is thus protected from retaliation for three years under WTO rules.

The EC has proposed that it be given a mandate to begin trade negotiations with MERCOSUR members (Brazil, Argentina, Uruguay, Paraguay) and associate member Chile to establish a free trade agreement with this region, but excluding the cereal, beef and the sugar sectors. The Interim Agreement between the EU and Mexico came into force on 1 July 1998. An agreement between the EU and Canada on sanitary measures in respect of trade in live animals and animal products was reached. An agreement between the EU and certain African, Caribbean and Pacific (ACP) states and India on guaranteed prices paid to these countries for cane sugar for the 1997/98 delivery period was made. Negotiations continued between the EU and South Africa on a Trade and Co-operation Agreement which includes agricultural products. Regarding the Transatlantic Economic Partnership between the EU and the US, an Action Plan was adopted identifying areas for common action, both bilaterally and multilaterally.

A programme to grant food aid to Russia was adopted and a memorandum of understanding was concluded between the EU and Russia covering questions such as tariff exemption, the destination of the aid, its distribution and follow-up and the use of the resources obtained when the products are sold on the Russian market. The net cost of the operation scheduled is some ECU 400 million (US$447 million).

Food safety. Considerable attention is being given to the GMO issue in the EU, notably the implications of labelling and segregating the various feed ingredients which may contain GMO's. National import bans applied by Austria and Luxembourg on genetically modified maize remain in place despite EC attempts to have them lifted. A proposal to define organic livestock farming has been presented to the EU Council of Agriculture Ministers. Concerning BSE, a proposal regulating the use of material presenting risks as regards transmissible spongiform encephalopathies is under examination.

Labelling and marketing. The list of protected agricultural and food products which limits the use of specific names to particular EU regions and processes has been enlarged. A regulation setting out guidelines on "designation of origin" in the context of the labelling of olive oil was adopted. New labelling rules for products containing GMO's were adopted and the list of foodstuffs and food ingredients produced from genetically modified organisms has been extended. Publicity measures on the labelling on beef and veal were adopted. An ECU 18 million (US$20 million) package to promote quality beef was authorised for the 1998/99 marketing period. The funding, which will be 60 per cent financed by the EU and spent in ten member states, will be allocated to organisations responsible for marketing and advertising.

Animal welfare. An agreement on sanitary measures to protect public and animal health in trade in live animals and animal products was signed with the US. A proposal designed to improve compliance with welfare rules for bovine animals during transport to third countries by making the payment of export refunds conditional on compliance with the relevant EC rules is under consideration.

National Policies

See Table II.8 for summary of EU national expenditures.

Austria

The farmers' health and accident insurance systems were modified, and are now modelled on the general health insurance system for workers and employees. The standard fees for medical treatment were also adjusted to that of the general system. A reform of the farmers' accident insurance was adopted by parliament. Insurance coverage will be extended to non-agricultural activities on the farm, including farm tourism. Aid for temporary replacement of farm labour following an accident will be improved. Invalidity payments will, to a greater extent, be based on actual income loss. Cumulative payments under invalidity and pension schemes will be eliminated.

A new agri-environmental programme ("ÖPUL 98") was developed, within EU Reg. 2078/92. The programme broadens the base for farmer participation and will have a higher degree of environmental

Table II.8. **European Union: National expenditures**

Million ECU

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998p
Austria										1 299	1 260	1 074	1 043
Belgium	288	515	476	261	339	276	450	258	249	242	246	259	n.a.
Denmark	201	192	198	238	214	199	160	204	234	235	184	184	n.a.
Finland										2 197	1 557	1 508	1 549
France	2 629	2 471	2 479	2 473	2 288	2 275	2 436	2 326	2 340	2 286	2 449	2 114	2 177
Germany	1 349	1 212	1 148	1 468	3 104	4 495	3 990	3 639	3 824	2 065	2 125	2 187	2 139
Greece	488	485	460	412	511	522	252	155	143	128	117	125	127
Ireland	175	116	124	114	114	131	152	120	204	129	136	112	117
Italy[1]	704	923	979	1 462	2 162	1 786	1 263	1 137	1 847	1 633	1 745	1 543	1 852
Luxembourg	17	15	22	26	27	48	30	31	32	27	32	35	33
Netherlands	539	555	492	536	546	562	524	601	597	626	589	582	n.a.
Portugal	131	236	241	273	299	279	266	267	278	274	290	291	280
Spain[1]	1 102	892	949	1 327	1 427	1 259	1 119	1 049	893	1 122	1 264	1 016	967
Sweden										267	252	263	255
United Kingdom	844	786	830	921	974	1 031	976	948	837	663	1 998	1 421	1 279

n.a.: not available. p: provisional.

1. Data do not include all regional expenditures.

Source: EC and OECD Secretariat estimates based on data provided by national authorities and other sources.

targeting than the old programme (which runs until the end of 1999). Participants in the former programme were given the choice to switch over to ÖPUL 98. Under this programme, all payment rates are degressive with farm size; payments for grassland are differentiated based on animal stocking density; and farms with more than 20 hectares of arable land have to set aside at least 2 per cent of their land for ecological purposes. Farmers are able to choose among different variants of the green cover requirement after harvest. For extensive cereal production the upper limits on nitrogen fertiliser applications per hectare as well as the per-hectare payments were reduced compared with the former programme.

To alleviate the financial situation in the pig sector, pigmeat producers were allowed to postpone the repayment of subsidised investment loans by one year. A government initiative to support research, product innovation and information networks in small and medium-sized food companies was introduced. The procedure for licensing plant production products that have already been licensed in Germany was simplified. The rules for the direct sale of milk and dairy products were modified by strengthening the hygiene requirements.

Belgium

Efforts to monitor animal health were on-going in 1998. As a result of a crisis in the pig sector, pig farmers' contributions to the National Animal Health Support Fund for 1998, BF 400 million (US$11 million), were suspended until June 1999. The campaign against the use of illegal hormones and antibiotics that was started in 1997, continued. The announced Flemish government plan for an update to the 1991 manure control Law did not come into practice in 1998.

Denmark

An *Action Plan for the Aquatic Environment* was announced by the government in 1998. The Action Plan set specific environmental targets: reduction of nitrogen and phosphorus discharges; reduction of chemical pesticide use; and treatment frequency. Economic instruments to control fertilisation were introduced in August 1998 for achieving these targets: administrative fines of DKr 10 ($US1.5) per kilogram of excess fertilisation up to 30 kilograms per hectare and DKr 20 (US$3.0) per kilogram above this level; and a tax of DKr 5 (US$0.75) per kilogram on all purchases of fertilisers, other than purchases by farmers. Farmers, however, are required to keep records on fertiliser use (fertilisation accounts) at the request of the Ministry of Agriculture. A tax on the use of antibiotics and growth promoters in feedstuffs was introduced and the tax on pesticide use, which was introduced in 1996, was doubled in 1998. Part of the revenues from tax on pesticide use is to be spent on measures promoting conversion to organic farming and improving the aquatic environment.

Finland

Additional transitional support, aid for northern Finland, and additional national aid for serious difficulties in southern Finland were provided. Total payments on national measures reached Mk 3.7 billion (US$690 million) in 1998, which is Mk 560 million (US$105 million) below the EU ceiling and 300 million (US$56 million) less than in 1997. The payments are intended to be reduced by Mk 258 million (US$48 million) in 1999, and equal Mk 3.1 billion (US$580 million) in 2000. Aid for northern Finland has increased since 1997 and will be stabilised in 2000. Both nationally-financed additional transitional support and EU-financed transitional support will expire at the end of 1999. The three-year transitional period during which dairy farmers had to comply with strict manure management requirements ended in 1998. A derogation to defer the date of declaration of set-aside area was granted by the EU to Finnish arable farmers who had suffered delays in sowing and access to direct aid payments because of flooding and frozen ground.

France

In 1998, the agricultural budget is estimated to have increased by 3 per cent to FF 28.2 billion (US$4.8 billion), with education, pensions and installation of young farmers benefiting most from the extra funds. In October 1998, the French Parliament adopted a new framework law for the agricultural sec-

tor, that sets guidelines for agricultural development. The main aspects of this law are described in Part I.3 of this report. While France has authorised the importation of genetically modified soybeans and rapeseed in 1996 and maize in 1997, and the cultivation of maize MON810 in 1998, the *Conseil d'État* referred a question concerning the national evaluation of Novartis maize to the European court of justice. Pending a decision, the planting of Novartis Maize has been postponed. In connection with a public conference on GMOs, some questions were raised by consumer representatives to scientists concerning the problem of gene flow in rapeseed. As a result, a two-year period of further testing was decided.

Fruit, vegetable and wine producers affected by frost in 1998 will receive disaster payments. During 1998, there have been talks between the Ministry and representatives of the fruit and vegetable industry to set a plan for assistance and development of the sector. Following the sharp decline in pigmeat prices, a number of measures have been announced to assist the sector, in particular the trigger of Stabiporc – a private fund which provides loans to farmers during the crisis period. In addition, all pigmeat producers will be allowed to delay payment of social security contributions and the government will set aside FF 150 million (US$25.4 million), for the most financially fragile producers. Following preliminary payments made last year, the Ministry of Agriculture announced the creation of a new fund to support rabbit farmers most affected by a disease crisis and to assist those wishing to leave the industry. Structural measures to help rebuild the industry once the crisis is over are also envisaged.

The Minister of Agriculture announced a three-year extension to the duration of reduced rate loans for the installation of young farmers. In addition, interest rates on disaster loans will be reduced in line with market rates. The Ministry of Agriculture launched a five-year development plan to promote organic farming. It includes increased public expenditures, from FF 15 million (US$2.5 million), in 1997 to FF 60 million (US$10.2 million), in 1998, and greater emphasis on research and training. The Minister of Agriculture announced the creation of an economic monitoring unit to provide impartial information on food price trends at all levels of the agri-food chain.

Germany

In 1998, the agricultural budget of the federal government amounted to DM 11.54 billion (US$6.56 billion), which corresponds to a reduction of about 2.2 per cent compared with the previous year. Expenditure on social security accounted for 68 per cent of total federal outlays on agriculture. Allocations for structural policy measures under the Joint Task Programme, which is co-financed by the *Länder*, decreased to 1.7 billion (US$1.0 billion). The funds were concentrated on measures such as investment credit programmes that aim to improve the competitiveness of agriculture and foster growth and employment in rural areas.

During the fiscal year 1997/98, about 32 per cent of agricultural area in Germany were subject to agri-environmental programmes. The federal and the *Länder* governments spent about DM 0.9 billion (US$0.5 billion) to compensate farmers for having to comply with regulations that impose environmental restrictions that go beyond standards of "good farming practice". Moreover, the federal law on nature conservation was changed to comply with the EU habitats directive. The new legislation establishes an adequate claim for agricultural producers to obtain compensation for restrictions in land use due to nature conservation. Also, new regulations on sewage-sludge came into force on 1 January 1999, pertaining to coverage of possible residual risks of sewage-sludge application in agriculture.

A change in the animal protection law altered regulations with respect to the breeding and keeping of livestock. Trade and transport of animals were brought into line with EU requirements. Further improvements in animal welfare are intended by the new government that came to power after the September 1998 federal elections. Other main policy objectives of the government include improving the competitiveness of agricultural production, placing increased emphasis on ecological and employment aspects within agricultural policy, and strengthening the preventive protection of food consumers.

Greece

In 1998, the agricultural budget is estimated to have increased by almost 7 per cent over 1997 to Dr 744.4 billion (US$2.5 billion). About 1.3 per cent of the budget is to be used for writing-off debts of

agricultural co-operatives and other undertakings of the Agricultural Bank. A limited company, which will undertake the promotion of agricultural products and foodstuffs abroad, is to be established. In the area of agro-environmental measures, the regional programme to reduce nitrate leaching from intensive cotton cultivation is being extended to other intensive crops. The programme to protect habitat sites, focused on the draft EU NATURA 2000 zones, will be implemented from 1999. No payments were made in 1998 for maintenance of organic production nor for organic livestock production.

Ireland

A ewe slaughter scheme aimed at removing sheep from sensitive grazing areas was launched. The aim was to cull 200 000 ewes by 4 December 1998. Under the scheme, farmers in *Special Areas of Conservation* are paid Ir£ 10 per ewe (US$14) on 70 per cent of their 1998 ewe quota, provided they culled the remaining 30 per cent before the deadline. As a result of devastating weather conditions an emergency winter fodder aid package worth Ir£ 10 million (US$14 million) was introduced; the package is targeted mainly at suckler cow and hill sheep farmers. As part of the winter aid package payment of Ir£ 1.2 million (US$1.7 million), in respect of flood compensation was also approved. A full evaluation of the Rural Environment Protection Scheme, the expenditures of which increased by 15 per cent in 1998, is foreseen in 1999.

All farmers who are not registered for VAT are entitled to a flat rate VAT refund on their inputs. This refund increased from 3.3 per cent to 3.6 per cent. An accelerated capital allowance on investment in necessary pollution control was re-introduced. The level of expenditure which can be written-off under the pollution control allowance increased from Ir£ 20 000 (US$28 500) to Ir £30 000 (US$42 700). In the first year the rate of allowance is 50 per cent, with the remaining 50 per cent being written off over the next six years. There were a number of other general tax concessions from which farmers would also benefit. A new computerised cattle movement monitoring system was introduced as part of a national beef marketing scheme and a task force to recommend ways to make the beef industry more competitive was set up.

Italy

The total agricultural budget for 1998 is estimated at IL 3050 billion (US$1.8 billion), compared to IL 2 555 billion (US$1.5 billion) in 1997. Regional payments accounted for 62 per cent of the total. The Ministry for Agriculture prepared a IL 3 133 billion (US$1.9 billion) agricultural development plan over the period 1999-2002. The aim is to co-ordinate measures concerning agriculture, agro-food and forestry sectors and to introduce a mechanism to co-ordinate national agricultural expenses together with regional ones.

A framework law has been adopted to reduce agricultural production costs, to help farms in difficulty, to develop renewable energy for agriculture and to introduce cost-effective means of integrated transport. Existing instruments of local development policy, such as territorial agreements, have been extended to the agricultural sector. Previously, these instruments concerned mainly the industrial sector.

A number of measures to help young farmers were adopted, including tax concessions for inheritance, for land transactions and registration. The existing Fund for land property will also finance projects for the consolidation of farm land in favour of young farmers.

A new law was adopted to recalculate milk production and marketing for the last three milk seasons, with the view to determine the exact individual reference quantity for each producer. Provisional estimates indicate that milk production in 1997/98 continued to exceed the country's guarantee quota.

The EC olive oil labelling scheme was adopted. The scheme, which applies to extra virgin and virgin olive oil only, requires that the entire olive oil production cycle must be carried out in the area specified, although there are also provisions to claim designated origin if the produce is at least 75 per cent from one area. Some institutional changes have been adopted, including reorganisation of the Ministry for Agriculture and more emphasis given to decentralisation.

The Netherlands

In order to meet environmental targets and reduce future risk of animal disease, a programme to reduce the size of the Dutch pig herd was announced. In April 1998, the Dutch Parliament approved Government measures to reduce production by 10 per cent in 1998 and by an additional 15 per cent in 2000. Conditions for implementation are under review. The reductions are based on the farmer's pig herd count in 1995 or 1996, the base year being at the discretion of the farmer. However, to achieve the last 5 per cent reduction, farmers have the option either to lower phosphate production by using more environmentally-friendly feed or to cut the actual herd numbers. The 25 per cent reduction of the pig herd is expected to reduce phosphate production by 14 million kg out of an estimated total 1998 production of 200 million kg (*i.e.* 7 per cent). Following a decision by the Minister of Agriculture, the number of poultry will be limited to its current level. This decision comes in response to concerns about the excessive level of poultry manure which has caused severe environmental problems, but it also reflects health and animal welfare concerns.

Portugal

In 1998, a ban on exports of live animals and beef products was imposed due to the rising incidence of BSE in Portugal. Following an amendment of the EU regulation on improving the efficiency of agricultural structures, compensatory allowances in less-favoured areas for farmers farming a minimum of 2 hectares of utilised agricultural area were extended to farmers farming a minimum of 1 hectare. Together with the definition of the NGQ for olive oil, permission was granted to increase new plantations by 30 000 hectares. The process of privatisation of the state enterprise (EPAC) for marketing of cereals, involving state aid, was initiated.

Spain

In 1998, the agricultural budget of the central government, excluding regional budgets and including government agencies, is estimated to have decreased by 4.8 per cent compared to 1997. A two-year milk quota buying-up programme combined with an early retirement scheme was announced. The objective is for some non-competitive small milk producers to leave milk production. Milk quota will be bought up by the national reserve and may be resold to other full-time farmers whose allocated quota is at least 90 per cent used. The early retirement scheme is designed for producers who are at least 55 years old and cede their quota to the national reserve. The “milk pension” they will receive will be between 50 000 and 60 000 pesetas per tonne (US$334 to 400 per tonne). The total budget expenditure foreseen is 10 000 million pesetas (US$67 million). In 1998, there were 3 500 producers participating in the programme, involving nearly 75 000 tonnes of milk.

Following the large decline in prices during the second half of the year, a marketing campaign for pigmeat consumption was launched. Spain is the second-largest pigmeat producer in the EU. In 1998 there were cases of classical swine fever, the latest in the southern region of Andalucia. The reform of the EU olive oil support agreed in 1998 has particular significance for Spain, as the world’s largest producer. The National Guaranteed Quantity for Spain is 760 027 tonnes or 43 per cent of the EU total.

Sweden

Funding on national and EU co-financed environmental programmes increased by SEK 700 (US$ 88 million) in 1998; bringing the total expenditure to SEK 2.8 billion (US$0.35 billion) compared to SEK 2.1 billion (US$0.28 billion) in 1997. This included a new nation-wide sub-programme to support sustainable "conventional" farming systems compensating farmers’ environmental efforts that aim at reducing nutrient leaching and chemical use, as well as financing educational efforts to improve competence in the environmental area. From 1999 onwards support for conservation of local breeds threatened by extinction will include finewool sheep and the Linderöd pig. To support more environmentally-sound energy sources, production of 50 000 cubic metres of ethanol (to be used as fuel) per year will be exempted from tax in 1999-2003. Support for farm replacement services (for hiring stand-in help for [livestock] farmers during holidays, etc.) was discontinued in 1998. The number of student places at the Agri-

cultural University was increased by 450 places. The government spent SEK 5 million (US$0.63 million) on marketing Swedish products abroad and SEK 3.7 million (US$0.47 million) on improving animal welfare. Funds were earmarked for testing animals prior to sale or slaughter on farms known to be infected with *Escherichia coli* bacteria (EHEC). Programmes to control paratuberculosis were introduced.

The voluntary country of origin labelling regulations for beef (frozen or fresh, but not processed) came into effect in July 1998 (compulsory labelling from 2000). From 1999, only commercial fruit produced under integrated production (which aims to minimise risks for the environment and human health, without being organic) can use the marketing label "SVENSKODLAT" ("Grown in Sweden"). Support measures for Sami cultural heritage environment may be introduced in 1999.

United Kingdom

For the first time since 1995 the UK's *green rate* was devalued in October, implying an increase in most agricultural support prices by over 1 per cent.

During 1998 a number of measures were introduced to aid *livestock producers*. Nearly £121 million (US$201 million) in agri-monetary compensation was paid to suckler cow producers, £73 million (US$121 million) at the beginning of the year and £48 million (US$80 million) at the end of the year, and a further £13 million (US$22 million) to sheep producers. At the end of 1998 it was announced that, subject to EU approval, *Hill Livestock Compensatory Allowances* to be paid to sheep and cow producers would be increased by £60 million (US$100 million) in the early part of 1999. It was also announced that the UK would continue to operate the *Calf Aid Processing Scheme* at a reduced rate until the end of March 1999. The new *Specified Risk Material* controls on cattle, sheep and goats were implemented and a new *Cattle Tracing System* was established (excluding Northern Ireland), operated by the *British Cattle Movement Service,* part of the Ministry of Agriculture. The set up costs of the system were partly financed by the EU, with remaining set up costs estimated at £17.5 million (US$29 million) and estimated running costs up to the end of September 1999 of £13 million (US$22 million) funded by the Government. Future costs are to be recovered from livestock producers. The current EU *beef export ban* came into force in April, a decision which restates the ban on UK exports of live bovine animals, beef and products, with the exception of beef from Northern Ireland produced in accordance with the *Export Certified Herds Scheme* rules which allowed the lifting of the export ban in June. In July measures were also introduced to: require the *compulsory slaughter of all sheep and goats suspected of being affected with scrapie* (TSE, transmissible spongiform encephalopathy); allow investigation of scrapie-affected premises; and set out the basis on which compensation will be paid to owners of sheep and goats compulsorily slaughtered. Regarding *animal welfare*, legislation will apply in 1999 banning pig stalls and tethers in order to give animals more space. Pig farmers have converted to the new system at their own cost.

Under *EU Agri-environmental Regulation 2078/92*, the UK now has more than 1.1 million hectares of land under the *Environmentally Sensitive Areas Scheme* (ESAs), involving over 18 000 farmers. Total payments to UK farmers participating in the scheme will amount to approximately £58 million (US$96 million) in the 1998/99 financial year, to help pay for the adoption of practices that benefit nature conservation, landscape and conservation of historic features. In 1999 the government will commit an additional £8.5 million (US$14 million) for new agreements under the *Countryside Stewardship Scheme*. Payments under the scheme, which are designed to promote environmentally-sensitive farming, totalled £20 million (US$33 million). Spending to encourage organic farming under the *Organic Aid Scheme* is planned to reach £4.5 million (US$7.5 million) in 1999 following the introduction of increased payments to farmers, which will range from £350-£450 per hectare (US$580-746 per hectare) over five years according to the type of agricultural land. Revised *Codes of Agricultural Practice for the Protection of Water, Air and Soil* were published; and initiatives implemented to support Government *policy to minimise pesticide use*, including new measures in 1999 requiring prior approval to be given for the disposal of waste chemicals.

Rural development has benefited in the UK under the EU Objective 5*b* structural funds programme. For the period 1994 to 1998 over £300 million (US$498 million), has been invested in schemes which, for example, encourage the marketing, promotion and development of alternative on-farm enterprises, the development of novel agricultural produce and alternative uses for agricultural products. About 72 per cent of the funding for these schemes has been provided from private investment and the remainder

co-financed by the EU and UK Government. The establishment of the independent *Food Standards Agency*, expected early 1998, has been delayed. The Agency plans to take responsibility for food safety, labelling, standards and nutrition policy. Public scrutiny of the draft Bill to create the Agency will take place early in 1999, and it is expected the Bill will be submitted to Parliament at the end of 1999, allowing for the Agency to be operational in 2000.

Hungary

Main policy instruments. Market price support policies are the main form of support in Hungary, based on a system of minimum and guidance prices. The state purchases limited quantities of bread wheat and maize at minimum guaranteed prices. For livestock products (milk, beef and pigmeat) subsidies are paid to processors who pay prices above the orientation prices to farmers. Farmers not receiving the orientation price from processors may apply for deficiency payments. The prices of other products are supported through import tariffs and quantitative export licences. The market intervention regime is combined with export subsidies. Direct payments per hectare of agricultural land are granted to farmers producing in less-favoured areas. Payments based on the use of inputs are provided in the form of interest rate subsidies, capital grants and fuel tax subsidies. A new scheme of direct payments promoting employment in agriculture was established in 1998. Environmental improvement and rural development is supported through budgetary payments (mainly capital grants and interest rate subsidies) and tax concessions.

Support to agriculture (Tables III.32-34, Figure III.6). Support to agriculture declined significantly during the first years of the economic transition process (1989-1991). The percentage PSE fell by two-thirds between 1989 and 1991 due to a sharp decrease in market price support. From 1992 to 1998 the percentage PSE fluctuated (mainly due to MPS changes) with an overall downward trend. In 1998, the percentage PSE is estimated to have increased to 12 per cent (from 8 per cent in 1997), still low compared with the OECD average of 33 per cent. This increase is essentially the effect of an increase in market price support (mainly for milk) and to a limited extent of increased budgetary support (payments based on input use). The share of market price support in total support increased from a quarter in 1997 to a half in 1998. Also the higher producer NAC of 1.13 in 1998 implies that 1998 gross farm receipts (including support) were 13 per cent higher than at world market prices, without any support.

Until 1991 budgetary support to consumers partly offset market transfers from consumers to producers. Since 1992, the CSE has reflected changes in MPS only. The percentage CSE was estimated to be 9 per cent in 1998, around a half of the OECD average. In 1998, the total CSE increased by 90 per cent, mainly due to a rise in MPS for milk. The consumer NAC increased to 1.10, suggesting that consumer expenditures were 10 per cent higher than world prices. The general services support estimate increased by 58 per cent in Ft terms (38 per cent in US$) mainly due to increased expenditures on marketing and promotion, inspection services and infrastructure. The Total Support Estimate (TSE) increased by 68 per cent (46 per cent in US$ terms) and reached 1.6 per cent of GDP.

Policy Developments

Grains. For bread ***wheat*** (grade B1, B2) the guaranteed price for the 1998 harvest was maintained at the 1997 level of Ft 18 000 (US$84) per tonne. The guarantee price was available for 2.4 tonnes/hectare of wheat for farmers who had applied for the programme by mid-June 1998. With similar conditions the government introduced a guarantee price of Ft 16 000 for bread wheat of lower quality ("euro" quality). The government also launched an intervention purchase scheme for feed wheat (Ft 13 000 per tonne) available only to small farms with up to 21 hectares of grain area and limited to 50 tonnes of grain per farm. With the fall in world market prices the stocks accumulated under intervention required increased export subsidies to be disposed of on the world market. For feed **maize** the guarantee price set for the 1998 crop also remained unchanged at Ft 16 500 (US$77) per tonne and limited to 3.2 tonnes/hectare of maize for farmers having applied for the programme before the harvest. The guaranteed prices for wheat and maize announced for the 1998 harvest have been well in excess of market prices. To stimulate demand the government introduced interest rates subsidies to finance public storage schemes and for the purchase of

feed grains by livestock farmers and producers of feed mixes. The government also offered compensation payments to farmers to dissuade them from selling into intervention.

Table II.9. **Hungary: Minimum guaranteed and guidance prices**

Product	1996		1997		1998		Change in Ft price 1997 to 1998
	Ft/t	US$/t[7]	Ft/t	US$/t[7]	Ft/t	US$/t[7]	%
Bread wheat[1, 2]	15 000	98	18 000	96	18 000	84	0
Maize[1, 3]	15 000	98	16 500	88	16 500	77	0
Beef[4]	164 000	1 075	188 000	1 008	n.a.	n.c.	n.c.
Pigmeat[5]	172 500	1 130	249 000	1 334	214 000	999	–14
Milk[6]	34 430	226	43 650	234	55 000	257	26

n.a.: not available. n.c.: not calculated.
1. Crop year July to June, *i.e.* in the table 1996 = crop year 1996/97; 1997 = 1997/98; 1998 = 1998/99.
2. Minimum guarantee price for grades B1, B2.
3. Minimum guarantee price for feed maize.
4. Guidance price for liveweight, average depending on quality, type and sex.
5. Guidance price for liveweight, average depending on quality and percentage of fat.
6. Prices converted from litres assume one litre of milk equals 1 031 kilogrammes. Average price depending on milk quality.
7. Conversion uses OECD annual exchange rates (January to December).

Source: Ministry of Agriculture, Budapest, 1998.

Livestock. Prices for the main livestock products (milk, pigmeat, beef and poultry) are supported by a guidance price system, with the possibility of intervention. In 1998, the guidance price for ***milk*** rose by 19 per cent (3.5 per cent in US$) to nearly Ft 55 000 (US$253) per tonne, leading to domestic prices 88 per cent above world prices in 1998. Dairies that paid prices for milk above the guidance price were entitled to state subsidies. Export subsidies were used for a range of dairy products. In reaction to the depressed ***pigmeat*** market, the government reduced the guide price for live pigs by Ft 35 000 per tonne (14 per cent) to Ft 214 000 (US$999) per tonne (Grade R) and increased direct payments (quality payments) to compensate pig producers in November. At the same time the government decided to increase export subsidies for pigmeat from Ft 20 000 to Ft 75 000 per tonne. For ***poultry*** the government reduced the guide price by 3 per cent to Ft 163 000 (US$761) per tonne and increased export subsidies from Ft 55 000 to Ft 95 000 (US$443) per tonne in December.

Other products. For ***apple*** production, the market regulation authorities started a subsidy scheme of Ft 2.1 billion (US$9.8 million) to processors of industrial apples who paid at least Ft 18 000 (US$84) per tonne of industrial apples to producers. A subsidy scheme was also introduced to provide interest subsidies on credits for purchases and storage of apples for consumption. In the *wine* sector the government introduced an export subsidy to a limit of 40 million litres, in order to dispose of accumulated stocks from the previous years. A subsidy was also introduced to support the distillation of 21 million litres of wine.

Payments based on output are the main payments provided to farmers. They are provided for a limited range of products in the form of deficiency payments, when farmers have not received the guide price from processors. These payments are not automatic. Farmers have to apply with proof (by a selling contract) of the level of deliveries and the price obtained. The second most important category is ***income-related direct payments*** to farms in less-favoured areas (with low-quality land). The programme under which these payments are provided was redesigned in 1998 and additional criteria (economic, social and employment) were added to the criteria of low-quality land. Thus the area of agricultural land entitled to such payments was reduced and the total expenditure fell by 35 per cent to Ft 4.5 billion (US$21 million).

Payments based on input use involve credit subsidies and loan guarantees as well as investment grants. Credit facilities are available for investment as well as working capital. Payments based on input use increased by 22 per cent in 1998. In 1998, support to improve the quality of livestock production and to replant orchards and vineyards was increased. New programmes support the start-up activities of

young farmers and restructured enterprises. Under the existing schemes additional interest rate subsidies are provided to farms in less-favoured areas. Full-time farmers were, for the first time in 1998, eligible for non-refundable aid and interest relief for land purchases.

Market access. Imports are regulated by *ad valorem* ***tariffs and tariff rate quotas.*** In 1998 Hungary lowered import tariffs in accordance with the URA and, to enable minimum and current market access, opened tariff rate quotas (TRQ). Preferential tariffs are also set for trade with the EU (under the provision of the Association Agreement) and for trade with CEFTA countries.

Export measures. In 1998 direct ***export subsidies*** were used for an increased range of products in accordance with the Hungary waiver granted to Hungary from its original export subsidy commitments. The per unit export refunds for a range of products were increased during 1998 in reaction to the low prices on world markets. In 1998, Hungary began to reform its export subsidy scheme. The current system of so-called "normative" support (providing exporters with funds on a regular basis) was gradually replaced by a new system of tendering for export subsidies. For this purpose the government established an Agricultural Intervention Centre (AIC) in January 1998, which monitors and controls export subsidy spending, including the control of export documentation and issuing certificates for the payment of export refunds by the Tax and Financial Auditing Office.

In 1998 the government introduced a new programme costing Ft 6 billion (US$28 million) in payments to ***support agricultural employment.*** Under the programme, agricultural entrepreneurs can apply for a payment of Ft 3000 (US$14) per worker, per month in order to partly compensate for labour costs. Negotiations on a ***veterinary and phytosanitary equivalency*** agreement between Hungary and the EU progressed further in 1998. ***The privatisation of strictly protected areas*** (environmentally sensitive areas and water protection areas), and national parks has been prohibited under a new legislation on environment protection. Moreover, the government programme to acquire some 250 000 hectares of protected areas which were formerly owned by co-operatives or illegally privatised is gradually being implemented. To support ***rural development programmes*** the Ministry of Agriculture and Regional Development provided a Ft 100 million (US$0.5 million) grant for the elaboration of county-level and micro-regional programmes.

Iceland

Main policy instruments. The Icelandic agricultural sector is highly regulated. For milk and beef and veal, the government sets prices at the producer level and for milk at the wholesale level either. Milk quantities benefiting from support are fixed, although direct payments to producers are partly de-linked from production levels. From 1996, direct payments to sheepmeat producers are de-linked from current production levels but reflect former quota entitlements. There is a system of levies raised and refunded within and between agricultural industries, which has been simplified in recent years. Trade is strictly regulated and, except for vegetables, imports of commodities that are also domestically produced are limited to volumes required under WTO minimum and current access provisions. Consumer subsidies for wool are implemented at the wholesale level. Interest concessions on agricultural loans are the main support to inputs. Environmental measures mainly aim at soil conservation and afforestation.

Support to agriculture (Tables III.35-37, Figure III.7). As measured by the percentage PSE, support has tended to decline over the last decade. There has been a significant shift from market price support to direct payments. However, at 69 per cent the percentage PSE is almost double the OECD average. In 1998, the PSE increased mainly because of higher market price support for livestock products. The producer NAC of over 3 suggests that 1998 gross farm receipts were twice higher than at world prices, without budgetary support.

As measured by the percentage CSE, the implicit tax on consumers associated with agricultural policies has also decreased since 1986-88. At 49 per cent, the percentage CSE is double the OECD average. The consumer NAC estimates that consumer expenditures would have been 96 per cent lower if total consumption had been at world prices. Support provided to general services to agriculture (GSSE) has increased representing around 9 per cent of the TSE in 1998. Overall, transfers from taxpayers and consumers associated with agricultural policies, as measured by the TSE, are estimated at IKr 13 billion, representing about 2.2 per cent of GDP.

Table II.10. **Iceland: Administered prices at the producer level**

Product	1997		1998		Change in IKr price 1997 to 1998 %
	IKr/t	US$/t	IKr/t	US$/t	
Milk[1]	54 730	771	59 370	834	8.5
Beef and veal	256 310	3 612	257 000	3 611	0.3
Sheepmeat[1, 2]	439 490	6 193	–	–	–
Wool[2]	398 280	5 612	–	–	–

1. Including direct payments.
2. Abolished in 1998.
Source: Ministry of Agriculture, Reykjavik, 1999.

Policy Developments

Livestock. Administered prices were increased by 8.5 per cent for milk, 0.3 per cent for beef and veal. The ***milk*** quota for the production year 1998/99 was increased by 1.0 per cent. Direct payments per tonne of milk, limited to the current quota level, rose by 4.6 per cent from the 1997 level. A new dairy agreement between the government and the farmers' association became effective in September 1998 and will expire in September 2005. The abolition of the administered price for ***sheepmeat,*** planned for 1996 by the 1995 Sheepmeat Agreement, was finally implemented in September 1998. Direct payments to sheepmeat producers are now linked to former quota levels. The payment per tonne rose by 1.7 per cent. The administered price for wool was also abolished in 1998.

Trade. Regarding the implementation of Uruguay Round commitments during the year from July 1997 to June 1998, tariff-quotas under minimum access were under-filled except for eggs and cheese. Tariff-quotas under current access were almost filled, especially for cereals.

The Agricultural Loan Fund, which replaced the former Agricultural Investment Fund on 1 January 1998 and is now independent from the Agricultural Bank of Iceland, receives over 1 per cent of the income of sheep and cattle farmers and 0.8 per cent from other sectors. New legislation for levies came into effect from January 1998. Four different product levies were combined into a single levy (2.65 per cent) to be imposed on the total agricultural income of each farm.

Japan

Main policy instruments. Support is provided largely through administered prices, trade measures and supply management regimes. These measures have been applied for almost all major commodities. For rice, the administered price (government purchase and sale price) applies to some 10 per cent of consumption. The government purchases this quantity as a national reserve from producers who participate in the Production Adjustment Promotion Programme (PAPP), introduced for the 1998 crop. This is a land diversion scheme which also plays an environmental role. Japan replaced quantitative restrictions on the import of rice with tariffs from 1 April 1999. The state trading regime, the Food agency, will continue to import rice under the minimum access commitment. The Rice Farming Income Stabilisation Programme (JRIS), a new direct payment to compensate part of the loss of income caused by a fall in the market price, was introduced in 1998. Deficiency payments are made for soyabean, calves and manufacturing milk. Supply controls include quotas on milk deliveries, and the diversion of land from rice to other crops under PAPP. Direct payments are made to farmers to encourage such diversion. A quasi-governmental body, the Agriculture and Livestock Industries Corporation (ALIC), operates the import and price support programmes for certain dairy products (mainly butter and skimmed milk powder) as well as the price stabilisation systems for sugar, beef and pigmeat. More emphasis has been put on budget-financed measures for investments for structural and rural infrastructure purposes. Prefectural and local governments provide infrastructure and extension services under the guidance of, and with some budgetary aid from, central government.

Support to agriculture (Tables III.38-40, Figure III.8). As measured by the percentage PSE, support has declined over the last decade, in particular due to a decrease in market price support. However, at 63 per cent the percentage PSE is much higher than the OECD average. In 1998, the total PSE was almost the same level as in 1997, in spite of a decrease in producer prices, as the fall in world prices more than offset the depreciation of the yen. With a producer NAC of 2.7, gross farm receipts (including support) were 170 per cent higher than at world market prices, without budgetary support.

As measured by the percentage CSE, the implicit tax on consumers associated with agricultural policies has been stable since 1986-88. At 53 per cent, the percentage CSE is more than double the OECD average. The CSE has increased in 1998 due to an increase in transfers from consumers to the budget. The consumer NAC estimates that consumer expenditures were 110 per cent higher than at world prices. Support provided to general services to agriculture (GSSE) has decreased recently representing around 20 per cent of the TSE in 1998. Overall, transfers from taxpayers and consumers associated with agricultural policies, as measured by the TSE, are estimated at ¥ 7 441 billion (US$ 57 billion), representing about 1.5 per cent of GDP, but expenditures funded by local governments are not included.

Table II.11. **Japan: Administered prices for rice**

	1996/97 (November to October)		1997/98 (November to October)		Change in yen price 1996/97 to 1997/98 %
	Yen/t	US$/t	Yen/t	US$/t	
Government purchase price					
Domestic rice	270 283	2 234	263 417	2 012	–2.5
Imported rice[1]	64 600	534	48 400	370	–25.1
Government sale price					
Domestic rice[2]	287 317	2 375	283 033	2 162	–1.5
Imported rice[1]	225 567	1 864	210 867	1 611	–6.5

1. Average government purchase/sale price for imported rice under the minimum access.
2. Government sale price applicable as of 1 February in each year.

Source: Ministry of Agriculture, Forestry and Fisheries, Tokyo, 1999.

Policy Developments

Rice. The government purchase price for rice for the 1998 crop was reduced by 2.5 per cent, while the government sale price for domestic rice to be applied from January 1998 was reduced by 1.5 per cent. The government sale price for imported rice under the minimum access commitment to be applied as from January 1998 was reduced more than that for domestically produced rice by 6.5 per cent. The import quota for rice was raised to 606 400 tonnes (milled basis) in 1998. The maximum mark-up was set at ¥ 292 000 (US$2 231) per tonne under the Uruguay Round agreement.

In December, the Japanese government notified the WTO that Japan would cease to apply special treatment under Annex 5 of the Uruguay Round Agreement on Agriculture in respect of rice from 1 April 1999, pursuant to paragraph 2 of Annex 5. The quantitative restriction on rice imports was abolished and replaced by tariffs as of 1 April 1999. The applied tariff rate is ¥ 351 170 (US$2 680) per tonne for the fiscal year (FY) 1999 and will be reduced to ¥ 341 000 (US$2 605) per tonne for FY 2000. Minimum access opportunities will be maintained and increased by 0.4 per cent per year which is the same increasing rate as other tariffied products (0.8 per cent, had special treatment continued to be applied) to 644 300 tonnes in FY 1999 and 682 200 tonnes in FY 2000. The Food Agency, a state trading enterprise, will continue to import rice under the minimum access commitment.

The JRIS payment began to be implemented for the 1998 crop. As it was the transitional year in 1998, there were also some direct payments under the old system of voluntarily marketed rice. The total

Table II.12. **Japan: Administered prices for crops**

Product	1997/98[1]		1998/99[1]		Change in yen price 1997/98 to 1998/99 %
	Yen/t [1]	US$/t	Yen/t[1]	US$/t	
Wheat[2]	150 383	1 243	149 300	1 140	–0.7
Wheat[3]	39 850	329	39 850	304	0.0
Barley[2]	129 560	1 071	128 620	982	–0.7
Barley[3]	34 800	288	34 800	266	0.0
Sugar beet[4]	17 140	142	16 880	129	–1.5
Sugar cane[4]	20 160	167	20 160	154	0.0
Soybeans[5]	236 000	1 950	234 700	1 793	–0.6
Rapeseed[5]	192 133	1 588	190 750	1 457	–0.7

1. Crop year July/June for wheat and barley, June/May for rapeseed, and October/September for others.
2. Government purchase price for domestic production.
3. Government sale price for domestic production, applicable as of 1 February in each year.
4. Minimum producer price.
5. Standard producer price.

Source: Ministry of Agriculture, Forestry and Fisheries, Tokyo, 1999.

Table II.13. **Japan: Administered prices for livestock products**

Product	1997/98 (April to March)		1998/99 (April to March)		Change in yen price 1997/98 to 1998/99 %
	Yen/t	US$/t	Yen/t[1]	US$/t	
Manufacturing milk[1]	74 270	614	73 860	564	–0.6
Butter[2]	965 000	7 975	955 000	7 295	–1.0
Skimmed milk powder[2]	523 600	4 327	523 600	4 000	0.0
Pigmeat[3]	385 000	3 182	380 000	2 903	–1.3

1. Guaranteed producer price.
2. Indicative stabilisation price.
3. Floor price in the price stabilisation band.

Source: Ministry of Agriculture, Forestry and Fisheries, Tokyo, 1999.

Table II.14. **Japan: Guaranteed prices for calves per head**

Breed	1997/98 (April to March)		1998/99 (April to March)		Change in yen price 1997/98 to 1998/99 %
	Yen/head	US$/head	Yen/head	US$/head	
Black Wagyu	304 000	2 512	304 000	2 322	0
Brown Wagyu	280 000	2 314	280 000	2 139	0
Other beef breeds	203 000	1 678	202 000	1 543	–0.5
Dairy breeds	156 000	1 289	156 000	1 192	0

Source: Ministry of Agriculture, Forestry and Fisheries, Tokyo, 1999.

government contribution in FY 1998 was ¥ 118 billion. The target area diverted from rice production under the PAPP scheme was 963 000 hectares in 1998, an increase of about 22 per cent over 1997 (787 000 hectares). The payment for farmers who participated in PAPP was ¥ 117 billion in 1998.

Other crops. The government purchase prices for ***wheat and barley,*** and minimum producer prices for ***sugar beet*** were reduced in 1998 by 0.7 per cent for wheat, 0.7 per cent for barley and 1.5 per cent for sugar beet. The minimum producer price for ***sugar cane*** was frozen at its 1997 level. Direct payments for sugar cane and sugar beet increased by 4.1 per cent and 10.2 per cent, respectively. The standard producer

prices (guaranteed prices for deficiency payments) for ***soyabean*** and ***rapeseed*** were reduced by 0.6 per cent and 0.7 per cent respectively in 1998. The government sale prices for wheat and barley were frozen at their 1997 levels.

Milk. The guaranteed producer price for manufacturing milk was reduced by 0.6 per cent in 1998; however, the quota (in conjunction with the deficiency payment limit) was unchanged. The stabilisation indicative price for butter was reduced by 1 per cent, but that for skimmed milk powder was frozen at its 1997 level. The mark-up on the import prices were ¥ 322 000 (US$2 460) per tonne for skimmed milk powder, ¥ 854 000 (US$6 523) per tonne for butter. While no reduction was made to the in-quota tariffs for these products, the over-quota tariffs were reduced by 2.5 per cent.

Beef and veal. Most administered prices for calves were frozen at their 1997 levels. An emergency measure which had been taken during the period August 1996 to March 1997 was not triggered in 1998. ***Pigmeat.*** The floor level of the pigmeat price stabilisation band principally maintained by ALIC intervention was reduced by 1.3 per cent. An emergency measure which had been triggered for pigmeat imports in 1997 was not implemented in 1998. The government contribution to direct payments to ***egg*** producers decreased by 4.4 per cent.

Trade. Regarding the implementation of Uruguay Round commitments, tariff-quotas were underfilled during FY 1997 for some products including mineral concentrated whey, butter and butter oil, skimmed milk powder and ground nuts. The quantity of rice exported as food aid for developing countries was around 0.2 million tonnes in FY 1997. Stockpiled imported rice is to be used in food aid shipments. It will therefore not be available for consumption on the Japanese domestic food market. The share of imported rice in the total shipment of the aid was about 70 per cent in FY 1997, taking into account requests from recipient countries.

The reduction in the general government deficit was the first priority in the initial government budget for the FY 1998. Budget outlays on government programmes that aim primarily at promoting ***environmental conservation*** and reducing adverse environmental effects of agriculture were increased from ¥ 14.9 billion (US$123 million) in FY 1997 to ¥ 15.7 billion (US$120 million) in FY 1998. These programmes include financial support for local governments to promote environmentally-friendly farm management through, for example, reducing excessive use of fertiliser and pesticide. Government investments to improve ***rural infrastructure,*** such as roads and sewerage, and to encourage the establishment of industries in these areas decreased from ¥ 454 billion (US$3.8 billion) in FY 1997 to ¥ 394 billion (US$3.0 billion) in FY 1998.

Korea

Main policy instruments. Agricultural policies consist mainly of market price support through trade measures and domestic price stabilisation mechanisms, including government purchase and public stockholding, although the share of market price support has been falling gradually over several years. Since the conclusion of the Uruguay Round, the government has implemented programmes to enhance agriculture's competitiveness in the belief that significant structural adjustment would be necessary to prepare for the changing agricultural policy environment. Accordingly, increased emphasis has been placed on technological development, infrastructure improvement, rural development and agro-environment conservation. As a result of the financial crisis that hit the Korean economy at the end of 1997, budget outlays for agriculture were reduced from 8.0 trillion won (US$8.4 billion) to 7.8 trillion won (US$5.6 billion) in 1998. This has resulted in a decrease in agriculture's share of the national budget – from 10.8 per cent in 1997 to 9.3 per cent in 1998. This budget constraint has caused long-term structural adjustment projects in agriculture to be delayed and has generated strong concern about the efficiency of agricultural investments. By the year 2001, the government is planning to convert direct subsidies for farmers into government-granted loans in order to encourage producer self-reliance and reduce budgetary pressures. Under this plan, direct subsidies would go, in principle, towards the construction of social overhead capital in agriculture as well as to agro-environment activities. To replace the Agricultural Basic Law enacted in 1967, the government drew up the Agricultural and Rural Basic Law, which will be put into effect from January 2000, with the following main elements: *a)* to reduce market price support and to expand direct income payments, *b)* to present guidelines for fostering environment-friendly farming

practices, *c)* to duly reflect the multifunctionality of agriculture in policy making, and *d)* to preserve farmland for food security. This is described in more detail in Part I.4.

Support to agriculture (Tables III.41-43, Figure III.9). As measured by the percentage PSE, support had increased over the period 1986-95. During the last three years, this trend was reversed due to a significant decrease in market price support (MPS) that accounts for over 90 per cent of total support to producers. The percentage PSE is still high at 59 per cent, 1.8 times higher than the OECD average. In 1998, the PSE decreased by about 11 per cent as a result of lower MPS due to the depreciation of the won. The producer nominal assistance coefficient (NAC) of 2.44 denotes that the value of gross farm receipts for 1998 was 144 per cent higher than at world market prices without any support.

The percentage CSE has shown a similar trend as the percentage PSE over the last decade. It increased up to 1995, but decreased since, because of declining MPS. At 54 per cent, the percentage CSE is about 2.7 times greater than the OECD average. The CSE decreased 15 per cent in 1998 due to a fall in the MPS mainly resulting from the exchange rate depreciation. The consumer NAC suggests that consumer expenditure was 116 per cent higher than at world market prices without any support. Support provided to general services to agriculture (GSSE) has increased steadily over the last decade, with the exception of 1998, and represents about 20 per cent of the TSE. Overall, transfers from taxpayers and consumers associated with agricultural policies in 1998, as measured by the TSE, are estimated at about 22.4 trillion won (US$16 billion), representing around 5.4 per cent of GDP.

Policy Developments

Rice. In 1998, the government purchase price of rice was raised while the quantity of government purchased rice was reduced. Due to the sharp increase in prices of agricultural inputs such as Fertilisers, pesticides and agricultural machinery caused by the financial crisis, the government purchase price of rice in 1998 was increased by 5.5 per cent from the previous year. The quantity of government purchased rice was set at 1.1 million tonnes, down by 9.4 per cent from 1997, in order to meet the Aggregate Measurement of Support (AMS) reduction commitment under the Uruguay Round (Table II.15). The government plans additional measures to facilitate private rice processing and marketing activities. In particular, the registration requirement for foodgrain milling, which was changed from a licensing system in 1995, will be replaced by a reporting system. The reporting requirement for foodgrain sales at retail and wholesale levels will be abolished as of the second half of 1999.

Other crops. Unlike rice, the government does not intervene directly in the buying system for barley, soyabean and maize but operates a price support system through the National Agricultural Co-operative Federation (NACF). The NACF purchases from producers, with price and quantity set by prior contracts, and the government then buys from the NACF. In 1998, the purchase price was increased by 5.5 per cent for barley and soyabean, and 5.4 per cent for maize. The purchased quantity amounted to 188 000 tonnes, 14 000 tonnes and 8 000 tonnes for barley, maize and soyabean respectively (Table II.15).

Beef and veal. The National Livestock Cooperative Federation (NLCF) purchased a large number of beef cattle at market prices in 1998, with the aim of preventing a fall in cattle prices that would have resulted from a decrease in beef consumption due to the economic crisis. About 113 000 cattle were purchased by the NLCF (Table II.16). Measures such as providing more detailed information on beef quality for consumers and expanding direct sales from mobile shops were also taken to boost beef consumption. Four new Livestock Processing Centres (LPCs), which deal with the whole processing chain from slaughtering to marketing, were established in 1998. By the year 2000 it is expected that ten LPCs will be established.

Korea is considering the introduction of a *calf breeding stabilisation band* with a view to maintaining a viable calf breeding sector in preparation for 2001 when the beef market will have been fully liberalised. The scheme will grant a deficiency payment based on the difference between the stabilisation price for four-month-old calves and the market price. The stabilisation price will be determined by reference to production costs, breeding trends and other factors, as well as the actual market price. It will be available to calf-raising farmers who participate in the scheme with a contribution of around 3 per cent of the stabilisation price. The stabilisation price will be lowered gradually to encourage livestock farmers to operate

Table II.15. **Korea purchase prices and quantities of major cereals**

	Units	1995[1]	1996[1]	1997[1]	1998[1]	1999[1] (e)	Percentage change		
							1997/96	1998/97	1999/98
Rice[2]									
Purchase price	'000 won/t	–	1 584	1 647	1 647	1 738	4.0	0	5.5
Purchase quantity	'000 t	–	1 376	1 241	1 224	1 109	–9.9	–1.4	–9.4
Barley[3]									
Purchase price	'000 won/t	926	926	926	977	–	0	5.5	-
Purchase quantity	'000 t	319	318	163	188	–	–48.7	15.3	–
Maize[2]									
Purchase price	'000 won/t	–	455	478	478	504	5.1	0	5.4
Purchase quantity	'000 t	–	15	13	13	14	–13.3	0	7.7
Soyabean[2]									
Purchase price	'000 won/t	–	1 365	1 433	1 433	1 512	5.0	0	5.5
Purchase quantity	t	–	3 248	1 269	5 488	8 000	–60.9	332	45.8

1. Marketing year for rice, maize and soyabean, and calendar year for barley. For example, in the case of rice, maize and soyabean, the year 1999 denotes the price and quantity of 1998 products. In the case of barley, the year 1998 denotes price and quality of 1998 products.
2. Polished grain equivalent.
3. Polished grain equivalent in case of price, while unhulled grain equivalent in case of quantity.

Source: Ministry of Agriculture and Forestry, Seoul.

Table II.16. **Korea: Consumption and price of beef and milk**

	Units	1996[1]	1997[1]	1998[1]	Percentage change	
					1997/96	1998/97
Beef						
Consumption[2]	'000 t	461	517	453	12.1	–12.4
Producer price	'000 won/t	7 102	5 580	5 139	–21.4	–7.9
Purchased cattle	Head	9 957	99 541	112 774	899.7	13.3
Milk						
Consumption	'000 t	2 465	2 440	2 306	–1.0	–5.5
Producer price	'000 won/t	431	454	533	5.3	17.4

1. Calendar year basis.
2. Carcass weight equivalent.

Source: Ministry of Agriculture and Forestry, Korea.

more efficiently. A pilot study has been underway since July 1998 to examine the feasibility of the scheme and will continue into 1999. Over the period 2000-2006, it is expected that 4.3 million calves will be covered by this scheme.

Dairy. As with beef and veal, the dairy industry has suffered from a severe drop in consumption resulting from the economic recession (Table II.16). This has led to an over-supply situation in milk. To facilitate milk consumption, the government along with private organisations launched a campaign to send milk to North Korea. The preparatory measures for implementation of the Dairy Promotion Act, revised in 1997 with the objective of reinforcing the involvement of the private sector in the marketing system of dairy products, were completed. This Act will be effective from January 1999.

Although budgetary payments in Korean agriculture are still relatively small, the government is trying to move in this direction away from market price support. In this context, Korea introduced a ***system of early retirement payments*** in 1997 with a view to facilitating structural adjustment. Participants fell to around 12 000 farmers in 1998 from more than 15 000 in 1997. The amount of land sold or rented under this programme also fell to 8 100 hectares in 1998, from about 11 000 hectares in 1997. Total payments fell to 21.7 billion won (US$15.5 million) in 1998 from 27.3 billion won (US$28.7 million) in 1997.

The government plans to introduce various kinds of direct payment schemes gradually. ***Payments scheme for environmentally-friendly farming*** will be implemented on a trial basis in 1999. Under this programme the government will make a payment of 524 000 won (US$374) per hectare to farmers carrying out low-input farming in areas that are specially designated for environment preservation purposes. Targets of low-inputs for fertiliser and pesticide will be set in advance. The expenditure for the 1999 trial programme, 5.7 billion won (US$4.1 million), was introduced in the 1999 budget. Continuation of this programme will be subject to the results of the 1999 trial. Agricultural research institutes, including the Korean Rural Economics Institute (KREI), are studying the possibility of introducing diverse direct payments schemes such as ***payments for less-favoured areas or for environment preservation.***

Trade. As a result of the financial crisis, the won depreciation and the economic recession that followed, tariff rate quotas were not fully filled in 1998. Out of a total of 64 items subject to the tariff rate quota scheme, approximately 20 items did not meet their respective quota. The rate of fill of tariff rate quotas was slightly more than 90 per cent in 1998. Korea was involved in a dispute settlement process concerning dairy products (Part II.4).

The ***Sustainable Agriculture Promotion Act*** established in 1997 came into effect on 14 December 1998. Sustainable and environmentally-friendly farming has become a top priority of the new government formed in 1998. Some measures have been introduced to preserve the environment, especially to promote sustainable agriculture. As mentioned above, the direct payments scheme for environmentally-friendly farming is one example. The government, along with the private sector, is trying to reduce fertiliser and pesticide use through a more effective combination of farming technologies such as Integrated Pest Management (IPM) and Integrated Nutrient Management (INM). For this, a total of 16 model areas for Integrated-Pest-Nutrient-Management (IPNM) are to be established in 1999.

The ***scheme for environmentally-friendly farming areas*** is another measure introduced in 1998. This programme targets mainly organic farmers in "water preserving areas" in which the use of chemicals and animal waste are restricted in order to preserve the quality of drinking water. Five areas, representing an investment of 10 billion won (US$7.1 million), were constructed in 1998. Over the period 1998-2004, it is expected that 189 areas will be established with a total investment of 378 billion won (US$270 million).

A ***labelling system for environmentally-friendly agro-food products*** such as organic products will be introduced in 1999 to enhance consumer recognition of those products. In addition, with a view to preserving tidelands and wetlands that are important to marine ecosystems, it was decided not to initiate any new reclamation programmes for agricultural purposes.

The ***agricultural marketing reform programme was*** established in 1998, confirming and strengthening the concern for improved agricultural marketing and distribution which has been considered to be relatively underdeveloped in Korea. This reform programme stresses voluntary agreement and diversity in the marketing sector. Central to this reform programme is the ***agricultural marketing agreement and direction system.*** Under this system, participants in the marketing channels from production to consumption make voluntary contracts to regulate the amount of production, distribution and consumption with the aim of maintaining reasonable prices. These contracts are applied primarily to perishable products that are marketed in small quantities. The bilateral transaction system, by which is meant direct bargaining in public agro-food wholesale markets between buyers and sellers without the involvement of auction brokers, has been authorised. Previously, all transactions in these markets were, in principal, by auction. This marketing reform programme was given legislative backing by amendments to the Act for Supply and Demand, and Price Stabilisation of Agricultural and Fisheries Products in 1998. The National Assembly is reviewing the Act. The Act, if passed, will come into force in the second half of 1999. Much attention has also been paid to direct contracts between producers and consumers in order to shorten marketing channels. Reflecting a strong commitment to the development of agricultural marketing, the government is planning to increase the share of budgetary appropriations related to agricultural marketing to 30 per cent of the total MAF budget by the year 2002.

Regulatory reform in the agro-food sector and measures to increase the participation of producers and consumers in the policy-making process have been taken. The Regulatory Reform Commission, which consists of researchers and experts from private and public agencies, reviews government regulations in the agro-food sector and recommends the elimination of regulations working as entry barriers. At the end

of 1998, a total of 209 regulatory items in the agro-food sector were abolished or improved through the amendment of nine relevant regulatory laws in the National Assembly. The system of "open agricultural policies" was established to reflect the opinions of farmers and consumers on major policy issues and to address emerging issues through public fora.

A restructuring of organisations and agencies involved in agriculture was undertaken. The National Agricultural Products Grading and Inspection Office (NAPGIO) was merged into the Provincial Agriculture and Statistics Office (ASO). The National Animal Quarantine Service (NAQS) was merged with the National Veterinary Research Service (NVRS) to form the National Veterinary Research and Quarantine Service (NVRQS). As the functions of the Rural Development Corporation (RDC), the Federation of Farmland Improvement Associations (FFIA) and the Farmland Improvement Association (FIA) overlapped to a large extent, efforts have been made to integrate the three agencies into a special agency that will be responsible for the maintenance and improvement of agricultural infrastructures. The special agency was tentatively named the Farmland Foundation Corporation (FFC). The FFC is likely to be established by January 2000.

Measures for female farmers have been improved. A Rural Women Policy Division was established in MAF in early March 1998 to encourage female farmers and to improve the welfare of rural women. Up until now, 10 per cent of the young farmers eligible for government assistance could be women; MAF has increased this proportion to 20 per cent.

Mexico

Main policy instruments. Mexico has been involved in a process of opening up the economy to international competition and reducing the intervention of government agencies in the national markets for agricultural products. There has been a sharp movement from price support measures for grains, beans and oilseeds to direct payments to producers. These direct payments through the PROCAMPO programme began in 1994. The main price intervention mechanism applies to maize by the National Basic Foods Company (CONASUPO) which buys maize from producers at a higher price than the subsidised selling price to consumers, covering the difference with government transfers. This this activity is gradually being phased out. The tortilla subsidy eliminated at the end of 1998. However, payments to buyers of crops (wheat, maize, sorghum and rice) in several states by the Support Services for Agricultural Marketing (ASERCA) will continue for some years. In 1996, the Government launched a set of programmes under the common name of ALIANZA PARA EL CAMPO (Alliance for Agriculture). These programmes are partially financed by the states and are oriented mainly to investment. Additionally in 1997, a programme of temporary employment for low-income farmers and rural workers was launched under the Alianza programme.

Support to agriculture (Tables III.44-46, Figure III.10). The devaluation of the peso in late 1994 caused a big fall in the value of market price support and in the percentage PSE. This latter changed from an average of 29 per cent in the period 1989-94 to 3 per cent in 1995. The adjustment of internal agricultural prices to this shock took place in the following years, especially in 1997 but also in 1998, increasing the market price support and the total PSE. In 1998 the percentage PSE rose to 19 per cent from 16 per cent in 1997. This was due to a rise in producer prices as the fall in world prices was more than offset by the depreciation of the peso (see the PSE decomposition figure). The higher value of market price support has reduced the weight of PROCAMPO payments (based on historical entitlements) in the total PSE. Mexico's percentage PSE is still well below the OECD average. The producer NAC of 1.23 suggests that 1998 farm receipts were 23 per cent higher than at world prices without budgetary support.

The evolution of the Consumer Support Estimate (CSE) is dominated by market price support calculations. CSE became negative in 1997 (–8 per cent) as it had been before 1995. In 1998 percentage CSE was –9 per cent and the corresponding consumer NAC was 1.10. Support for General Services to agriculture (GSSE) represents a small fraction of total support. It was about 10 per cent of the Total Support Estimate (TSE) in the period 1990-94, and 6 per cent of TSE in 1997-98. The amount of GSSE has grown in nominal pesos, 35 per cent in the last two years, up to 3 240 million pesos (US$354 million) in 1998. The Total Support Estimate (TSE) in 1998 was 54 895 million pesos (US$5 998 million), 1.4 per cent of the Mexican GDP.

Table II.17. **Mexico: Administered prices**

Product	Producer level								Change in M$	
	A.W. 96/97		S.S. 97		A.W. 97/98p		S.S. 98p		A.W. 96/97 to 97/98	S.S. 97 to 98
	M$/t	US$/t	M$/t	US$/t	M$/t	US$/t	M$/t	US$/t	%	
Maize[1]	1 255	158	1 292	163	1 311	143	1 312	143	4.5	1.5
Sorghum from Tamaulipas[2]	900	114	–		960	105	–		6.7	
Wheat from the North-East[2]	1 401	177	–		1 400	153	–		–0.1	
Wheat from El Bajío[2]	1 369	173	–		1 368	149	–		0	
	Wholesale level								Change in M$ 1997 to 1998 %	
	1997				1998					
	M$/t		US$/t		M$/t		US$/t			
Sugar[3]	3 339		421		3 513		384		5.2	

p: provisional.
Notes: A.W.: autumn/winter crop season; S.S.: spring/summer crop season.
1. Weighted average of CONASUPO buying prices for maize producers. These prices vary by state and they have been weighted by the volume sold in each state. *Source:* CONASUPO.
2. Minimum price to be paid to the producer under ASERCA programme. Source: *Official Journal.*
3. Ex-factory prices for raw sugar (*azucar estandar*) on the basis of which sugar cane producer prices are determined.
Source: Sugar Industry Committee (COAZUCAR) and *Official Journal.*

Policy Developments

Maize. The National Basics Food Company (CONASUPO) continued to intervene in the maize market, but the volume sold fell from 3.7 million tonnes in 1997 to an estimated 2.6 million in 1998. This represents approximately 16 per cent of the 1998 crop. Up to 30 per cent was sold to DICONSA, a government agency with a chain of retail stores in rural areas.

Table II.18 shows how the gap between buying and selling prices has been reduced substantially in 1998. The new budget foresees no transfer to CONASUPO as a first step towards its complete closure, although it will still be active in 1999 in guaranteeing maize supply for tortilla in urban areas. ASERCA payments will continue in 1999. These payments are given in order to ensure a minimum producer price fixed by ASERCA for some regions (see Table II.17) and they cover the difference between this price and the "indifference price".[29] The tortilla subsidy, in place since 1986, will be eliminated in 1999. This liberalisation of maize is expected to result in a higher tortilla price which, due to the weight of maize in the Mexican diet, may have significant effects on the consumer price index. Some tortilla will still be distributed free to the poorest families by SEDESOL.

Wheat and sorghum. ASERCA payments per tonne in 1998 covered more than 90 per cent of wheat production and more than 70 per cent of sorghum production. Out of the 4.5 million tonnes of sorghum under the ASERCA programme, 1.7 million came from the State of Tamaulimas. The minimum price necessary to obtain the payment was 960 pesos (US$107) per tonne (see Table II.17).

Rice. ASERCA payments for rice are given directly to the producer, not to the first consumer. In 1998, as in the previous years, payments covered all production, including the household consumption of producers. In 1999 only the marketed production will be covered by the programme with a limit on the yield per hectare.

Milk. Until 1997 CONASUPO was the sole importer of milk into Mexico. In 1998 some private importers were granted an import quota. Milk interventions have generated net cash inflows in CONASUPO. In 1998, 70 per cent of all sales of milk by CONASUPO went to the Government agency Liconsa whose activities concentrate on providing food though social programmes.

Table II.18. **Mexico: Average purchasing and selling prices of maize by CONASUPO**

	1997		1998p		Change in M$ 1997 to 1998 %
	M$/t	US$/t	M$/t	US$/t	
	Average purchasing prices[1]				
White maize	1 315	166	1 305	143	–1
Yellow maize	854	108	1 156	126	35
	Average selling prices[1]				
Tortilla factories	470	59	1 064	116	126
Flour companies[2]	470	59	1 064	116	126
DICONSA shops					
White maize	1 246	157	1 085	119	–13
Yellow maize	1 020	129	1 062	116	4
Feed sector[3]	835	105	829	91	–1

p: provisional.
1. These are average prices which vary across regions and crop seasons.
2. Since 1985, flour companies purchase most of their maize grains directly from producers and receive payments from CONASUPO to lower selling prices to tortilla factories.
3. Since 1996, sales of maize grains by CONASUPO to the feed sector have substantially decreased.
Source: National Basic Foods Company (CONASUPO), Mexico DF., 1998.

Table II.19. **Mexico: Retail price ceilings of maize**

	1997		1998p		Change in M$ 1997 to 1998 %
	M$/t	US$/t	M$/t	US$/t	
Tortilla[1]	1 800	227	2 540	282	41
Flour[2]	1 204	152	2 144	238	78

p: provisional.
1. Retail prices of both Tortilla and flour were different in Mexico City from in the rest of the country up to 1996.
2. Except for flour sold in the form of 1 kg bags for which retail prices were liberalised in 1995.
Source: National Basic Foods Company (CONASUPO), Mexico DF, 1998.

Table II.20. **Mexico: PROCAMPO direct payments**

	1996		1997		1998p		Per cent change in M$ 1997 to 1998	
	M$	US$/t	M$	US$/t	M$	US$/t	1996 to 97	1997 to 98
Per hectare payments								
Autumn/winter crop season	440	56	484	61	556	62	10	15
Spring/summer crop season	484	61	556	70	626	70	15	13
Total payments (mn)	6 575	830	7 533	951	8 522	947	15	13
Area benefiting (mn hectares)	13 853		13 984		13 909		1	–1

p: provisional.
Source: Secretariat of Agriculture and Rural Development (SAGAR), Mexico DF., 1998.

Other crops: dry beans (Frijol). In 1998 CONASUPO stopped subsidising the dry beans price. The total sales by CONASUPO were 194 000 tonnes, 27 per cent of which went to DICONSA.

Per hectare payments under PROCAMPO increased by 13 per cent in nominal terms to 556 pesos for the autumn/winter crop season and 626 pesos for the spring/summer season (US$61 and US$68,

Table II.21. **Mexico: Alliance for Agriculture**

Type of programme	1996		1997		1998p		Change in M$ %		Main objective of the programme
	M$ mn	US$ mn	M$ mn	US$ mn	M$ mn	US$ mn	96 to 97	97 to 98	
Payments based on limited area planted	**194.2**	**25.5**	**214.6**	**27.1**	**410.4**	**44.8**	**11**	**91**	
Oil-palm and soyabeans	34.4	4.5	49.2	6.2	77.0	8.4	43	56	Increasing the planted area of oil-palm and soybeans in the tropic.
Coffee programme	135.2	17.8	128.6	16.2	199.3	21.8	–5	55	Improve coffee plants, productivity and renovation of plantations.
Cotton	0.0	0.0	0.0	0.0	39.0	4.3	n.a.	n.a.	Technical assistance, pest control and genetic improvement.
Other programmes	24.6	3.2	36.8	4.6	95.0	10.4	50	158	
Payments based on historical plantings	**11.7**	**1.5**	**14.1**	**1.8**	**0.0**	**0.0**	**21**	**–100**	
Payments based on use of variable inputs	**51.6**	**6.8**	**157.6**	**19.9**	**201.2**	**22.0**	**206**	**28**	
Maize and beans seed improvement	50.2	6.6	155.0	19.6	187.0	20.4	209	21	Use of certified seeds in low productivity units.
Other programmes	1.3	0.2	2.6	0.3	14.2	1.6	93	447	
Payments based on use of on-farm services	**249.0**	**32.8**	**496.0**	**62.6**	**600.7**	**65.6**	**99**	**21**	
Elementary Programme of Technical Assistance	0.0	0.0	122.4	15.4	125.7	13.7	n.a.	3	Technical support for increasing productivity of basic crops.
Training and Extension	91.5	12.0	113.0	14.3	142.9	15.6	23	26	Extension services to improve productivity of small producers.
Animal health	72.2	9.5	111.6	14.1	145.1	15.9	55	30	Pest and diseases prevention, control, surveillance and eradication.
Plant health	83.5	11.0	122.7	15.5	125.9	13.8	47	3	Pest prevention, control and/or eradication.
Other programmes	1.8	0.2	26.3	3.3	61.1	6.7	1 361	132	
Payments based on use of fixed inputs	**1241.4**	**163.3**	**1 883.6**	**237.7**	**1 619.5**	**176.9**	**52**	**–14**	
Ferti-irrigation	324.9	42.7	333.3	42.1	348.8	38.1	3	5	Irrig. systems to allow a more efficient use of water, energy and fertilizers.
Mechanisation	209.1	27.5	245.9	31.0	203.3	22.2	18	–17	Facilitate the acquisition/repair of tractors and seeding machines.
Creation of Pairies	152.5	20.1	239.6	30.2	190.1	20.8	57	–21	Increase of production and efficient use of forage.
Milk Programme	112.4	14.8	113.5	14.3	109.4	12.0	1	–4	Installation of building materials and equipment for milk production.
Livestock Genetic Improvement	96.9	12.7	145.0	18.3	138.2	15.1	50	–5	Promote artificial insemination and improve breeding quality of cattle.
Genetic Improvement	70.0	9.2	80.1	10.1	65.5	7.2	14	–18	Acquisition of genetic material and cattle samples for repopulating.
Rural equipment	238.1	31.3	360.4	45.5	382.0	41.7	51	6	Acquisition of small equipment by young, female and indigenous farmers.
Development of indigenous Areas	0.0	0.0	41.5	5.2	56.2	6.1	n.a.	35	Promote productive projects in extremely poor areas.
Other programmes	37.5	4.9	324.3	40.9	126.1	13.8	765	–61	
Payments based on established minimum farming income	**0.0**	**0.0**	**300.0**	**37.9**	**404.5**	**44.2**	**n.a.**	**35**	
Temporary employment programme in poor areas	0.0	0.0	300.0	37.9	404.5	44.2	n.a.	35	Rehabilitate basic infrastructures and provide temporary employment.
Research and Development	**126.5**	**16.6**	**133.0**	**16.8**	**149.5**	**16.3**	**5**	**12**	
Technology transfers	126.5	16.6	133.0	16.8	149.5	16.3	5	12	Research, validation and technology transfers by research foundations.
Inspection services	**0.0**	**0.0**	**1.0**	**0.1**	**1.1**	**0.1**	**n.a.**	**5**	
Marketing and promotion	**6.1**	**0.8**	**26.0**	**3.3**	**36.5**	**4.0**	**326**	**40**	
Other Programmes	**0.0**	**0.0**	**6.4**	**0.8**	**2.0**	**0.2**	**n.a.**	**–69**	
Total	**1 880.5**	**247.4**	**3 232.3**	**407.9**	**3 425.3**	**374.2**	**72**	**6**	
Share by State Governments	36%		36%		32%		0	–10	

p: provisional. n.a.: not applicable.
Note: Alianza programs have been allocated according to the OECD's classification on the basis of implementation (see Part II in this volume).
Source: Secretariat of Agriculture and Rural Development (SAGAR, Mexico).

respectively). However, payments remained constant in dollar terms due to the depreciation. Some per hectare payments were also given through some specific programmes in ALIANZA (Table II.20).

Trade. In the latter part of 1998 Mexico started important trade negotiations with the European Union. They are still at an early stage and it is difficult to foresee to what extent they will include agricultural products. As the transition period of NAFTA proceeds import tariffs for some products are being reduced progressively.

The set of agricultural programmes called ***ALIANZA*** was launched in 1996 (see Table II.21). There are more than thirty different programmes, which may change as their performance is monitored and reviewed. Out of a total expenditure of 3 425 million pesos (US$380 million) in 1998, 65 per cent was to support investment, extension and technological transfer. These programmes cover areas such as genetic improvement, mechanisation, rural equipment and ferti-irrigation. A specific programme of temporary employment in extremely poor rural areas started in 1997 and its budget was increased by 35 per cent in 1998 to 405 million pesos (US$44 million). Payments are given to low-income rural workers in the form of a 22 pesos salary per day (US$2.4) and are conditional on working on environment and small general infrastructure improvement projects.

New Zealand

Main policy instruments. The main policy measures in New Zealand are implemented through general budget outlays for basic research and for the control of pests and diseases. Some community groups that contribute to the development of more sustainable agriculture and the environment also receive modest support. Direct payments are granted in New Zealand only for adverse climatic events and natural disasters and then only in the event of large-scale emergencies of national significance that are beyond the response capacity of local farmer/grower organisations and territorial local authorities. Statutory producer and marketing boards operate as independent, self-financing organisations. The most important boards are for dairy products, meat, wool and certain horticultural products. The New Zealand Dairy Board, the New Zealand Apple and Pear Marketing Board, the New Zealand Kiwifruit Marketing Board, the New Zealand Raspberry Marketing Council and the New Zealand Hop Marketing Board have monopoly export powers. The New Zealand government has indicated that it intends to remove the statutory backing of agriculture's producer boards, although no timetable has been set. For sanitary and phytosanitary reasons there are strict border controls to prevent the incursion of exotic pests and diseases affecting the health status of the livestock, poultry, bee and fruit and vegetable sectors.

Support to agriculture (Tables III.47-49, Figure III.11). Support provided to New Zealand farmers as measured by the PSE, already the lowest in total and in percentage terms of any country in the OECD, fell by nearly half in 1998 as compared to 1997. This fall is due wholly to a decrease in the estimated level of market price support for one commodity – poultry. This resulted in an estimated overall percentage PSE for 1998 of 0.8 per cent. Support provided in the form of General Services constitutes a little over one-half of total support provided in New Zealand. The estimated level of support to research and development, one of only two categories of support within this classification, did not change in 1998. However, there was a small decrease in the estimated costs of inspection services, the other item in this classification.

Altogether then, total support as measured by the TSE in New Zealand declined somewhat in 1998 and now is estimated to amount to less than 0.2 per cent of New Zealand's GDP.

Policy Developments

Commodity Boards. Boards and their industries were asked to prepare plans for operating without specific statutory backing and to submit these proposals to the government by 15 November 1998. The proposals submitted are now under consideration. New Acts were passed for the Meat, Wool and Pork Industry Boards in 1997, designed to redefine their roles and to increase transparency and accountability. (A more detailed description of these changes was included in the 1998 report.) The Dairy Board Amendment Bill introduced in April 1998 removes the power of the Dairy Board to operate a domestic market price equalisation scheme. The Kiwifruit Marketing Regulations were amended with effect from 1 April 1998 to *inter alia:*

- provide for the board to acquire fruit from suppliers other than producers;

- provide for the Board to take ownership of the fruit when it reaches the ship (rather than at the coolstore);
- increase the number of factors for price setting;
- rationalise fruit quality provisions and include process standards;
- allow the Board to establish a supply chain management company.

Budgetary payments. Measures may take the form of limited emergency income support or labour assistance through Task Force Green. A drought associated with El Niño weather patterns severely affected farming in Marlborough and on much of the east coast of the South Island from October 1997. North Canterbury and Hawkes Bay were also affected by a greater than one-in-fifty year drought event (*i.e.* it has been estimated that such an event would occur less than once every fifty years). Government assistance amounted to NZ$ 323 000 (US$172 820) in 1997/98, while for the six months to December 1998 another NZ$ 423 500 (US$226 592) was budgeted, of which it is estimated that only NZ $300 000 (US$160 514) will be used.

Trade. New Zealand's tariffs and domestic support levels are already well below the levels required under the Uruguay Round Agreement on Agriculture and New Zealand continues to benefit from improved market access under its terms. It is also making use of the new dispute settlement procedures to resolve implementation issues as they arise. These are described in Part II.4.

Food safety and quality. On food regulation, New Zealand is working to implement a risk-based approach across all current and intended food product legislation and to apply this within the framework of the Optimal Regulatory Model. The Australia New Zealand Food Authority (ANZFA) has been responsible for the development of food standards for both countries since 1996 and will have completed its standard-by-standard review by the beginning of 2000. By that time food standards in Australia and New Zealand will be the same. One of the most important standards agreed recently concerns food produced using gene technology. Administrative changes are also underway relating to food regulation. Following a review process begun in 1997, a discussion document entitled "Assuring Food Safety – an integrated approach to regulating the food sector", became the basis for public consultation. Government agreed, late in 1998, to implement one of its main recommendations: to establish a single food agency combining the functions of food safety and regulation currently carried out by the Ministry of Health and the Ministry of Agriculture and Forestry. The new agency is to be located within MAF.

A new Animal Products Bill was introduced to the New Zealand Parliament in December 1998 and is expected to pass into legislation in the latter half of 1999. The Bill will replace the current Meat Act 1981, and is designed to ensure that the risks to human and animal health arising from the production and processing of animal material and products are minimised and managed. The Bill is also aimed at facilitating access to trade. The Bill is premised on a risk-based approach, and implements the Optimal Regulatory Model for the animal products sector.

A ***new Animal Welfare Bill*** was introduced to the New Zealand Parliament in October 1998 and is expected to pass into legislation in March 1999. Revised codes will reflect societal and scientific consensus on best animal husbandry practice surrounding the use of animals in agriculture, science and recreation. The Act which is expected to be enacted in July 1999 and come into force in October 1999, will contain detailed provisions relating to the use of animals in research testing and teaching and to the approval of animal exports.

Administrative reforms include the merging of the Ministries of Agriculture and Forestry in March 1998. The new combined Ministry has a policy function, a regulatory authority, an operational group, a centre of forest management and expertise, and corporate support. In addition, from November 1998 two new state-owned enterprises were created to deliver MAF Quality Management services. Asure New Zealand Ltd is providing meat inspection and other services to the meat industry while AgriQuality New Zealand Ltd is providing services covering farm quality and animal health, quality assurance services for a wide range of food products, and biosecurity and food safety services. The services of both state-owned enterprises will become contestable over time. MAF retains control of regulatory func-

tions and the certification process, as well as Health Surveillance and Emergency Disease and Pest Response and border quarantine control.

Norway

Main policy instruments. Agriculture in Norway is supported through direct payments, administered prices, supply control measures, market regulation and border measures. Market price support is supplemented by a comprehensive system of deficiency payments and other forms of direct payments, a significant share of which are differentiated by region, size of farm, amount of arable land and number of animals. Export subsidies are financed through levies at the producer and wholesale levels for livestock products, but for processed and horticultural products they are financed by the government budget. High tariffs to a large extent prevent imports of products competing with domestic production. To keep domestic prices at the levels specified in the Agricultural Agreement, a system of "open periods" for imports at reduced tariff rates is triggered when domestic prices rise above threshold levels. The current framework for Norwegian agricultural policy reform emphasises fewer, better-targeted support measures and increased market orientation of the sector. This framework is currently being revised by the Government and a proposal for future agricultural policy in Norway will be sent to Parliament during 1999.

Support to agriculture (Tables III.50-52, Figure III.12). The level of support, as measured by the percentage PSE, changed little over the last ten years. Following a moderate decline between 1991 and 1996, the percentage PSE increased by 3 percentage points in 1997 and by a further 5 percentage points in 1998. At 70 per cent, it is more than twice the OECD average. The PSE increased in 1998 mainly because of lower world market prices which resulted in higher market price support. Administered prices and direct payments also increased but the effect on the overall level of support was relatively small. More than half of support was provided through direct payments. The trend away from payments based on output to payments based on area and animal numbers continued. Payments based on input use (mainly for grass fodder used in livestock production) accounted for almost half of direct payments. Slightly less than one-third was linked to output, with a moderate predominance of payments based on limited output over those based on unlimited output. And nearly one-fifth consisted of payments based on limited area and animal numbers. The producer NAC of 3.3 suggests that gross farm receipts (including support) were more than 3 times higher than at world market prices without budgetary support.

Reflecting a gradual shift from price support to direct payments, the percentage CSE declined faster than the percentage PSE during the first half of the 1990s. In 1997 the CSE began to rise again, and in 1998 it increased by 7 percentage points to 53 per cent, which is two-and-a-half times the OECD average. Mirroring the development of market price support, the increase in the CSE was largely due to changes in world market prices. The consumer NAC of 2.1 indicates that consumption expenditures were 110 per cent higher than at world market prices. Budgetary expenditures for the provision of general services to agriculture (GSSE) were more or less stable until 1996, but have declined since then and now represent only about 3 per cent of the TSE. Overall, the transfer from taxpayers and consumers associated with agricultural policies, as measured by the TSE, are estimated at NKr 21.4 (US$2.8) billion, representing nearly 2 per cent of GDP.

Policy Developments

All ***administered prices*** were raised in 1998. The prices of cereals were increased by between 1.3 per cent and 1.8 per cent depending on the type of cereal (Table II.22). The price of potatoes was raised by around 7 per cent and the target prices for fruits and vegetables were increased by up to 5 per cent. In the livestock sector the price increases were 0.7 per cent for beef and sheepmeat, 0.8 per cent for veal and poultrymeat and 0.9 per cent for pigmeat. The milk price was raised by just over 1 per cent and the price of eggs by 1.3 per cent. Some *producer levies* were increased while others were reduced. The producer levy on beef and veal was increased three-fold and the levy on milk was raised by 9 per cent. The levy on sheepmeat was reduced by four-fifths and the levy on pigmeat was lowered by one-third.

The ***milk quota system*** was slightly modified. Milk quotas became tradable in 1997, but they can only be bought and sold within each of the 9 regions. In 1998 the rules for quota trade were amended to

Table II.22. **Norway: Administered prices**

Product	1 July 1997/30 June 1998		1 July 1998/30 June 1999		Change in NKr price 97/98 to 98/100
	NKr/t	US$/t	NKr/t	US$/t	%
	Producer level (excluding value added tax)				
Food grains					
Wheat	2 310	327	2 340	310	1.3
Rye	2 120	300	2 150	285	1.4
Barley[1]	1 890	267	1 920	254	1.6
Oats[1]	1 700	240	1 730	229	1.8
Feed grains					
Wheat	2 030	287	2 060	273	1.5
Rye	1 910	270	1 940	257	1.6
Oilseeds	4 440	628	4 440	588	0.0
	Wholesale level (excluding value added tax)				
Beef, bull[2]	36 200	5 119	36 450	4 831	0.7
Veal[3]	33 340	4 714	33 590	4 452	0.8
Pigmeat[4]	26 620	3 764	26 870	3 561	0.9
Sheepmeat, lamb[2]	37 190	5 259	37 440	4 962	0.7
Eggs[5]	15 480	2 189	15 680	2 078	1.3
Poultry	29 800	4 214	30 050	3 983	0.8
Milk[6]	6 298	891	6 366	844	1.1

1. The feed grain prices for barley and oats are the same as the food grain price.
2. Class O- and better; Carcasses.
3. Class 1 and better; Carcasses.
4. Class E; Carcasses.
5. Class A, weighing more than 53 grammes.
6. Converted from litres, assuming 1 litre equals 1.032 kilogrammes of milk.

Source: Ministry of Agriculture, Oslo, 1998.

encourage trade within municipalities. Quota that becomes available has to be offered for sale within the same municipality. Only if quota supply exceeds demand, can it be sold to farmers in other municipalities of the region. Another change concerns government purchases of milk quota. As from 1998, half of the quota purchased by the Agricultural Marketing Board is permanently withdrawn from the market. Government purchases henceforth affect the total amount of quota rights held by farmers.

The base ***deficiency payment*** for cow's milk was reduced by 44 per cent while the deficiency payment for goats' milk was raised by 51 per cent. The regional deficiency payment for milk was increased, the size of the increase depending on the production zone. The deficiency payment for wool was also slightly raised. A regional deficiency payment for eggs was introduced in western and northern parts of the country. The quality-based deficiency payment for potatoes was abolished.

Area and animal headage payments were raised for most farm acreage classes and animal varieties. *Area payment* rates decline with the number of hectares and are differentiated by region. The payment for the first 10 hectares of grassland was increased by around 3 per cent in some of the regions. The payments for cereals were raised in all regions by a fixed amount equivalent to between 1 and 2 per cent of the previous rate. The area payment for potatoes was increased by a fixed amount in the majority of regions. For the first 6 hectares, the increase amounted to 45 per cent, for the following 6 hectares to 130 per cent, and for any area above 12 hectares the payment was granted for the first time. The payment for vegetables was raised by between 10 and 100 per cent depending on the size class and the region. One-off payments of NKr 100 (US$13) per hectare of cereals and NKr 650 (US$86) per hectare of other agricultural land were also provided.

The ***headage payment*** rates decrease with the number of animals up to a certain size limit, beyond which no payment is made. For dairy cows, suckler cows and male cattle, the payments were raised by a fixed amount irrespective of the size class, implying that in relative terms the increases were larger for the upper size classes. The percentage increases ranged from 5 to 33 per cent for dairy cows, from 9 to

38 per cent for suckler cows and from 5 to 11 per cent for male cattle. For milk goats, sheep and suckler goats the payment rates for the smallest size groups were raised by the largest amount even though this is not reflected in the percentage increases. For milk goats, the increases were between 8 and 10 per cent and for sheep and suckler goats they ranged from 47 to 90 per cent. The payment rate for suckler pigs was raised by 3 per cent and the rate for slaughter pigs by 9 per cent. In addition, farmers received one-off payments of NKr 80 (US$11) per milk goat for up to 125 goats and NKr 130 (US$17) per dairy cow for up to 25 cows.

Trade. Norway has met all its WTO commitments to date, although some of the tariff-rate quotas continue to be under-utilised. Negotiations with the EU over a reduction in agricultural trade barriers within the European Economic Area agreement continued. Negotiations took place between the EFTA countries and the Palestinian Authority over an interim free trade agreement concerning trade in some agricultural products. The agreement is scheduled to come into force in 1999. A free trade agreement between the EFTA countries and Morocco is also expected to enter into force in 1999.

Expenditures on ***agri-environmental measures*** increased by 8 per cent. In an attempt to achieve a better targeting of agri-environmental measures, farmers and municipalities were encouraged to develop, in a co-operative way, local plans that identify environmental protection needs and propose suitable actions. The government allocated NKr 12 million (US$1.6 million) to support this process. The Agriculture Ministry and the Environment Ministry decided on a new action plan to reduce the health and environmental risks of pesticide use in agriculture. This plan, which covers the period 1998-2002, consists of a package of measures with a strong educational, training and research component. It also includes a shift in the pesticide levy from a percentage of the sales value to a levy that is based on a combination of area treated and dose applied, as well as other health and environmental risk factors. Moreover, the size of the levy will be substantially increased. A requirement for farmers to draw up fertiliser and manure plans for their farms was introduced, and a minimum period was specified during which cattle must be allowed to graze outdoors.

An exercise to ***monitoring landscape,*** which will cover all regions of the country in a 5-year inventory cycle, was started. The monitoring system, which includes such elements as land cover and linear landscape elements, biodiversity, cultural and historical buildings and structures, accessibility and other aesthetic values, is based on land samples of one square kilometre and uses aerial photos, field controls and farm statistics. Changes in landscape will be recorded in the second inventory cycle.

An ***early retirement scheme*** for farmers was introduced. The programme, which applies from age 62, provides annual payments of NKr 85 000 (US$11 266) per person or 1.6 times this amount for a family farm. It requires that the retiree has had an average annual farm income of at least NKr 90 000 (US$11 928) per year during the past five years. Funding for the ***farmer replacement schemes,*** which cover the costs of hiring temporary replacements for farmers during holidays and sickness, was increased. An additional ***subsidy for young farmers*** was introduced and the existing ***installation grant*** was increased. Female farmers receive higher subsidies than their male counterparts under these programmes. The *interest rate* charged on loans from the State Bank for Agriculture was raised from 4.3 per cent to 5.9 per cent. At the same time, the market interest rate increased from about 4.5 per cent to around 9.5 per cent. The ***farm investment tax*** was abolished.

Poland

Main policy instruments. Transfers to agriculture are provided largely through market price support by means of import tariffs, complemented by a system of intervention purchases by the Agricultural Market Agency (AMA). Market intervention through minimum prices applies mainly to wheat, rye and milk. For meat, sugar, potato starch, honey, linen and wool, the AMA may also intervene in the market by purchasing or selling products depending on internal market conditions. Price support in conjunction with a production quota system and export subsidies apply to sugar. Inputs to stimulate productivity in agriculture (certified seeds, seed potatoes, new animal breeds) and to prevent further increases in soil acidity (lime use and transportation) are subsidised. The Agency for Restructuring and Modernisation of Agriculture (ARMA) provides credit subsidies on loans to farmers for purchasing farm inputs, for modernisation

and restructuring of the farming and agro-food processing sectors, as well as for the development of basic rural infrastructure.

Support to agriculture (Tables III.53-55, Figure III.13). The economic transition process initiated in 1989 began with the liberalisation of food prices. The result was that in the period 1989-1991 farmers were implicitly taxed, as domestic prices were lower than world prices. With border measures and new market support mechanisms in place, support to agriculture as measured by the PSE has tended to increase up to 1996, especially market price support (MPS). After a decline of about 10 per cent in 1997, the total PSE increased by about 17 per cent in 1998, mainly due to a greater decline in world prices than in producer prices for grains and milk. Market price support accounts for nearly 90 per cent of the PSE, the remainder being payments based on input use. In 1998, support to producers, as measured by the percentage PSE, increased by 4 percentage points to 25 per cent, which is below the OECD average, and equivalent to a quarter of total gross farm receipts. In other words, total gross farm receipts (including support) were one-third higher than at world market prices, without budgetary support, as indicated by a producer NAC of 1.33.

The changes in market price support were mirrored in changes in the CSE. Consumers were implicitly subsidised in 1989-1991, but have been implicitly taxed since 1992, as measured by the CSE. The share of consumption expenditure due to support to producers, as measured by the percentage CSE, increased to 22 per cent which is close to the OECD average in 1998. Or in other words, consumption expenditures on domestically produced commodities were 28 per cent higher than at world market prices, as estimated by the consumer NAC. Support to general services provided to agriculture has increased gradually, as measured by the GSSE. However, in 1998, the percentage GSSE shows that, despite the need for improving efficiency of the agri-food sector, only 11 per cent of the total support to agriculture was provided to general services to agriculture. Overall, transfers from taxpayers and consumers, as measured by the TSE, increased by 16 per cent to about ZL 15 billion (US$4 billion) in 1998, and accounted for about 3 per cent of the GDP.

Policy Developments

Cereals. Minimum support prices for wheat and rye were increased by over 10 per cent in 1998 (Table II.23), but the producer price of wheat is estimated to have fallen by around 6 per cent. From August 1998, intervention purchases of grains, SMP and butter are triggered when market prices of these products are 90 per cent or less of the intervention prices during 6 days. In 1998, intervention purchases covered about 1.5 million tonnes of grains, 80 per cent of which were purchased by domestic enterprises under a new intervention scheme. Enterprises, selected on a tender basis, were obliged to: purchase grains at prices not lower than intervention prices; pay farmers within two weeks after delivery; and store the purchased grains until the end of November 1998. Having fulfilled these requirements, the enterprises received a payment, established on a tender basis, not exceeding Zl 90 (US$26) per tonne for wheat and Zl 60 (US$17) per tonne for rye. The enterprises also received a payment for storage which, also fixed on a tender basis, could not exceed Zl 5 (US$1) per tonne and per month of storage, for a maximum of three months. These payments reached a total of Zl 120 million (US$34 million) in 1998.

Using the "special safeguard clause", additional import levies covering the difference between a threshold price of Zl 569 (US$163) per tonne and the import price of wheat were imposed between August and the end of 1998. In January 1998, import tariffs on maize imported from Hungary were raised from zero to 20 per cent. However, between April and the end of 1998, maize imports from Hungary were made at zero tariff within a quota of 1 300 tonnes. Producer prices for wheat and maize decreased, but market price support increased due to a larger decline in world prices of these commodities.

Sugar. The minimum selling price for sugar (on which the buying price for sugar beet is based) was increased by 14 per cent in 1998 (Table II.23). The sugar quota for domestic use (quota A) was increased by 1.2 per cent to 1.65 million tonnes in 1998, but the quota for subsidised export (quota B) was reduced by 4 per cent to 109 100 tonnes in 1998. Quantities exported with subsidies increased by 23 per cent to 176 000 tonnes in 1997, but they have declined by 8 per cent to 162 000 tonnes in 1998, the maximum quantity under the WTO commitments for this year. Using the "special safeguard clause", the 40 per cent preferential import tariffs on sugar imported from the Czech Republic were changed to 40 per cent with a minimum of ECU 170 (US$49) per tonne. The producer price for sugar beet rose, and the world price

Table II.23. **Poland: Administered prices**

Product	1997/98		1998/99		Change in Zl 1997/98 to 1998/99 %
	Zl/t	US$/t	Zl/t	US$/t	
Wheat[1]	460	140	510	146	11
Rye[1]	320	98	360	103	12
Sugar[2]	1 500	457	1 710	489	14
Milk[3]	550	168	610	174	11

1. Minimum prices for crop years (April to March).
2. Minimum selling price for the period October to September.
3. Minimum purchasing prices per 1 000 litres for the period May to April.

Source: Ministry of Agriculture and Food Economy, Warsaw, 1999.

declined, resulting in an increase in market price support and a PSE which, at 49 per cent, is the highest for any commodity in Poland.

Dairy and livestock. The minimum purchase price for *milk* increased by over 10 per cent (Table II.23), but the producer price is estimated to have increased by only about 1 per cent, while the world price decreased by over 12 per cent in 1998. As a result, support to milk as measured by the PSE increased by 11 percentage points to 22 per cent, which nevertheless is one of the lowest in the OECD. In 1998, additional import taxes (safeguard measures) could be charged if threshold quantities or prices were reached on imports of certain products, including *beef*, *pig* and *poultrymeat*, *butter* and *eggs*. As from October to December 1998 an additional import levy raised by 20 percentage points to 80 per cent of the tariff rate applied to imports of *pork*, as imports exceeded a threshold quantity of 39 000 tonnes. The introduction in February of intervention purchases for pigmeat put a halt to the decline in producer prices, and by the end of June some 54 000 tonnes had been put into intervention stores. Intervention purchases of pigmeat and processed meat increased afterwards due to a collapse in exports to Russia. PSE is estimated to have decreased for all these products, except for eggs.

Inputs. Payments for the use of high-quality seeds have decreased by over 1 per cent to Zl 125 million (US$36 million), and those for the use of high quality animals for breeding were also reduced by over 4 per cent to Zl 160 million (US$46 million) in 1998. Moreover, payments for the use of lime fertiliser declined by half to Zl 100 million (US$29 million) in 1998, but in regions where these payments were not used in 1997 due to floods, the payment per tonne was increased by 15 per cent. With an average of about 90 kg per hectare of nutrient use, the use of industrial Fertilisers is still only about half of the level recorded in 1989. But the total use of industrial Fertilisers has been increasing, partly due to preferential credit supplied to farmers for this purpose.

Trade. In 1998, Poland introduced a comprehensive system of thresholds for agricultural imports, in accordance with the "Special Protection Clause" of the Uruguay Round agreement. Additional import levies will be automatically triggered if the volume of imports in the last seven months of the year exceed a certain level, or if prices fall below a threshold price. The system could affect most crops and livestock products. In the 1998 tariff schedule under WTO, Polish bound tariffs were reduced by between 0.8 and 2 percentage points for most products. Moreover, tariff quotas were increased, although within quota tariff rates were not changed. For example, tariff quotas increased by around 10 per cent for beef, pork, dairy products, processed eggs and wheat flour, 12 per cent for processed vegetables, 16 per cent for poultry and 33 per cent for sweeteners. However, CEFTA preferential tariffs were raised for cereals and sugar (see above) and for tomato paste. For the latter product, the 11 per cent preferential tariff was raised to 60 per cent in January 1998, but as from April a duty-free tariff quota of 3 000 tonnes was applied.

The State Treasury Agricultural Property Agency has continued the ***privatisation of land*** of former state farms. From the 4.6 million hectares mid-1998 taken over by the agency, only some 20 per cent was sold to the private sector, the rest was leased. Public expenditure to purchase farms from producers wanting to receive a pension remained stable at Zl 1 million (US$0.3 million) in 1998. Public expenditure for the

farmers' social system increased by 17 per cent to about Zl 15 billion (US$4 billion) in 1998. Public expenditure for the Agricultural Markets Agency declined by 2 per cent to Zl 331 million (US$95 million) in 1998.

A ***"Medium-term Strategy for Agriculture and Rural Development"*** was approved in April 1998, with the main objectives of: improving farmers' income situation; enhancing competitiveness on domestic and foreign markets; improving living and working conditions of rural area inhabitants; and preparing for integration with the European Union. The main instruments to be used will include: introduction of Value Added Tax on agricultural products; tax allowances and exemptions, including for farmers off-farm activities; pre-accession and credit support measures for modernisation of the agro-food sector; support for the formation of market institutions. The EU pre-accession funds would be one of the sources of finance.

Switzerland

Main policy instruments. In 1998, Switzerland used border tariffs, price support and supply controls, and direct payments to support farmers' incomes. Imports into the country continued to face high tariff barriers, and surplus production of dairy products was sold abroad using export subsidies. Farmers received state-guaranteed prices for milk, bread grains, oilseeds, and sugar beet, but were subject to production quotas and "guaranteed quantity" ceilings for these commodities. Direct payments were granted to supplement farmers' receipts, to encourage agricultural producers to maintain farming activities in mountainous areas, and to remunerate agri-environmental services. Budgetary payments were also used to reduce the costs of domestic produce for agro-food consumers, and thereby to mitigate the effects of the agricultural price support policies. A comprehensive agricultural reform programme ("AP 2002"), comprising reforms in market organisation (including the gradual elimination of all price controls) as well as the use of public funds, was adopted by the Swiss Parliament in April 1998, and was implemented from January 1999 (as described in Part III).

Support to agriculture (Tables III.56-58, Figure III.14). Total PSE increased during 1998, mainly due to an increase in market price support. The latter was caused by the sharp fall in world market prices for most agricultural commodities. Domestic prices fell also, but not to the same extent as prices on the world market (Figure III.14). Border protection remained high, with the producer NAC indicating that total gross farm receipts were on average 270 per cent higher than at world market prices without budgetary support. The amount of direct payments to agricultural producers stayed virtually unchanged, even though some shifts between programmes and categories occurred (see below). Overall, the percentage PSE increased from 68 in 1997 to 73 in 1998. Support to agricultural producers in Switzerland thereby continues to be more than twice as high as the OECD average.

GSSE, which accounted for 5.5 per cent of TSE in 1998, continued its medium term decline as outlays for investments in agricultural infrastructure and miscellaneous agricultural expenses of subnational entities declined. The percentage CSE increased from 55 in 1997 to 62 in 1998. This increase was due to domestic policy measures not fully allowing consumers to benefit from the lower world market prices. Consumption quantity remained virtually unchanged (Figure III.14). Aggregate TSE went up from SF 8.6 billion (US$5.9 billion) to SF 9.0 billion (US$6.2 billion), which corresponded to 2.4 per cent of Switzerland's GDP.

Policy developments

Support prices for several agricultural products were reduced in 1998 compared to the previous year. The state guaranteed prices for bread wheat and rye were lowered by 5 per cent and 7 per cent respectively, and target prices for barley, oats, and maize were reduced by between 3 and 5 per cent (Table II.24). Market prices for pork fell by about a third during the second half of 1998, as domestic supplies increased and cheap pork imports entered the Swiss market under WTO tariff rate quotas.

With the phasing in of the new agricultural policy framework "AP 2002" in 1999, all price guarantees are being suppressed except for bread wheat, where the state will still acquire the entire harvest at guaranteed prices during the next two marketing years. The guaranteed price for milk was converted into a non-binding target price, which was set at SF 770 (US$531) per tonne. Milk quotas are becoming tradable within but not between the mountainous and lowland zones. The area limitations on oilseed production

were eliminated, and the sugar production quota was fixed at 185 000 tonnes. The state guaranteed price for sugar beet will be replaced by a procurement price determined by the interprofessional sugar organisation, and reduced from SF 120 (US$83) to SF 112 (US$77) per tonne.

Table II.24. **Switzerland: Policy prices**

	1997		1998		Change in SF %
	SF/t	US$/t	SF/t	US$/t	
Guaranteed prices					
Wheat[1, 2]	940	648	890	614	–5.3
Rye	790	545	740	510	–6.8
Rapeseed	1 650	1 138	1 500	1 034	–9.1
Sugarbeet[3]	120	83	120	83	0
Milk[2]	870	600	870	600	0
Target prices					
Barley	525	362	502.5	347	–4.3
Oats	485	334	462.5	319	–4.6
Maize	545	376	530	366	–2.8
Beef[4]	4 300	2 966	4 300	2 966	0
Pigmeat	4 000	2 759	4 000	2 759	0
Sheepmeat	3 200	2 207	3 200	2 207	0

1. Class 1b.
2. Price before deduction of producer levy.
3. Sugar content of 16 per cent.
4. Liveweight, class T.

Source: Federal Office of Agriculture, Bern.

Budgetary payments. In 1998, the last year before the implementation of large-scale reforms under "AP 2002", payment rates for most programmes remained unchanged. The only alterations concerned reductions in the base farm payment and a substantial increase in the price supplement for milk used for cheese production (Table II.25). As a result, budgetary outlays for complementary direct payments,[30] which include expenditures for the base farm payments, decreased, while public expenses for production directing payments, which comprise the price supplement for milk used for cheese production, increased (Table II.26). Also, outlays for ecological compensation rose, as participation in programmes, such as maintenance of extensive meadows, floral fallows, and tall fruit trees, went up. Overall, budgetary outlays for direct payments increased by 2.1 per cent between 1997 and 1998, with the 18 per cent surge in production directing payments being mostly responsible for the aggregate budget cost expansion.

Under AP 2002, the system of direct payments is being reformed, starting in 1999. Farmers are only entitled to receive payments if their production methods satisfy environmental standards equivalent to the previous "integrated production" criteria. The old integrated production programme was suppressed, and the funds were allocated to other programmes. Complementary direct payments have been consolidated into area and headage payments, with more uniform payment rates across crop and animal species than in previously existing programmes of similar type. Moreover, the eligibility criteria for environmental programmes were changed such that, for example, extensively cultivated border strips of land can receive payments under the floral fallow programme. Also, a new compensation programme for water protection measures was introduced. With respect to production directing payments, the non-silage premium paid to milk producers who refrain from feeding silage to their cows in order to allow for speciality cheese making from raw milk is henceforth granted throughout the entire year, instead of just being paid during the winter months. Furthermore, the price supplement for milk used for cheese production is to be increased in stages from SF 120 (US$83) to SF 200 (US$138) per tonne of milk between 1999 and 2002. This price supplement is, as in previous years, paid in part to dairy farmers to raise their milk revenues, and in part to cheese producers to help them improve the competitiveness of Swiss cheese on domestic and international markets.

Table II.25. **Switzerland: Direct payment rate**

Type of payment	Basis for payment	1997		1998	
		SF	US$	SF	US$
Complementary direct payments					
Base farm payment[1]	Whole farm	2 500-4 000	1 724-2 759	2 000-3 000	1 379-2 069
Supplementary farm payment	Livestock farm	2 700	1 862	2 700	1 862
Base area payment	Hectare	380	262	380	262
Supplementary area payment for meadows[1]	Hectare	180-290	124-200	180-290	124-200
Payments in difficult production locations					
Holding of livestock in mountainous areas[1]	Number of animals	230-1 500	159-1 034	230-1 500	159-1 034
Farming on steep slopes[2]	Hectare	370-510	255-352	370-510	255-352
Summer pasturing[3]	Number of animals	10-300	7-207	10-300	7-207
Ecological payments					
Ecological compensation					
• extensive meadows and litter areas[1]	Hectare	450-1 200	310-828	450-1 200	310-828
• floral fallow land	Hectare	3 000	2 069	3 000	2 069
• extensive meadows on set-aside land	Hectare	3 000	2 069	3 000	2 069
• low-intensity meadows[3]	Hectare	300-650	207-448	300-650	207-448
• tall fruit trees	Number of trees	15	10	15	10
Integrated production[4]	Hectare	430-1 200	297-828	430-1 200	297-828
Organic farming[4]	Hectare	530-1 800	366-1 241	530-1 800	366-1 241
Controlled holding of animals in open air[3]	Number of animals	120-240	83-66	120-240	83-66
Animal welfare through housing systems[3]	Number of animals	60-120	41-83	60-120	41-83
Extensive cereal farming	Hectare	500	345	500	345
Extensive farming on dryland and litter areas[1]	Hectare	450-1 500	310-1 034	450-1 500	310-1 034
Production directing payments					
Acreage premiums for coarse grains[3]	Hectare	770-1 260	531-869	770-1 260	531-869
Green fallow	Hectare	3 000	2 069	3 000	2 069
Production of renewable raw material[3]	Hectare	1 500-3 000	1 034-2 069	1 500-3 000	1 034-2 069
Holding of cows whose milk is not marketed[5]	Number of animals	400-1 250	276-863	400-1 250	276-863
Non-silage premium	Tonnes of milk	40	28	40	28
Price supplement for milk for cheese production[6]	Tonnes of milk	70	48	120	83
Social payments					
Child allowance for small-scale farmers[1]	Number of children	1 920-2 160	1 324-1 490	1 920-2 160	1 324-1 490
Child allowance for farm workers[1]	Number of children	1 920-2 160	1 324-1 490	1 920-2 160	1 324-1 490
Household allowance for farm workers	Household	1 200	828	1 200	828

1. Payment rate varies with the altitude of the farming location.
2. Payment rate varies with the gradient of the land.
3. Payment rate varies by species.
4. Payment rate varies by land use (meadow, cropland, orchard).
5. Payment rate varies with herd size.
6. Payment is partly granted to cheese factory operators.

Source: Federal Office of Agriculture, Bern.

Table II.26. **Switzerland: Budgetary outlays for direct payments**

Type of payment	1997		1998p		Change in SF %
	SF mn	US$ mn	SF mn	US$ mn	
Complementary direct payments	**872.3**	**601.6**	**809.2**	**558.1**	**–7.2**
Payments for farming in difficult production locations	**425.8**	**293.7**	**432.0**	**297.9**	**1.5**
of which:					
Holding of livestock in mountainous areas	261.9	180.6	270.0	186.2	3.1
Farming on steep slopes	97.3	67.1	102.0	70.3	4.8
Summer pasturing	66.6	45.9	60.0	41.4	–9.9
Ecological payments	**766.4**	**528.6**	**807.0**	**556.6**	**5.3**
of which:					
Ecological compensation	107.2	73.9	144.0	99.3	34.3
Integrated production	500.9	345.4	500.0	344.8	–0.2
Organic farming	47.5	32.8	50.0	34.5	5.3
Controlled holding of animals in open air	44.4	30.6	46.0	31.7	3.6
Animal welfare through housing systems	9.5	6.6	10.5	7.2	10.5
Extensive cereal farming	47.3	32.6	45.5	31.4	–3.8
Extensive farming on dryland and litter areas	9.6	6.6	11.0	7.6	14.6
Production directing payments	**349.2**	**240.8**	**412.9**	**284.8**	**18.2**
of which:					
Acreage premiums for coarse grains	52.1	35.9	53.0	36.6	1.7
Green fallow	8.7	6.0	15.0	10.3	72.4
Production of renewable raw material	5.6	3.9	7.2	5.0	28.6
Holding of cows whose milk is not marketed	93.4	64.4	89.7	61.9	–4.0
Non-silage premium	63.5	43.8	64.0	44.1	0.8
Price supplement for milk for cheese production	125.9	86.8	184.0	126.9	46.1
Social payments	**142.7**	**98.4**	**147.1**	**101.4**	**3.1**
of which:					
Child allowance for small-scale farmers	119.2	82.2	120.4	83.0	1.0
Child and household allowances for farm workers	23.5	16.2	26.7	18.4	13.6
Total	**2 556**	**1 763**	**2 609**	**1 799**	**2.1**

p: provisional.
Source: Federal Office of Agriculture, Bern.

Outlays for ***ecological direct payments***[31] increased by 5.8 per cent in 1998, as participation in the different programmes went up. Environmental payments thereby accounted for almost 30 per cent of total direct payments. In January 1999, new cross-compliance requirements were introduced, so that all farmers have to satisfy a set of environmental criteria if they want to receive direct payments. Moreover, annual reviews of the environmental performance of agriculture will be launched in 1999. These evaluations use agri-environmental indicators to determine to which extent objectives with respect to a reduction of emissions from agricultural activities and an improvement in biodiversity have been attained. In addition, the social situation of rural communities, in particular changes in certain regions and among different farm types, will be monitored. A first report from the Federal Office for Agriculture is scheduled to be published in 2000.

From January 1999, nation-wide uniform definitions and ***standards for organic farming*** have been applied. This framework change comprises an increase in the permissible content of conventionally produced ingredients in organic farming products from 5 to 10 per cent. The adjustment is in line with corresponding regulations in the European Union.

Trade. Decisions were taken during 1998 to dismantle the state sanctioned cheese and butter organisations, which largely controlled foreign trade in dairy products. From May 1999 onwards, cheese and butter producers will be allowed to trade directly with partners abroad. With respect to non-dairy live-

stock trade, concern has repeatedly been expressed over imports of agricultural commodities that are produced with methods that are illegal in Switzerland. In particular, proposals have been put forward for the mandatory labelling of eggs that have been produced by battery hens, and beef that is derived from animals fed with hormones or antibiotic performance stimulators. A decision by the Swiss government on the issue has been suspended.

With the formal deregulation of the Swiss agro-food market under AP 2002, product specific co-operatives and interprofessional organisations play a more important role in the ***management of agricultural markets.*** In the areas of product quality, sales promotion, and supply management, measures approved by at least 60 per cent of the members of an interprofessional or producer organisation can be declared obligatory by the Swiss government for all producers. However, such arrangements do not involve any financial obligation by the government. Decisions will be made on a case-by-case basis.

Turkey

Main policy instruments. In the past decade, support has mainly been provided through price support and payments based on input use. Import tariffs, complemented in the case of cereals, sugar beet and tobacco by administered prices, support domestic production. The sanitary ban on all imports of livestock is continuing for the third consecutive year, concurrently with high import tariffs. Export subsidies continue to apply to fresh and processed fruits and vegetables and derived food products, poultrymeat, milk powder and eggs. The government has been heavily involved in the marketing of crops. Sugar beet production is controlled by a system of contracting. In 1998, a government purchase quota was introduced for sugar beet. Interest concessions and other input subsidies, particularly for Fertilisers, are important. The Government plays a large role in investment in infrastructure, especially irrigation works. Compensation has been paid to consumers to partly cover the burden imposed on them through higher market prices. Privatisation in the agro-food sector has made no progress in the past few years. Most farmers are exempt from income tax.

Support to agriculture (Tables III.59-61, Figure III.15). Support, as measured by the percentage PSE, has increased steadily since 1996, reaching 39 per cent in 1998, thus exceeding for the first time since 1986, the OECD average. This is mainly the result of the increase in market price support, and to a much lesser degree to increased production. Border protection increased in 1998 through higher import tariffs for cereals and livestock commodities. However, caution should be exercised in the interpretation of changes in market price support, especially in nominal terms, because of the depreciation of the Turkish lira, the very high level of inflation and the lag between world and domestic price adjustments. An increase in subsidies to input use also partly contributed to the overall growth in support. Total gross farm receipts including support, as measured by the producer NAC, were 65 per cent higher than at world market prices with no budgetary support.

As a result of border protection (MPS), consumers were implicitly taxed by 33 per cent as expressed by the percentage CSE. Consumption subsidies, in the form of budgetary payments, such as those to cover losses incurred by state-owned enterprises and Agricultural Sales Co-operative Unions (ASCU) in their trading operations, partly offset the increase in Market transfers. Consumption expenditure was on average 50 per cent higher than at world prices, as shown by the consumer NAC of 1.50 in 1998.

Historically, general services have played a very small role in support, at around 5 per cent of total support. The only services provided until 1995 were research and development and inspection. Since 1995, the financial costs associated with price premia for cotton have grown steadily. This was mainly the result of high inflation and interest rates on unpaid debt of the Treasury to Agricultural Bank for premia payments to producers. In 1998, these financial costs reached more than 98 per cent of the General services support estimate and around 30 per cent of total support; as a result total, support grew at a much faster rate than PSE during this period.

Policy Developments

Crops. Support prices for *cereals* (wheat, barley, rye, oats and maize) were set at 60 per cent higher in 1998 than in 1997 – well above world prices – (Table II.27) and cash purchases by the authorities contin-

ued. The cash purchases, in a high inflation context, again led to the purchase of a large volume of grains by the Turkish Grain Board (TMO), far exceeding the volume expected. Consequently the Board exported grains, mainly wheat and barley, at a loss. The announced support price for *sugar beet* was increased by 50 per cent compared to 1997, and was well above world prices. The Price Support and Stabilisation Fund (PSSF) extended new concessional loans (at a rate 58 percentage points lower than commercial rates) to Agricultural Co-operatives through the Agricultural Bank (Z.B.). *Hazelnuts*, *cotton* and *sunflower* are the main commodities which benefit from these loans. In 1998 approximately TL 131 trillion (US$503 million) was lent by the PSSF to the ASCUs, compared to TL 93 trillion (US$614 million) in 1997. The Agricultural Bank also lends money to farmers at rates 40 per cent below commercial rates. The quota system by which the area planted to tobacco was limited was removed in the 1997 crop-year, therefore premium payments for *tobacco* ceased in 1998. But support prices were raised by more than 20 percentage points above inflation. The programme to improve *tea* plantations was extended until 2004. In this programme payments are made to producers for pruning part of their tea plantations. A purchasing quota was introduced for *sugar* beet and the in-quota volume produced would receive a guaranteed price. However, the volume of sugar produced that is eligible for the guaranteed price was set at levels equal to expected production, and thus the quota is not likely to influence the volume of production in 1998.

Livestock. A sanitary ban on imports of *livestock* and *meat products* has been in place since August 1996. Decrees regulating imports of meat, meat products and live animals have been regularly published, since May 1996. Following these decrees, imports of live animals (dairy and beef cattle, sheep and goats and poultry) and meat (beef, sheep and goat and poultry) are severely controlled and no imports took place in 1998. With a view to restructuring the livestock sector, a new policy was announced at the end of the year. This programme is targeted to livestock development. The major lines of this plan are to allow imports of breeding cattle and to enhance production of forage crops.

Inputs. Some of the cost of the operation and maintenance of ***irrigation schemes*** operated by the State Hydraulic Works (DSI) continued to be transferred to user associations. These associations calculate the operation and maintenance charges on both area irrigated and crops cultivated according to estimates of quantities of water used. In schemes managed by the DSI, users pay an annual fee approved by the government, but this fee has not been adjusted for inflation since 1985, and is therefore negligible. Furthermore the collection rate from farmers is very low.

Farmers continue to benefit from ***concessional loans*** at highly subsidised rates; in 1998 the rates were 41 and 52 percentage points below commercial rates for crops and livestock respectively. Farmers' co-operatives benefited from even lower interest rates for the purchase of selected commodities. In 1998, with a change in the implementation of ***subsidy to Fertilisers,*** the rate of subsidy was below 40 per cent of buying prices, depending on active ingredient and with the aim of encouraging the use of Fertilisers. The subsidy was paid to fertiliser producers, distributors and importers on presentation of farmers bills. ***Pesticides*** were also subsidised, with farmers being refunded 20 per cent of the price. This subsidy takes the form of a refund through the Agricultural Bank to farmers, on presentation of receipts for the purchase of pesticides. Farmers also benefit from subsidies for the purchase of ***hybrid seeds*** for specific crops (sunflower, rice, soybeans, alfalfa, sainfoin, cow vetches and other fodder crops). This subsidy is paid to the seed producers by the Agricultural Bank.

Trade. As well as the *sanitary ban* on imports of livestock and meat products previously referred to, *import tariffs* continue to apply to agricultural commodities (grains, livestock and livestock products). These tariffs were increased in 1998 (Table II.28), further insulating the sector from world markets. Tariffs for cereals, varying between 50 to 85 per cent as from mid-1998, were at about one fourth of the bound rates for these commodities in the GATT. Negotiations are on-going with the European Union and EFTA countries to extend existing trade agreements to agricultural commodities. During 1998, ***bilateral trade*** agreements with Romania, Hungary, Lithuania, Estonia, the Czech Republic, Slovakia and Bulgaria became effective. Fresh and processed fruits and vegetables and derived food products, poultrymeat, milk powder and eggs benefit from export subsidies of 10 or 20 per cent of their export values, but a volume limit (from 30 to 100 per cent of quantities exported) is imposed. Export subsidies can take two forms, either a rebate on the producer/exporter's government debt (taxes, social insurance, energy cost or telecommunication bills) or cash payments.

Table II.27. **Turkey: Administered floor prices for cereals, sugar and tobacco**

Product	1997		1998		Change in TL price 1997 to 1998, %
	TL mn/t	US$/t	TL mn/t	US$/t	
Wheat					
Durum, Anatolian	44.55[1]	294	71.55[5]	275	61
Durum, other	37.95[1]	250	60.95[5]	234	61
Hard, white	36.30[1]	239	58.30[5]	224	61
Hard, red Anatolian	33.00[1]	218	53.00[5]	204	61
White barley	24.75[2]	163	39.75[6]	153	61
Rye	24.75[2]	163	39.75[6]	153	61
Oats	24.75[2]	163	39.75[6]	153	61
Maize	29.70[3]	196	47.70[7]	183	61
Sugar beet	11.00[4]	73	16.50[8]	63	50
Tobacco, Aegean A	475.00	3 133	900.00	3 462	89

1. Base prices. Prices were raised above the base by TL mn 2 (US$13) per tonne each month for grain purchased from 1 July to 30 September.
2. Base prices. Prices were raised above the base by TL mn 1.25 (US$8) per tonne each month in July and August and by a further TL mn 1 (US$7) in September.
3. Base prices. Prices were raised above the base by TL mn 1.5 (US$10) per tonne in October and November.
4. Base prices. On the basis of 16 per cent polar sugar, each additional/lower polar level is compensated by a payment/deduction of TL 187 500 (US$1) per tonne.
5. Base prices. Prices were raised above the base by TL mn 2 (US$8) per tonne each month for grain purchased from 1 July to 30 September.
6. Base prices. Prices were raised above the base by TL mn 1.25 (US$5) per tonne each month in July and August and by a further TL mn 1 (US$4) in September.
7. Base prices. Prices were raised above the base by TL mn 1.5 (US$6) per tonne in October and November.
8. Base prices. On the basis of 16 per cent polar sugar, each additional/lower polar level is compensated by a payment/deduction of TL mn 1 (US$4) per tonne.

Source: Government of Turkey, *Resmi Gazete [Official Gazette],* Ankara, 1998.

Table II.28. **Turkey: Import tariffs**

Commodity	Import tariff *(ad valorem)*						
	1/1/97	29/6/97	1/8/97	9/1/98	16/6/98	3/9/98	7/11/98
Wheat	15	30	40	40	40	50	50
Barley	15	20	20	20	20	50	85
Maize	15	35	35	35	20	35	60
Live cattle	70	70	70	115	115	115	115
Live sheep	70	70	70	115	115	115	115
Meat	165	165	165	200	200	200	200
Milk	130	130	130	130	130	130	130

Note: Tariffs are expressed as percentage of c.i.f. value.
Source: Government of Turkey, *Resmi Gazete, [Official Gazette]* various issues, Ankara, 1997 and 1998.

A project considering the use of industrial residues for the ***improvement of agricultural land*** is underway. In 1998 TL 2 trillion (US$7 million) was spent on three ***rural development*** projects.

United States

Main policy instruments. The Federal Agriculture Improvement and Reform Act of 1996 (1996 FAIR Act) provides the basic legislation governing farm policy for the period 1996-2002. The main policy instruments for the crop sector are the predetermined annual Production Flexibility Contract (PFC) payments based on historical enrolled area of contract crops (wheat, maize, grain sorghum, barley, oats, rice and upland cotton), together with minimum price provisions operating through non-recourse loans and marketing loans, and provisions for export subsidies for wheat, feed grains and rice. The price of sugar is supported by a tariff quota, together with provisions for non-recourse loans. Milk and dairy products are supported by minimum prices (to be progressively reduced and eliminated after 1999) and government

purchases of dairy products, and by tariffs, import quotas and export subsidies. Other livestock industries are supported only through border measures, including a tariff quota for beef and export subsidies for pork, poultry, and eggs. Price reductions on farm inputs mainly include credit, energy, water for irrigation, grazing and feed. Environmental programmes are an increasingly important dimension of agricultural policy, focusing on measures to convert highly erodible cropland to approved conservation uses (including long-term retirement), to return farmland back into wetlands, as well as to encourage crop and livestock producers to adopt practices that reduce environmental problems, on a cost-sharing basis. Research and extension are increasingly focused on ensuring sustainable agriculture. Policy measures financed at state level have accounted for less than 4 per cent of the total support estimate (TSE) in recent years. These measures mainly cover extension and technical assistance to farmers, and support to general services for improving and promoting state agricultural products.

Support to agriculture (Tables III.62-64, Figure III.16). As measured by the PSE, support has decreased since 1986-88, in particular due to a marked decrease in payments based on output and area planted for crops. Over the last decade there has been a significant fall in the percentage PSE, although it increased in 1996 and 1998 mainly due to PFC payments for crops exceeding the deficiency payments they replaced. In 1998, the total PSE is estimated to have increased by over 50 per cent. This was mainly due to a significant increase in payments based on output (loan deficiency payments), area planted (crop disaster payments), and historically based support (supplementary PFC payments), as well as to market price support (MPS) for milk. MPS accounted for about half of total support to producers, as measured by the PSE. Nonetheless, at 22 per cent, the percentage PSE is about two-thirds of the OECD average. In other words, with a producer NAC of 1.28, the gross farm receipts (including support) of US farmers were 28 per cent higher than at the world market prices without budgetary support.

The combination of a declining trend in MPS and increasing budgetary support to consumers (including for Food Stamps expenditure, which has been allocated to all agricultural commodities according to their shares in the food budget of households receiving food stamps), has resulted in a declining tax on consumers in the first half of the decade, sometimes becoming a net subsidy in recent years. However, due to the increase in MPS for milk, it is estimated that consumers were again implicitly taxed at 3 per cent in 1998, as measured by the percentage CSE. This was 17 percentage points below the OECD average. US domestic prices are very closely aligned with world prices, and in 1998, consumption expenditure on domestically produced commodities was only 3 per cent higher than at world market prices, as shown by the consumer NAC. Support to general services provided to agriculture, as measured by the GSSE, has decreased gradually over the last decade, representing around 30 per cent of the TSE in 1998. Foreign and domestic food aid included under "Marketing and promotion" accounted for about 80 per cent of the GSSE.[32] Overall, transfers from taxpayers and consumers associated with agricultural policies, as measured by TSE, grew by about 22 per cent in 1998 due to higher consumer and taxpayer transfers, and accounted for about 1 per cent of GDP.

P*olicy Developments*

Crops. Total annual PFC payments for *contract crops* (based on historical enrolled contract area but not related to current plantings) decreased by 10 per cent to US$5.7 billion in 1998, and are scheduled to continue to be reduced progressively to 2002 (Table II.29). However, these payments were supplemented by an additional US$2.9 billion "market loss assistance payment" (provided in proportion to the 1998 PFC payments), resulting in an overall increase of 36 per cent. In addition, "emergency assistance" legislation provided up to US$1.5 billion for crop losses due to natural disasters in 1998, and up to US$875 million for crop losses in any three or more crop years between 1994 and 1998. Farmers can receive payments only under one of these two provisions, whichever provides the higher rate. These provisions include some US$400 million to be used as incentive payments to all farmers to purchase higher levels of crop insurance for their 1999 crops, as well as some amounts to cover losses due to wheat scab and multi-year flooding. Other disaster payments included US$5 million to cotton producers and US$3 million to raisin producers.

Loan rates, which provide a minimum price for contract crops and oilseeds, remained at their 1997 level for most crops, but they were reduced by around 1 per cent for sorghum and barley, and increased

Table II.29. **United States: Main commodity support settings (crop years)**

Commodity	Loan rates US$/t		PFC payments[1] million US$	
	1997	1998	1997	1998
Wheat	94.8	94.8	1 397	1 497
Maize	74.4	74.4	3 384	2 633
Sorghum	69.3	68.5	338	287
Barley	72.1	71.7	113	120
Oats	76.5	76.5	8	9
Rice	143.3	143.3	448	478
Upland cotton	1 144.6	1 144.6	597	637
Soyabeans	193.3	193.3	n.a.	n.a.
Other oilseeds	205.0	205.0	n.a.	n.a.
Sugar	396.8	396.8	n.a.	n.a.
Milk[2]	224.9	221.6	n.a.	n.a.
Total[3]			6 286	5 661

n.a.: not available.
Notes: Crop year periods vary between different commodities. Complete documentation is provided in the OECD CD-ROM: *Producer and Consumer Support Estimates,* Paris, 1999.
1. Annual budgetary amounts for Producer Flexibility Contract Payments to farmers (crop year) allocated among contract commodities (crops for which deficiency payments were previously available) according to percentages specified in the 1996 Fair Act. These percentages were based on commodity shares of projected deficiency payments for 1996-2002 from a baseline of the Congressional Budget Office.
2. Minimum price, calendar years.
3. Calculated from unrounded data.
Source: United States Department of Agriculture, Washington DC., 1999.

by 1 per cent for burley tobacco and 33 per cent for peanuts without quota (Table II.29). The associated loan deficiency payments increased from about US$3 million in 1997 to over US$2 billion, and marketing loan gains increased more than twice to US$350 million in 1998. As domestic prices were, in general, close to world price levels, EEP export subsidies were paid only for barley, and so the level of support for producers of commodities eligible for EEP was essentially determined by the amount of the above payments. However, although export assistance under EEP was minimal, there was an increasing use of the export credit guarantee and food aid programmes. The latter programmes include the Special 1998 Food Aid Initiative with a donation of 2.5 million tonnes of wheat worth US$250 million, and the Russian Aid Package for 1999 with donations including 3.1 million tonnes of commodities (mainly maize, soybean, and wheat) worth US$625 million. In 1998, food aid programmes provided 3.5 million tonnes of agricultural commodities for 67 countries with an estimated value of US$787 million.

The loan rate for *sugar* and the sugar marketing assessment rates (levies on all processed sugar) did not change from their 1996 levels (Table II.29). For the entire fiscal year (FY) 1998 loans were non-recourse (processors can repay the loan by forfeiting the quantity of sugar to the CCC). The raw sugar tariff-rate quota (TRQ) for FY1998 was initially fixed at 1.8 million tonnes, with 1.2 million tonnes immediately eligible for entry. The remaining 0.6 million tonnes being held in reserve for allocation if the projected ending stocks-to-use ratio in each of the months January, March and May was less than or equal to 15.5 per cent. The final total raw sugar TRQ for FY1998 was 1.6 million tonnes. The TRQ for FY1999 was initially fixed at 1.6 million tonnes, with 1.2 million tonnes immediately eligible for entry, and 0.4 million tonnes held in reserve for allocation as in 1998. Domestic and world prices for sugar remained stable, as did the level of support to producers, which at a PSE of 41 per cent, remained the highest rate of support for crops in the US in 1998.

Livestock. The minimum price for *milk* was further reduced by 1.5 per cent to US$222 per tonne in 1998 (Table II.29). Milk producers received US$200 million in "1998 market loss assistance" and US$3 million under the 1998 Disaster Emergency Assistance (indemnity) Program. In addition, US$200 million was paid to livestock producers to compensate for disaster on feed production. The quantities sold under the Dairy Export Incentive Program were 17 per cent below 1997 sales, but the average export subsidy increased by 8 per cent to US$941 per tonne of milk in 1998. After a decrease of 10 per cent in 1997,

the milk producer price is estimated to have increased by 15 per cent in 1998, although the world market price decreased significantly. Market price support and the percentage PSE increased to 61 per cent, the highest rate of commodity support in the US for 1998.

There were no export subsidies for pork and less than 1 per cent of the value of total exports of frozen poultry benefited from export subsidies. The Government purchased US$70 million of pork products for use in domestic food programmes and to help to improve pork producer prices. In addition, 50 000 tonnes of pork were included in a food package for Russia, which is equivalent to about 10 per cent of 1997 exports of pork. Moreover, the Government has also approved pork as a food commodity for international assistance under the Export Credit Guarantee Program. The level of support for all these products remained stable and low at around 3 per cent in 1998.

Inputs. The maximum size of loans eligible for a 90-95 per cent guarantee by the USDA under the Farm Ownership Loan Program (US$300 000) and under the Farm Operating Loan Program (US$400 000) were both raised to US$700 000, subject to a US$700 000 limit per borrower on the combined total amount of loans from both types. However, this limit will vary annually with the index of prices paid by farmers. Moreover, the new legislation removed some restrictions on eligibility for USDA emergency loans that cover production or property losses due to natural disasters. There was also an emergency budget appropriation of over US$31 million made available for the Farm Operating Loan Program.

Apart from the budgetary payments outlined above, the ***Tax and Trade Relief Extension Act of 1998*** also provided benefits to farmers through changes in a number of Federal tax provisions that either are targeted to farmers or will provide significant tax benefits to farmers. These include extending the carryback period for farm losses from 2 to 5 years; delaying taxes on PFC payments until money is actually received; making permanent the income averaging over 3 years; and increasing the deductibility of the health insurance premium for self-employed farmers to 100 per cent in 2003. While these provisions are expected to reduce farm tax liabilities by about US$1 billion over the next 9 years, the tax reduction for FY 1999 is about US$85 million.

Although the PFC Program is still the main source of budgetary payments to farmers, the importance of programmes providing payments for conservation purposes has been increasing. Payments under the ***Conservation Reserve Program*** (CRP) increased by about 12 per cent to US$1.9 billion in 1998, and the area enrolled in the programme increased by about 0.5 million hectares to 12 million hectares. However, new rules introduced in 1998 expanded the CRP eligible area to over 100 million hectares (over two-thirds of the US cultivated cropland), compared with the 57 million hectares of highly erodible cropland eligible in 1985 when the CRP began. The additional eligible land is mostly cropland in federal and state environmental priority areas, cropland adjacent to water bodies, cropped wetlands and adjacent upland, and cropland subject to conservation compliance but not formerly eligible under CRP erodibility criteria.

The ***Conservation Reserve Enhancement Program,*** which is a voluntary federal-state land retirement conservation programme, provides payments in addition to those under the CRP to encourage farmers to remove land from agricultural production for 10 to 15 years. This programme started in 1997 with US$195 million for one state enrolling over 40 000 hectares of riparian buffers, filter strips, and wetland restoration. By the end of October 1998, there were proposals to include 288 000 hectares in the programme at a cost of US$1.7 billion, and 90 000 hectares were actually enrolled. In 1998, some US$105 million was paid to 218 farms under the Farmland Protection Program to protect 22 000 hectares of land with good production potential from being converted to urban uses.

Trade. There was no expenditure on the Export Enhancement Program in FY 1997, and expenditure was US$2.1 million in FY 1998 for one sale of barley and another of frozen poultry. However, the authorised EEP level was increased by 10 per cent to US$550 million in 1999. The total expenditure on export subsidies under the Dairy Export Incentive Program decreased by over 9 per cent to US$110 million in FY 1998. Unused export subsidy commitments for skim milk powder were "rolled-over" from previous years. The total value of export credit guarantees to help foreign countries finance purchases of US farm goods under the Export Credit Guarantee Program rose by 40 per cent to US$4 billion in FY 1998. Overall expenditure on export programmes increased by 70 per cent to US$212 million in 1998. In 1996 and 1997, there was an under-utilisation of tariff quotas determined under the UR agreement, the main exception being raw cane sugar for which the in-quota imports in both years were about 80 per cent higher than the

tariff quota. On December 1998, Canada and the United States agreed to a Action Plan to improve bilateral trade. The plan essentially creates a comprehensive early warning system and consultation process to ensure agricultural trade concerns are addressed in a timely fashion. The US was involved in a number of trade disputes including agriculture during 1998 (see Part II.4).

The ***Agricultural Research, Extension, and Education Reform Act*** of 1998 funds new initiatives to address "critical emergency agricultural issues", including initiatives on: food safety, agricultural genome, natural resource management, agricultural biotechnology, alternative commodity production, and farm profitability. The law authorises grants for high-value agricultural product research and extension activities in order to enhance US commodity competitiveness and increase exports, and grants to promote precision agriculture. The law also provides funds for research, extension, and education programmes to improve the viability of small and medium size dairy, livestock, and poultry operations, and a grant for a multistate wheat scab research project. Research funding for FY 1999 increased 7 per cent for the above activities.

A ***new food safety system,*** the "hazard analysis and critical control points regulatory system" (HACCP), has been introduced to improve the procedures for meat and poultry inspection. Essential elements of this system being phased in between 1998 and 2000 include: all federally and state inspected meat and poultry plants must have a HACCP plan; federally inspected plants must develop written plans for meeting daily sanitation requirements; and tests on raw meat and carcasses will be performed to check for Salmonella and *Escherichia coli*.

Public expenditure on ***domestic food assistance*** programmes fell 6 per cent in 1997, and remained stable at around US$35 billion in 1998. Two-thirds of this expenditure is accounted for by the Food Stamp Program. These programmes help needy people by providing an access to a more nutritious diet, and help farmers by providing an outlet for their production, including through the distribution of foods purchased under commodity price-support and surplus-removal programmes. ***Biodiesel fuel use credits*** for transport fleets burning a fuel-blend of at least 20 per cent vegetable oil and diesel, which help farmers by providing an outlet for oilseeds, cost US$84 million in 1998. Some US$200 million will be allocated in 1999 to support the creation of ***rural co-operatives,*** including farmer-owned co-operatives that process raw crops into value-added products.

4. WTO AND NAFTA TRADE DISPUTE DEVELOPMENTS INVOLVING AGRICULTURAL PRODUCTS

WTO dispute settlement procedures

In the World Trade Organisation (WTO), the Committee on Agriculture and the Committee on Sanitary and Phytosanitary Measures are mandated to review progress in the implementation of the Agreement on Agriculture and the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) respectively. The various notification requirements of members' policies and regular meetings of the Agriculture and SPS Committees can contribute to modify the development of other members' agricultural policies and to avoid conflicts.

In cases of disputes, WTO members have access to a formal dispute settlement procedure, under the WTO Dispute Settlement Understanding (DSU), in which claims on any of the WTO agreements can be examined. The dispute settlement procedure is a central element of the WTO in providing security and predictability to the multilateral trading system. It serves to preserve the rights and obligations of Members and to clarify the existing provisions of those agreements in accordance with customary rules of interpretation of public international law.

The first stage in settling disputes is the holding of consultations between the members concerned. If a mutually acceptable solution cannot be found through consultations, the Dispute Settlement Body (DSB) can be asked to establish a panel to examine the matter. The panel makes an objective assessment of the issues and submits a report to the DSB. The adoption of panel reports is automatic unless there is a consensus for not adopting them. An appeal procedure is provided and decisions of the Appellate Body are also automatically adopted unless there is a consensus not to adopt them. The implementation of panel reports is subject to specific deadlines and, in cases where measures found to be inconsistent are not modified within a reasonable time period, members involved enter in negotiations for developing mutually acceptable compensation. If no satisfactory compensation can be agreed upon, within a fixed period of time determined in the DSU, the affected members may request authorisation from the DSB to apply retaliatory actions.

The Final Act of the Uruguay Round negotiations provides that the WTO Ministerial Conference will complete a full review of dispute settlement rules and procedures within four years after the entry into force of the WTO, (*i.e.* the end of 1998), and take a decision as to whether to continue, modify or terminate such dispute settlement rules and procedures. Following discussions throughout 1998, WTO members agreed to delay the completion of the review for July 1999 which could then be available for consideration at the upcoming WTO Ministerial Conference, scheduled for 30 November to 3 December 1999. Several members have submitted proposals for modifying procedures.

The SPS Agreement requires the SPS Committee to review the operation and implementation of the Agreement three years after the entry into force of the WTO (*i.e.* in 1997), and to submit to the Council for Trade in Goods proposals, as appropriate, to amend the text of the Agreement. At the end of 1997, the Committee has agreed on a procedure to conduct the review and invited Members to submit suggestions. Among the issues considered throughout 1998 were: the implementation of the transparency provisions; the notification process; the special needs of developing countries; technical assistance; the adaptation of SPS measures to regional conditions; and harmonisation and equivalence. There is yet no agreement to the establishment of a deadline for completion of the review.

WTO trade dispute developments

The following paragraphs summarise the nature of the trade disputes involving agricultural products which were submitted to the DSB of the WTO and the efforts made to solve them in 1998 and early 1999. In several cases, consultations or the panel processes are still proceeding.

Requests for consultations

Argentina: countervailing duties on imports of wheat gluten (requested by the European Union). In September 1998, the European Union requested consultations with Argentina regarding the imposition of countervailing duties on imports of wheat gluten originating from the EU. The EU claims that the investigation which led to the imposition of duties exceeded 18 months and thus violates the provision of the Subsidies Agreement. Consultations are still proceeding.

Czech Republic: import duties on wheat (requested by Hungary). In October 1998, Hungary requested consultations with the Czech Republic regarding increased duties on imports of wheat originating from Hungary. Hungary claims that it is the only country against which the increased import duties on wheat are applicable and that the new duties exceed respective bound rates by the Czech Republic. Hungary further invokes the urgency provision of the DSU in view of the temporary application of the increased duties set to expire on 26 April 1999. Consultations are still proceeding.

European Union: differentiated treatment for soluble coffee (requested by Brazil). In December 1998, Brazil requested consultations with the EU regarding duty-free preferential treatment granted under the EU's generalised system of preferences for soluble coffee originating from the Andean Group of countries and the central American Common Market countries. Brazil claims that these preferences adversely affect its soluble coffee exports to the EU. Consultations are still proceeding.

European Union: patent protection for pharmaceutical and agricultural products (requested by Canada). In December 1998, Canada requested consultations with the EU regarding the protection of inventions in the area of pharmaceutical and agricultural chemical products covered under regulations EEC No. 1768/92 and EC No. 1610/96. Canada claims that these regulations are inconsistent with the EU's obligations under Article 27.1 of the TRIP Agreement which prevents discrimination on the basis of field of technology as these regulations only apply to pharmaceutical and agricultural products. Consultations are still proceeding.

European Union: import duties on rice (requested by India). In May 1998, India requested consultations with the EU regarding the alleged restrictions introduced by a regulation establishing a so-called cumulative recovery system for determining import duties on rice. India claims that this regulation will restrict the number of importers of rice from India and will adversely affect its exports. It further claims that this measure violates several Articles of the GATT 1994, the Customs Valuation Agreement, the Import Licensing Agreement and the SPS, TBT and Agriculture Agreements.

European Union: exportation of processed cheese (requested by the United States). In October 1997, the United States requested consultations with the EU regarding alleged export subsidies on processed cheese without regard to the export subsidy reduction commitments of the EU. The United States claims that these export subsidies distort markets and that they may be inconsistent with several provisions of the GATT 1994, the Agriculture and the Subsidy Agreements. Consultations are still proceeding.

Japan: pork imports (requested by the European Union). In January 1997, the EU requested consultations with Japan regarding certain measures affecting imports of pork and pork processed products. The EU claims that these measures may be inconsistent with Japan's obligations under several provisions of the GATT 1994. Consultations are still proceeding.

Korea: inspection procedures for fresh and processed agricultural products (requested by the United States). In April 1996, the United States requested consultations with Korea regarding Korea's customs inspection procedures for fresh and processed agricultural products. The United States claims that such measures restrict imports and may be inconsistent with several provisions of the GATT 1994, the Agreement on Technical Barriers to Trade (TBT) and the SPS Agreement. Consultations are still proceeding.

Korea: restrictions on the distribution of imported beef (requested by the United States). In February 1999, the United States requested consultations with Korea concerning various restrictions on beef imports, on the display of imported beef and the confinement of sales to specialised stores only. The United States claims that such measures are constraining marketing opportunities of imported beef in Korea and that these measures may be inconsistent with several provisions of the GATT 1994, the Agreement on Agriculture and the Import Licensing Agreement. Consultations are proceeding.

Philippines: pork and poultry (requested by the United States). In April 1997, the United States requested consultations with the Philippines regarding the implementation of its tariff-rate quotas for pork and poultry. The United States claims that the delays in permitting access to the tariff-quota quantities and the licensing system used to administer access to the quota may be inconsistent with several provisions of the GATT 1994 and the Agreement on Agriculture. In March 1998, the two parties notified a mutually agreed solution of their dispute.

Slovak Republic: import duties on wheat (requested by Hungary). In September 1998, Hungary requested consultations with the Slovak Republic regarding increased duties on imports of wheat originating from Hungary. Hungary claims that it is the only country against which the increased import duties on wheat are applicable and that the new duties exceed respective bound rates by the Slovak Republic. Hungary further invokes the urgency provision of the DSU in view of the temporary application of the increased duties set to expire on 10 March 1999. Consultations are still proceeding.

Slovak Republic: imports of dairy products and the transit of cattle (requested by Switzerland). In May 1998, Switzerland requested consultations with the Slovak Republic regarding certain measures imposed on the importation of dairy products and the transit of cattle. Switzerland claims that these measures adversely affect its exports of cheese and cattle and violates several provisions of the GATT 1994, the SPS and Import Licensing Agreements.

The United States: tariff-rate quota for groundnuts (requested by Argentina). In December 1997, Argentina requested consultations with the United States regarding the determination of the US tariff-rate quota for groundnut imports. Argentina claims that the restrictive interpretation by the United States is adversely affecting Argentinean exports and further results in violation of several provisions of the GATT 1994, the Rules of Origin and Import Licensing Agreements.

The United States: poultry products (requested by the European Union). In August 1997, the EU requested consultations with the United States regarding a ban on imports of poultry and poultry products originating from the EU. It claims that the grounds for this ban have not been demonstrated and the ban may be inconsistent with several provisions of the GATT 1994, the SPS and TBT Agreements. Consultations are still proceeding.

The United States: imports of cattle, swine and grains (requested by Canada). In September 1998, Canada requested consultations with the United States regarding certain measures imposed by some states prohibiting entry or transit to Canadian trucks carrying cattle, swine and grains. Canada claims that these measures may be inconsistent with several provisions of the SPS, TBT and Agriculture Agreements. Canada further invokes the urgency provision of the DSU in view of the perishable nature of the goods in question. Immediately prior to the beginning of WTO consultations, the concerned measures ceased to apply at the satisfaction of Canada.

The United States: safeguard measures on corn brooms (requested by Colombia). In April 1997, Colombia requested consultations with the United States regarding the application of a safeguard measure on imports of corn brooms. Colombia claims that the adoption of this safeguard measure is inconsistent with the Agreement on Safeguards and several provisions of the GATT 1994. Consultations are still proceeding.

Requests for the establishment of a panel and panel reports

Canada: milk imports and exportation of dairy products (requested by the United States and New Zealand). A panel was established in March 1998 to examine the conformity of Canadian measures in respect of alleged export subsidies on dairy products and the administration of the tariff-rate quota on milk.

The applicants claim that Canadian measures are inconsistent with several provisions of the Agreement on Agriculture, the Subsidies and Import Licensing Agreements. The panel has not yet released its report.

European Union: bananas (requested by Ecuador, Guatemala, Honduras, Mexico and the United States). A panel was established in May 1996 to examine the conformity of EU regulations on the Common Market Organisation for bananas with several provisions of the GATT and other WTO obligations. The report of the panel found that certain provisions of the EU banana import regime were inconsistent with several GATT Articles and WTO Agreements. The panel also found that the Lomé waiver removes the inconsistency with Article XIII of the GATT but not the WTO inconsistencies arising from the licensing system. In June 1997, the EU notified its decision to appeal certain legal interpretations developed by the panel. The Appellate Body upheld most of the panel's findings but reversed some of the original panel's findings relating to the Lomé waiver. The DSB adopted the Appellate Body's report and the panel report, as modified by the Appellate Body's report, on 25 September 1997. In November 1997, the complainants requested that the reasonable period of time for implementation of the recommendations of the DSB be determined by binding arbitration. The Arbitrator found the reasonable period of time would expire on 1 January 1999. In July 1998, the EU Council adopted regulation No. 1637/98 amending regulation No. 404/93 on the common organisation of the market in bananas and in October regulation No. 2362/98 laying down detailed rules for the implementation of their new import regime, both of which to be applied as of 1 January 1999. The United States claimed that proposed amendments are still inconsistent with the EU's WTO obligations and notified the DSB in January 1999 of its intention to exercise its right, in accordance with Article 22 of the DSU, to suspend concessions to the EU on trade of about $US520 million. The EU and several other WTO Members argued that the USA can not seek compensation until a WTO panel has determined, in accordance with Article 21.5, that the new EU measures are incompatible with its obligations. In early February 1999, it was agreed that the original panel would reconvene under Article 21.5. An arbitration process was also initiated to determine the appropriate level of compensation, if any. The Chairman of the DSB also undertook to proceed with informal consultations for dealing with the appropriate interpretation to be given to the Articles 21.5 and 22 and the sequence in which they should apply.

European Union: ban on beef raised with growth hormones (requested by the United States and Canada). Following two separate sets of consultations between the EU and, respectively, the United States and Canada which did not result in a satisfactory outcome, the United States and later Canada requested the establishment of an individual panel to examine the conformity of the EU measures prohibiting the use in livestock farming of certain substances having a hormonal action with several provisions of the GATT, the TBT and SPS Agreements. The report of the panel found that the EU ban on imports of meat and meat products from cattle treated with growth hormones was inconsistent with several provisions of the SPS Agreement. In September 1997, the EU notified its decision to appeal against certain legal interpretations developed by the panel. The Appellate Body upheld the panel's findings that the EU import prohibition was inconsistent with Article 5.1 of the SPS Agreement. It reversed the panel's findings concerning the inconsistency of the EU prohibition with Articles 3.1 and 5.5 of the SPS Agreement. It further reversed the interpretative ruling of the panel on the burden of proof and modified the panel's interpretation of the concept of risk assessment. The DSB adopted the Appellate Body's report and the panel report, as modified by the Appellate Body's report on 13 February 1998. The EU has to comply with the recommendations and ruling of the DSB within a reasonable period of time agreed upon to expire on 13 May 1999.

European Union: poultry products (requested by Brazil). A panel was established in July 1997 to examine the EU regime for the importation of certain poultry products and the implementation by the EU of the tariff-rate quota for these products. The panel found that Brazil had not demonstrated that the EU had failed to implement and to administer the tariff-rate quota for poultry in line with its obligations. In April 1998, Brazil notified its intention to appeal certain legal interpretations developed by the panel. The Appellate Body upheld most of the panel's finding but concluded that the EU had acted inconsistently with Article 5.5 of the Agreement on Agriculture. In July 1998, the DSB adopted the Appellate Body report and the panel report. The EU has undertaken to comply with the recommendations and ruling of the DSB within a reasonable period of time agreed upon to expire on 31 March 1999.

European Union: butter products (requested by New Zealand). A panel was established in November 1997 to examine the EU decision to exclude butter manufactured under some butter-making pro-

cesses in New Zealand from eligibility for New Zealand's country-specific tariff quota established by the EU's WTO Schedule. New Zealand claims that the EU decision is inconsistent with the EU's obligations under several provisions of the GATT and the TBT Agreement. On 24 February 1999, the complainants requested the suspension of the panel proceedings.

India: patent protection for agricultural chemical products (requested by the United States). A panel was established to examine the conformity of India patent protection for pharmaceutical and agricultural chemical products with the Agreement on Trade-Related Intellectual Properties (TRIP). The report of the panel, issued in September 1997, found that India was not in compliance with its obligations under several provisions of the TRIP Agreement. In October 1997, India notified its decision to appeal against certain legal interpretations developed by the panel. The Appellate Body upheld, with modifications, the panel's findings. The DSB adopted the Appellate Body's report and the panel report, as modified by the Appellate Body's report in January 1998. India has undertaken to comply with the recommendations and ruling of the DSB within a reasonable period of time agreed upon to expire on 16 April 1999.

India: patent protection for agricultural chemical products (requested by the European Union). A panel was established in October 1997 to examine the conformity of India patent protection for pharmaceutical and agricultural chemical products with the TRIP Agreement. The panel found that India has not complied with its obligations under the TRIP Agreement by failing to establish a legal basis that adequately preserves novelty and priority in respect of applications for product patents for pharmaceutical and agricultural chemical inventions. The DSB adopted the panel report on 2 September 1998. India has undertaken to comply with the recommendations and ruling of the DSB within a reasonable period of time agreed upon to expire on 16 April 1999.

India: quantitative restrictions on agricultural products (requested by the United States). A panel was established in November 1997 to examine the conformity of quantitative restrictions imposed by India on the importation of a large number of agricultural, textiles and industrial products. Several other Member countries also requested consultations with India regarding these quantitative restrictions. Throughout 1998, India reached a series of mutually agreed solutions with Australia, Canada, the EU, New Zealand and Switzerland. The panel has not yet released its report.

Japan: quarantine of agricultural products (requested by the United States). A panel was established in November 1997 to examine the import prohibition imposed by Japan on each variety of a product requiring quarantine treatment, even if the treatment has proved to be effective for other varieties of the same agricultural product. The panel found that Japanese measures were inconsistent with several provisions of the SPS Agreement. In November 1998, Japan notified its intention to appeal certain issues of legal interpretations developed in the panel report. The Appellate Body circulated its report on 22 February 1999 and upheld the basic findings of the panel report.

Korea: dairy products (requested by the European Union). In August 1997, the EU requested consultations with Korea regarding the imposition of a definitive safeguard measure on imports of certain dairy products. The EU claims that the imposition of an import quota for these products may be inconsistent with several provisions of the Agreement on Safeguard Measures and the GATT 1994. Following a request by the EU, the DSB established a panel in July 1998. The panel has not yet released its report.

Mexico: high-fructose corn syrup (requested by the United States). In the September 1997, the United States requested consultations with Mexico regarding the imposition of provisional anti-dumping measures on imports of high-fructose corn syrup. In October 1998, the United States requested the establishment of a panel to examine the conformity of the Mexican imposition of definitive anti-dumping measures. It claims that these measures are inconsistent with several provisions of the Anti-Dumping Agreement. Following a request by the United States, the DSB established a panel in November 1998. The DSB established a panel in November 1998 and the panel has not yet released its report.

NAFTA dispute settlement procedures

The North American Free Trade Agreement (NAFTA) has established the Free Trade Commission to resolve disputes between Canada, the United States and Mexico that may arise over the interpretation

or application of the NAFTA. Requests put forward to the Free Trade Commission and decisions of panels established to rule on disputes with respect to agricultural products in 1998 and early 1999 are summarised below.

The United States: safeguard measures applied on corn brooms (requested by Mexico). In February 1998, a panel report concluded that the safeguard tariffs applied by the United States on imports of corn brooms from Mexico were based on an injury determination by the US International Trade Commission (ITC) which was not adequately explained. This situation was found to violate the United States' obligations under NAFTA. The safeguard tariffs were initially applied in November 1996.

The United States: sugar export to the United States (requested by Mexico). In March 1998, Mexico requested formal consultations with the United States with the view to clarify the terms of Mexican sugar exports under NAFTA to the United States for the period after October 2000. As consultations did not conclude in a satisfactory outcome, Mexico requested the meeting of the Free Trade Commission to address the issue. The Free Trade Commission has not yet made a decision on the issue.

The United States: imports of cattle, swine and grains (requested by Canada). In September 1998, Canada requested consultations with the United States under NAFTA procedures regarding certain measures imposed by some states prohibiting entry or transit to Canadian trucks carrying cattle, swine and grains. Canada claims that these measures violated the United States' obligations under NAFTA. Immediately prior to the beginning of consultations, concerned measures ceased to apply to the satisfaction of Canada.

NOTES

1. Paragraph 15 of this Communiqué contains the full text of Article 20 of the URAA.
2. All references to "Ministers in this Communiqué also include the Commissioner for Agriculture and Rural Development of the European Communities".
3. Ministers recognised that OECD has done substantial work in this regard.
4. OECD Environment Committee at Ministerial Level, Communiqué [SG/PRESS(91)9].
5. OECD, "Communiqué" PRESS/A(87)27, Paris, 13 May 1987.
6. OECD, *National Policies and Agricultural Trade*, Paris, 1987.
7. See paragraph 16 of the Communiqué cited in note 5, above.
8. OECD, *National Policies and Agricultural Trade*, Paris, 1987.
9. See *Agricultural Policies in OECD Countries*, 1998, OECD, 1998; and *Modelling the Effects of Agricultural Policies*, OECD Economic Studies, Special Issue, No. 13/Winter 1989-1990.
10. Based on work by Professor T. Josling (FAO, *Agricultural Protection: Domestic Policy and International Trade*. Rome, 1973; and FAO, *Agricultural Protection and stabilisation Policies: A framework of Measurement in the Context of Agricultural Adjustment*. Rome, 1975), building on early work by Professor W. Corden, *The Theory of Protection. Oxford University Press*, 1971.
11. In other words, elements in the PSE are, in general, gross transfers to producers because to receive a given payment producers have to produce or plant a specific commodity, or use a specific input, and therefore incur costs, which are not deducted from the amount of the payment, although these costs may absorb a part of the payment.
12. Farm receipts (revenues) are not the same as farm income, which is farm receipts less farm costs.
13. Unlike the others payments to commodities, these payments directly increase farm income by the amount of the payment as producers do not have to incur any specific cost (other than those associated with being a farmer).
14. A payment remunerating farm inputs on condition they are used for producing a non-market good can be seen as a payment associated with constraints on the use of a set of inputs or on the choice of production techniques.
15. Unlike most of the others, these payments directly increase farm income by the amount of the payment as producers do not have to incur any specific cost (other than those necessary to generate an (or the) eligible level of farm income).
16. This also shows that a classification exclusively based on payments per tonne, hectare or animal would not classify such measures in a way helpful for policy analysis.
17. If transfers to agricultural producers provided through two (or more) policy measures are only available as aggregate amounts, an appropriate allocation key should be found to assign them to the appropriate categories; if such a key cannot be found, assign the total to *H. Miscellaneous payments*.
18. Border prices are world market prices, f.o.b. for exported commodities and c.i.f. for imported commodities.
19. Sometimes, part of the budgetary transfer is kept by industry or services (banks) (and not transferred to farmers), and this part should strictly speaking be included in the GSSE. However, as it is not always possible to identify the part that does not accrue to producers, the PSE (GSSE) is over (under)-evaluated to some extent. The same could also be said in the case of other programmes, such as certain schemes of deficiency payments for commodities. That is one of the reasons why a price gap calculation would, in many cases, be the most appropriate. However, the choice of the method to be used will often be dictated by data availability and quality.
20. Sometimes, part of the price gap for farmers is paid by other consumers of the input. For example, other consumers of water finance the price gap for farmers through higher power or water prices paid by other consumers. That is another reason why the price gap calculation would, in many cases, be the most appropriate.

21. The CSE for crops is therefore calculated net of producer contributions, or in order words does not include the share of domestic production used as feed in the sector. In the same way, the aggregate PSE for crops and livestock does not include the share of domestic production used as feed in the sector, but the method shows that the associated support to crops is an implicit tax on livestock products.

22. Tables in Part III with the calculations of these indicators by country explicitly show the amount of the MPS for the set of 13 common commodities and the shares of these commodities on the total value of agricultural production.

23. Gross farm receipts are not the same as farm income, which is farm receipts less farm costs.

24. That is the case of the percentage PSE and CSE as defined above. The GSSE and the TSE are not a part of the total value of farm receipts (as the PSE) nor a part of the total value of consumption expenditure of agricultural commodities (as the CSE).

25. The Fisher ideal index has been developed expressly to deal with large changes in weights when measuring economic aggregates. The Fisher ideal index has been demonstrated to be a "superlative" index, meaning that in situations where quantities produced and consumed undergo large changes between year *t* and *t + 1,* the Fisher ideal index of changes in prices and unit support is the best approximation of the underlying "true" theoretical index. The changes in unit aggregates, in other words, do not suffer a bias.

26. The Laspeyres price index L is a weighted average of prices in year 1 (P_1) and year 0 (P_0) with the weights being the quantity for year 0 (Q_0):

$$L = \frac{\sum P_1 \cdot Q_0}{\sum P_0 \cdot Q_0}$$

The Paasche price index P is a weighted average of price changes between year 1 and year 0 with the weights being the quantity for year 1 (Q_1):

$$P = \frac{\sum P_1 \cdot Q_1}{\sum P_0 \cdot Q_1}$$

The Fisher ideal index F is the geometric average of the Laspeyres and Paasche indices:

$$F = \sqrt{L \cdot P} = \sqrt{\left(\frac{\sum P_1 \cdot Q_0}{\sum P_0 \cdot Q_0}\right) \cdot \left(\frac{\sum P_1 \cdot Q_1}{\sum P_0 \cdot Q_1}\right)}$$

Readers interested in the properties of the Fisher ideal index are referred to the following papers: W.E. Diewert, "Fisher ideal output, input and productivity indexes revisited", *Journal of Productivity Analysis*, No. 3, 1992, pp. 211-248; W.E. Diewert, "Exact and superlative index numbers", *Journal of Econometrics*, No. 4, 1976, pp. 115-145; and W. Eichhorn, R. Henn, O. Optiz and R.W. Shephard (editors), *Theory and Application of Economic Indexes, Physica Verlag*, Wurzburg, 1978.

27. It may not therefore equate exactly with the actual reference price used in estimating the PSE, as transport costs, quality adjustment factors etc., are all reflected in this implicit price.

28. Changes to government in 1998 resulted in renaming the former Department of Primary Industries and Energy as the Department of Agriculture, Fisheries and Forestry – Australia (AFFA) (responsibility for resources and energy was transferred to the Department of Industry, Science and Resources).

29. The indifference price is calculated by ASERCA as the world price plus a margin to cover all delivery costs from the United States to Mexican consumption areas (tariffs included), minus the transport costs from production areas to consumption areas in Mexico.

30. These payments consist of several components, *i.e.* base farm payment, supplementary farm payment, base area payment, and supplementary area payment, that have been classified as a group under "payments based on historical entitlements". Detail on the expenditure on the individual components will be made available to the Secretariat. Their classification will be re-examined in the future as to whether it appropriately reflects the payment characteristics.

31. Ecological payments are classified as "payments base on input constraints", except those that are commodity-specific (the majority) and have therefore been classified as "payments based on area planted/animal numbers".

32. Expenditures on *Agricultural schools* in GSSE are not available, but some expenditures are included in the PSE under *Payments based on use of on-farm services* – Extension.

Part III

SUMMARY TABLES ON ESTIMATES OF SUPPORT TO AGRICULTURE

Table III.1. OECD: Estimates of support to agriculture
(US$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**550 605**	**674 299**	**693 997**	**687 344**	**651 933**
of which share of common commodities (%)	*65*	*63*	*61*	*61*	*60*
Total value of consumption (at farm gate)	**555 998**	**683 236**	**705 883**	**697 542**	**658 499**
Producer Support Estimate (PSE)	**246 561**	**292 005**	**258 984**	**245 546**	**273 649**
Market price support	191 082	225 861	173 391	162 831	186 379
of which common commodities	*124 850*	*141 715*	*105 382*	*99 356*	*111 309*
Payments based on output	12 842	12 996	7 747	7 020	9 250
Payments based on area planted/animal numbers	15 325	21 951	33 408	32 375	34 050
Payments based on historical entitlements	526	272	9 341	8 642	10 765
Payments based on input use	20 034	21 399	22 953	22 635	21 738
Payments based on input constraints	2 972	5 280	7 721	7 714	7 238
Payments based on overall farming income	2 261	1 275	1 661	1 778	1 748
Miscellaneous payments	1 520	2 969	2 761	2 552	2 482
Percentage PSE	**41**	**39**	**33**	**32**	**37**
Producer NAC	**1.69**	**1.65**	**1.50**	**1.47**	**1.59**
General Services Support Estimate (GSSE)	**61 510**	**77 454**	**65 726**	**66 460**	**62 508**
Research and development	4 267	6 036	5 983	5 830	5 826
Agricultural schools	800	843	832	832	748
Inspection services	1 091	1 460	1 591	1 638	1 627
Infrastructure	12 563	22 259	18 322	18 733	13 740
Marketing and promotion	32 069	30 876	31 303	30 983	34 243
Public stockholding	7 612	11 108	4 315	5 120	3 118
Miscellaneous	3 109	4 871	3 381	3 323	3 206
GSSE as a share of TSE (%)	**19.0**	**19.7**	**18.8**	**19.8**	**17.2**
Consumer Support Estimate (CSE)	**-191 939**	**-221 250**	**-171 643**	**-160 141**	**-180 950**
Transfers to producers from consumers	-195 040	-224 944	-170 476	-160 419	-183 633
Other transfers from consumers	-24 123	-30 389	-29 244	-27 360	-29 201
Transfers to consumers from taxpayers	16 724	24 062	24 093	24 179	26 216
Excess feed cost	13 533	12 482	3 984	3 459	5 668
Percentage CSE	**-36**	**-34**	**-25**	**-24**	**-29**
Consumer NAC	**1.56**	**1.51**	**1.34**	**1.31**	**1.40**
Total Support Estimate (TSE)	**325 996**	**393 520**	**348 802**	**336 185**	**362 373**
Transfers from consumers	219 163	255 333	199 720	187 779	212 834
Transfers from taxpayers	130 956	168 576	178 326	175 766	178 740
Budget revenues	-24 123	-30 389	-29 244	-27 360	-29 201
TSE as a share of GDP (%)	**2.1**	**1.7**	**1.3**	**1.3**	**1.4**

Notes: See Part II.2 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. TSE in percentage of GDP for 1986-88 for the OECD excludes the Czech Republic, Hungary and Poland for which GDP is not available for 1986-88.
Source: OECD, PSE/CSE database.

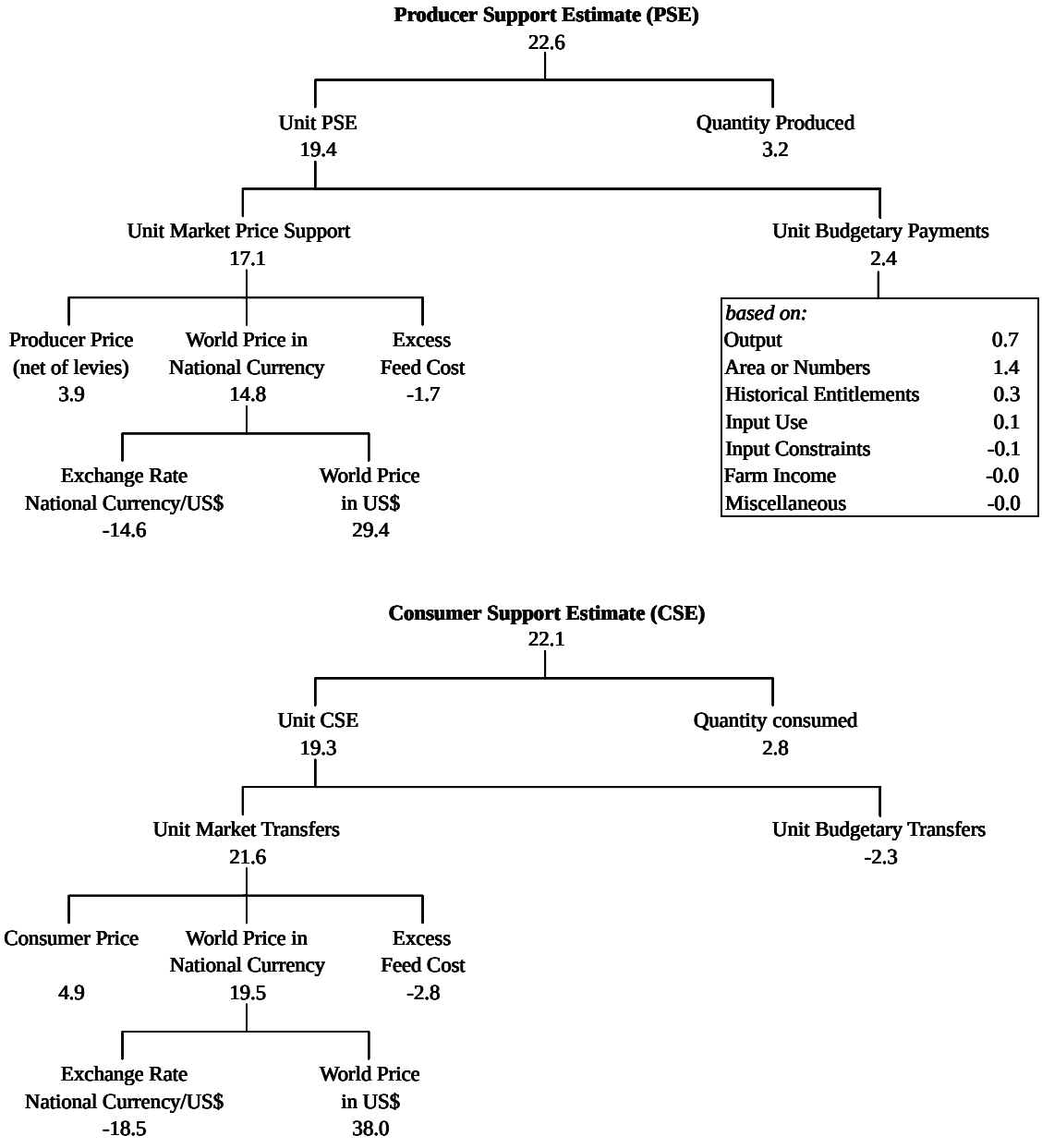
Table III.2. **OECD: Estimates of support to agriculture**

(ECU mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**498 602**	**547 318**	**591 485**	**606 238**	**582 958**
of which share of common commodities (%)	*65*	*63*	*61*	*61*	*60*
Total value of consumption (at farm gate)	**502 997**	**555 026**	**601 403**	**615 232**	**588 830**
Producer Support Estimate (PSE)	**224 178**	**236 922**	**221 460**	**216 572**	**244 697**
Market price support	173 760	183 103	148 332	143 617	166 660
of which common commodities	*113 587*	*114 817*	*90 095*	*87 632*	*99 533*
Payments based on output	11 631	10 488	6 652	6 192	8 271
Payments based on area planted/animal numbers	13 966	17 997	28 546	28 555	30 447
Payments based on historical entitlements	497	223	8 013	7 622	9 626
Payments based on input use	18 150	17 376	19 566	19 964	19 438
Payments based on input constraints	2 701	4 288	6 582	6 803	6 473
Payments based on overall farming income	2 085	1 032	1 426	1 569	1 563
Miscellaneous payments	1 388	2 414	2 344	2 251	2 219
Percentage PSE	**41**	**39**	**33**	**32**	**37**
Producer NAC	**1.69**	**1.65**	**1.50**	**1.47**	**1.59**
General Services Support Estimate (GSSE)	**56 275**	**63 030**	**56 087**	**58 618**	**55 895**
Research and development	3 845	4 906	5 103	5 142	5 210
Agricultural schools	720	686	708	734	668
Inspection services	988	1 186	1 363	1 445	1 455
Infrastructure	11 462	18 091	15 511	16 522	12 286
Marketing and promotion	29 514	25 187	26 849	27 327	30 620
Public stockholding	6 919	9 011	3 671	4 516	2 788
Miscellaneous	2 827	3 962	2 882	2 931	2 867
GSSE as a share of TSE (%)	**19.0**	**19.7**	**18.8**	**19.8**	**17.2**
Consumer Support Estimate (CSE)	**-174 416**	**-179 566**	**-146 678**	**-141 244**	**-161 806**
Transfers to producers from consumers	-177 328	-182 392	-145 862	-141 489	-164 204
Other transfers from consumers	-21 810	-24 858	-24 935	-24 132	-26 111
Transfers to consumers from taxpayers	15 138	19 556	20 671	21 325	23 442
Excess feed cost	12 347	10 111	3 449	3 051	5 068
Percentage CSE	**-36**	**-34**	**-25**	**-24**	**-29**
Consumer NAC	**1.56**	**1.51**	**1.34**	**1.31**	**1.40**
Total Support Estimate (TSE)	**296 814**	**319 508**	**298 218**	**296 515**	**324 034**
Transfers from consumers	199 138	207 250	170 797	165 621	190 316
Transfers from taxpayers	119 486	137 116	152 356	155 026	159 829
Budget revenues	-21 810	-24 858	-24 935	-24 132	-26 111
TSE as a share of GDP (%)	**2.1**	**1.7**	**1.3**	**1.3**	**1.4**

Notes: See Part II.2 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. TSE in percentage of GDP for 1986-88 for the OECD excludes the Czech Republic, Hungary and Poland for which GDP is not available for 1986-88.
Source: OECD, PSE/CSE database.

Figure III.1. **OECD: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 17.1 percentage points to the 22.6 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.3. OECD 24: Estimates of support to agriculture
(US$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**492 171**	**598 375**	**613 702**	**604 902**	**584 172**
of which share of common commodities (%)	*65*	*63*	*61*	*62*	*60*
Total value of consumption (at farm gate)	**500 135**	**604 285**	**622 252**	**613 634**	**588 632**
Producer Support Estimate (PSE)	**220 631**	**257 558**	**230 460**	**215 541**	**251 155**
Market price support	169 842	194 480	148 687	136 654	167 182
of which common commodities	*111 102*	*123 244*	*91 188*	*84 367*	*100 045*
Payments based on output	12 688	12 944	7 714	6 972	9 205
Payments based on area planted/animal numbers	15 324	21 938	33 303	32 284	33 906
Payments based on historical entitlements	174	272	8 415	7 689	9 834
Payments based on input use	16 987	18 859	20 558	20 269	19 872
Payments based on input constraints	2 972	5 238	7 639	7 621	7 167
Payments based on overall farming income	1 142	914	1 384	1 501	1 511
Miscellaneous payments	1 501	2 913	2 760	2 552	2 477
Percentage PSE	**41**	**39**	**33**	**32**	**38**
Producer NAC	**1.69**	**1.64**	**1.50**	**1.46**	**1.60**
General Services Support Estimate (GSSE)	**58 426**	**72 029**	**60 399**	**60 760**	**58 394**
Research and development	4 012	5 643	5 503	5 361	5 415
Agricultural schools	585	576	545	538	496
Inspection services	1 016	1 338	1 366	1 416	1 396
Infrastructure	11 823	20 881	15 588	15 723	11 614
Marketing and promotion	32 057	30 647	31 147	30 832	34 083
Public stockholding	5 828	8 134	2 902	3 607	2 214
Miscellaneous	3 105	4 811	3 349	3 283	3 176
GSSE as a share of TSE (%)	**20.0**	**20.5**	**19.3**	**20.3**	**17.5**
Consumer Support Estimate (CSE)	**-175 774**	**-189 410**	**-146 824**	**-134 201**	**-162 897**
Transfers to producers from consumers	-174 763	-194 388	-146 331	-134 989	-165 079
Other transfers from consumers	-23 665	-27 105	-26 942	-25 083	-28 178
Transfers to consumers from taxpayers	12 742	22 293	22 637	22 585	25 006
Excess feed cost	12 946	12 251	3 813	3 286	5 353
Percentage CSE	**-36**	**-33**	**-25**	**-23**	**-29**
Consumer NAC	**1.57**	**1.48**	**1.33**	**1.29**	**1.41**
Total Support Estimate (TSE)	**292 999**	**351 880**	**313 496**	**298 887**	**334 554**
Transfers from consumers	198 429	221 493	173 273	160 072	193 257
Transfers from taxpayers	118 236	157 492	167 164	163 898	169 475
Budget revenues	-23 665	-27 105	-26 942	-25 083	-28 178
TSE as a share of GDP (%)	**2.1**	**1.6**	**1.2**	**1.2**	**1.4**

Notes: See Part II.2 for detailed explanations. p: provisional. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.4. OECD 24: Estimates of support to agriculture

(ECU mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**445 528**	**485 634**	**523 230**	**533 523**	**522 366**
of which share of common commodities (%)	*65*	*63*	*61*	*62*	*60*
Total value of consumption (at farm gate)	**452 336**	**490 890**	**530 399**	**541 225**	**526 354**
Producer Support Estimate (PSE)	**200 642**	**208 951**	**197 247**	**190 107**	**224 582**
Market price support	154 491	157 626	127 365	120 528	149 494
of which common commodities	*101 114*	*99 829*	*78 041*	*74 412*	*89 461*
Payments based on output	11 494	10 446	6 623	6 149	8 231
Payments based on area planted/animal numbers	13 966	17 986	28 454	28 475	30 319
Payments based on historical entitlements	176	223	7 220	6 782	8 794
Payments based on input use	15 380	15 308	17 538	17 877	17 770
Payments based on input constraints	2 701	4 255	6 512	6 721	6 409
Payments based on overall farming income	1 066	739	1 191	1 324	1 351
Miscellaneous payments	1 370	2 368	2 342	2 251	2 215
Percentage PSE	**41**	**39**	**33**	**32**	**38**
Producer NAC	**1.69**	**1.64**	**1.50**	**1.46**	**1.60**
General Services Support Estimate (GSSE)	**53 463**	**58 621**	**51 565**	**53 591**	**52 216**
Research and development	3 614	4 587	4 696	4 728	4 842
Agricultural schools	525	467	464	475	444
Inspection services	920	1 087	1 170	1 249	1 248
Infrastructure	10 789	16 973	13 187	13 868	10 385
Marketing and promotion	29 504	25 000	26 716	27 194	30 477
Public stockholding	5 290	6 594	2 478	3 181	1 980
Miscellaneous	2 824	3 913	2 854	2 896	2 840
GSSE as a share of TSE (%)	**20.0**	**20.5**	**19.3**	**20.3**	**17.5**
Consumer Support Estimate (CSE)	**-159 760**	**-153 696**	**-125 669**	**-118 365**	**-145 663**
Transfers to producers from consumers	-158 905	-157 572	-125 382	-119 060	-147 614
Other transfers from consumers	-21 391	-22 177	-23 014	-22 124	-25 197
Transfers to consumers from taxpayers	11 500	18 119	19 431	19 920	22 360
Excess feed cost	11 800	9 918	3 297	2 898	4 787
Percentage CSE	**-36**	**-33**	**-25**	**-23**	**-29**
Consumer NAC	**1.57**	**1.48**	**1.33**	**1.29**	**1.41**
Total Support Estimate (TSE)	**266 829**	**285 690**	**268 243**	**263 618**	**299 158**
Transfers from consumers	180 296	179 749	148 396	141 184	172 810
Transfers from taxpayers	107 924	128 118	142 860	144 558	151 545
Budget revenues	-21 391	-22 177	-23 014	-22 124	-25 197
TSE as a share of GDP (%)	**2.1**	**1.6**	**1.2**	**1.2**	**1.4**

Notes: See Part II.2 for detailed explanations. p: provisional. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.5. **OECD: Producer Support Estimate by country**

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
US$ mn	945	1 277	1 316	1 375	1 239
ECU mn	865	1 035	1 124	1 213	1 108
Percentage PSE	7	8	6	7	7
Producer NAC	1.07	1.08	1.07	1.07	1.07
Canada					
US$ mn	5 641	5 738	3 262	2 988	3 176
ECU mn	5 156	4 643	2 777	2 635	2 840
Percentage PSE	34	30	15	14	16
Producer NAC	1.52	1.43	1.18	1.16	1.19
Czech Republic					
US$ mn	4 605	1 616	592	409	731
ECU mn	4 222	1 309	505	361	654
Percentage PSE	59	37	13	10	17
Producer NAC	2.50	1.64	1.15	1.11	1.21
European Union					
US$ mn	99 619	131 028	116 271	109 670	129 808
ECU mn	90 392	106 238	99 653	96 729	116 075
Percentage PSE	46	47	39	38	45
Producer NAC	1.86	1.88	1.65	1.61	1.83
Hungary					
US$ mn	3 073	901	585	433	642
ECU mn	2 819	733	497	382	574
Percentage PSE	40	17	10	8	12
Producer NAC	1.68	1.20	1.11	1.08	1.13
Iceland					
US$ mn	196	193	142	135	159
ECU mn	176	156	121	119	142
Percentage PSE	75	71	60	58	69
Producer NAC	4.03	3.61	2.59	2.41	3.21
Japan					
US$ mn	52 073	55 628	55 639	52 640	49 059
ECU mn	47 210	45 179	47 230	46 428	43 868
Percentage PSE	65	58	63	61	63
Producer NAC	2.85	2.40	2.69	2.53	2.72
Korea					
US$ mn	12 232	20 391	19 724	21 120	12 769
ECU mn	10 971	16 554	16 656	18 628	11 418
Percentage PSE	71	76	65	66	59
Producer NAC	3.52	4.12	2.89	2.94	2.44
Mexico					
US$ mn	1 685	9 978	3 707	4 638	4 605
ECU mn	1 475	8 113	3 229	4 091	4 118
Percentage PSE	10	34	14	16	19
Producer NAC	1.11	1.51	1.17	1.20	1.23
New Zealand					
US$ mn	478	86	85	105	44
ECU mn	454	70	72	93	39
Percentage PSE	11	2	1	2	1
Producer NAC	1.13	1.02	1.01	1.02	1.01
Norway					
US$ mn	2 771	3 242	2 744	2 685	2 726
ECU mn	2 519	2 625	2 343	2 368	2 437
Percentage PSE	67	69	66	65	70
Producer NAC	3.04	3.28	2.94	2.88	3.29

Table III.5. **OECD: Producer Support Estimate by country (cont'd)**

	1986-88	1991-93	1996-98	1997p	1998p
Poland					
US$ mn	4 336	1 561	3 916	3 404	3 746
ECU mn	4 049	1 264	3 325	3 003	3 350
Percentage PSE	32	12	23	21	25
Producer NAC	1.48	1.14	1.30	1.27	1.33
Switzerland					
US$ mn	4 998	5 659	5 405	5 005	5 359
ECU mn	4 513	4 594	4 606	4 415	4 792
Percentage PSE	74	71	69	68	73
Producer NAC	3.81		3.30	3.15	3.70
Turkey					
US$ mn	3 686	9 248	9 757	10 321	12 626
ECU mn	3 345	7 494	8 459	9 103	11 290
Percentage PSE	20	30	29	31	39
Producer NAC	1.25	1.45	1.44	1.44	1.65
United States					
US$ mn	41 428	34 981	35 838	30 616	46 960
ECU mn	38 056	28 441	30 862	27 004	41 992
Percentage PSE	26	19	17	14	22
Producer NAC	1.35	1.24	1.20	1.17	1.28
OECD 24					
US$ mn	220 631	257 558	230 460	215 541	251 155
ECU mn	200 642	208 951	197 247	190 107	224 582
Percentage PSE	41	39	33	32	38
Producer NAC	1.69	1.64	1.50	1.46	1.60
OECD					
US$ mn	246 561	292 005	258 984	245 546	273 649
ECU mn	224 178	236 922	221 460	216 572	244 697
Percentage PSE	41	39	33	32	37
Producer NAC	1.69	1.65	1.50	1.47	1.59

Notes: See Part II.2 for detailed explanations. p: provisional. NAC: Nominal Assistance Coefficient. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.6. **OECD: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
US$ mn	18 425	20 963	18 950	17 126	22 108
ECU mn	16 799	17 048	16 252	15 105	19 769
Percentage PSE	48	46	36	34	45
Producer NAC	1.96	1.86	1.57	1.51	1.80
Maize					
US$ mn	12 406	10 605	8 030	7 796	10 599
ECU mn	11 372	8 588	6 947	6 876	9 478
Percentage PSE	40	30	20	20	28
Producer NAC	1.68	1.43	1.26	1.24	1.39
Other grains					
US$ mn	10 477	10 891	12 527	11 651	13 394
ECU mn	9 571	8 870	10 710	10 276	11 977
Percentage PSE	52	51	46	44	55
Producer NAC	2.14	2.08	1.90	1.79	2.24
Rice					
US$ mn	27 072	28 250	28 446	28 015	22 452
ECU mn	24 606	22 903	24 088	24 709	20 076
Percentage PSE	81	81	74	73	74
Producer NAC	5.46	5.21	3.91	3.72	3.81
Oilseeds					
US$ mn	6 653	7 654	5 300	5 216	6 148
ECU mn	5 941	6 178	4 557	4 601	5 498
Percentage PSE	31	31	18	17	22
Producer NAC	1.45	1.47	1.23	1.21	1.28
Sugar (refined equivalent)					
US$ mn	5 122	6 327	5 025	4 959	5 275
ECU mn	4 662	5 125	4 302	4 374	4 717
Percentage PSE	50	50	39	38	43
Producer NAC	2.02	1.99	1.64	1.60	1.75
Milk					
US$ mn	43 977	49 261	48 949	44 919	53 344
ECU mn	40 217	39 977	41 867	39 619	47 700
Percentage PSE	59	56	52	49	58
Producer NAC	2.51	2.29	2.08	1.96	2.35
Beef and Veal					
US$ mn	18 502	26 501	27 446	27 922	28 882
ECU mn	16 882	21 440	23 525	24 627	25 827
Percentage PSE	28	30	31	31	34
Producer NAC	1.38	1.44	1.45	1.45	1.52
Pigmeat					
US$ mn	8 248	9 208	6 215	5 430	6 930
ECU mn	7 416	7 474	5 313	4 789	6 197
Percentage PSE	18	17	12	10	15
Producer NAC	1.23	1.21	1.13	1.11	1.18
Poultry					
US$ mn	4 279	4 516	3 725	3 822	2 908
ECU mn	3 801	3 663	3 158	3 371	2 600
Percentage PSE	19	16	10	11	8
Producer NAC	1.24	1.18	1.11	1.12	1.09
Sheepmeat					
US$ mn	4 664	6 747	6 864	6 887	6 267
ECU mn	4 202	5 496	5 846	6 074	5 604
Percentage PSE	55	57	51	50	52
Producer NAC	2.24	2.32	2.06	2.01	2.08

Table III.6. **OECD: Producer Support Estimate by commodity (cont'd)**

	1986-88	1991-93	1996-98	1997p	1998p
Wool					
US$ mn	255	371	168	170	138
ECU mn	231	301	142	150	124
Percentage PSE	6	14	7	7	8
Producer NAC	1.06	1.16	1.08	1.07	1.08
Eggs					
US$ mn	2 160	2 294	2 020	1 808	1 962
ECU mn	1 951	1 860	1 718	1 595	1 754
Percentage PSE	14	13	11	10	12
Producer NAC	1.17	1.16	1.12	1.11	1.14
Other commodities					
US$ mn	75 525		85 321	79 825	93 240
ECU mn	68 569	79 524	73 035	70 406	83 375
Percentage PSE	39	38	32	30	35
Producer NAC	1.63	1.61	1.47	1.43	1.53
All commodities					
US$ mn	246 561	292 005	258 984	245 546	273 649
ECU mn	224 178	236 922	221 460	216 572	244 697
Percentage PSE	41	39	33	32	37
Producer NAC	1.69	1.65	1.50	1.47	1.59

Notes: See Part II.2 for detailed explanations. p: provisional. NAC: Nominal Assistance Coefficient. The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities. Austria, Finland and Sweden are included in the total for "all commodities" for all years, and in the commodity detail from 1995 (since joining the EU).
Source: OECD, PSE/CSE database.

Table III.7. **OECD: Producer Support Estimate per full-time farmer equivalent**

	1986-88	1991-93	1996-98	1997p	1998p
US$ '000					
Australia	2	3	3	3	3
Canada	12	13	8	7	8
Czech Republic	9	5	3	2	4
European Union	11	17	17	16	19
Hungary	3	2	2	1	2
Iceland	27	32	30	29	35
Japan	14	18	23	22	21
Korea	8	19	23	26	16
Mexico	n.c.	2	0	1	1
New Zealand	4	1	1	1	0
Norway	26	34	32	31	33
Poland	n.c.	n.c.	n.c.	n.c.	n.c.
Switzerland	27	37	34	31	33
Turkey	n.c.	n.c.	n.c.	n.c.	n.c.
United States	17	14	14	12	19
OECD 24	13	17	17	16	18
OECD	12	14	11	10	11
ECU '000					
Australia	2	3	3	3	3
Canada	11	10	6	6	7
Czech Republic	8	4	3	2	3
European Union	10	14	14	14	17
Hungary	3	1	2	1	2
Iceland	24	26	26	26	31
Japan	13	15	20	20	19
Korea	7	15	20	23	14
Mexico	n.c.	1	0	0	1
New Zealand	4	1	1	1	0
Norway	23	28	27	28	29
Poland	n.c.	n.c.	n.c.	n.c.	n.c.
Switzerland	24	30	29	28	30
Turkey	n.c.	n.c.	n.c.	n.c.	n.c.
United States	16	11	12	11	17
OECD 24	12	14	14	14	16
OECD	11	11	9	9	10

Notes: See Part II.2 for detailed explanations. p: provisional. n.c.: not calculated. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994) and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995. Data on full-time farmer equivalents is not available for Mexico (1986-88), Poland, and Turkey.
Source: OECD, PSE/CSE database.

Table III.8. **OECD: Producer Support Estimate per hectare of agricultural land**

	1986-88	1991-93	1996-98	1997p	1998p
US$					
Australia	2	3	3	3	3
Canada	76	78	44	41	43
Czech Republic	1 065	377	138	96	171
European Union	711	968	801	756	895
Hungary	472	145	95	70	104
Iceland	86	85	62	59	70
Japan	9 756	10 771	11 143	10 543	9 826
Korea	5 503	9 428	9 823	10 518	6 359
Mexico	17	97	36	44	44
New Zealand	27	5	5	6	3
Norway	2 852	3 215	2 650	2 587	2 626
Poland	230	83	211	184	202
Switzerland	2 473	3 306	3 419	3 166	3 389
Turkey	94	231	243	257	314
United States	97	82	85	73	112
OECD 24	185	219	197	184	215
OECD	186	223	198	188	210
ECU					
Australia	2	2	2	3	2
Canada	69	63	38	36	39
Czech Republic	977	305	118	84	153
European Union	645	785	687	667	800
Hungary	433	118	80	62	93
Iceland	77	68	53	52	62
Japan	8 843	8 749	9 459	9 299	8 786
Korea	4 936	7 655	8 295	9 277	5 686
Mexico	15	79	31	39	40
New Zealand	26	4	4	6	2
Norway	2 593	2 603	2 262	2 282	2 348
Poland	215	67	179	162	181
Switzerland	2 233	2 684	2 913	2 792	3 031
Turkey	86	187	211	227	281
United States	89	67	73	64	100
OECD 24	168	178	168	162	192
OECD	169	181	170	166	187

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.9. **OECD: Composition of Producer Support Estimate**
(percentage share in PSE)

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
Market Price Support	55	61	54	59	63
Payments based on output	0	7	4	4	4
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	17	19	20	19	15
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	22	9	16	12	12
Miscellaneous payments	7	5	6	6	5
Canada					
Market Price Support	49	56	55	64	63
Payments based on output	17	8	9	8	7
Payments based on area planted/animal numbers	17	20	4	4	7
Payments based on historical entitlements	0	0	11	0	0
Payments based on input use	15	12	12	14	12
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	0	2	9	10	9
Miscellaneous payments	2	1	0	0	1
Czech Republic					
Market Price Support	78	95	63	52	68
Payments based on output	3	0	0	0	0
Payments based on area planted/animal numbers	0	0	2	3	5
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	5	5	35	45	21
Payments based on input constraints	0	1	0	0	0
Payments based on overall farm income	14	-1	0	0	6
Miscellaneous payments	0	0	0	0	0
European Union					
Market Price Support	84	75	52	53	62
Payments based on output	6	7	4	4	3
Payments based on area planted/animal numbers	2	9	29	28	23
Payments based on historical entitlements	0	0	1	1	1
Payments based on input use	7	6	9	9	8
Payments based on input constraints	1	2	4	4	3
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	0	1	1	1	1
Hungary					
Market Price Support	76	74	39	28	51
Payments based on output	0	0	5	10	6
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	9	18	46	50	36
Payments based on input constraints	0	1	0	0	1
Payments based on overall farm income	15	2	9	11	5
Miscellaneous payments	1	6	0	0	1
Iceland					
Market Price Support	87	70	46	47	53
Payments based on output	1	20	46	45	40
Payments based on area planted/animal numbers	1	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	11	9	8	8	7
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0

Table III.9. **OECD: Composition of Producer Support Estimate (cont'd)**
(percentage share in PSE)

	1986-88	1991-93	1996-98	1997p	1998p
Japan					
Market Price Support	90	91	92	91	91
Payments based on output	3	3	2	3	2
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	4	4	4	4	4
Payments based on input constraints	3	2	2	2	2
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Korea					
Market Price Support	99	96	95	94	94
Payments based on output	0	0	0	0	0
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	1	2	4	4	5
Payments based on input constraints	0	0	0	0	1
Payments based on overall farm income	0	2	1	1	1
Miscellaneous payments	0	0	0	0	0
Mexico					
Market Price Support	n.c.	86	30	65	68
Payments based on output	0	1	0	0	0
Payments based on area planted/animal numbers	0	0	2	1	2
Payments based on historical entitlements	0	0	34	21	20
Payments based on input use	n.c.	13	33	12	9
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	0	0	0	1	1
Miscellaneous payments	0	0	0	0	0
New Zealand					
Market Price Support	26	70	78	78	57
Payments based on output	0	0	0	0	0
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	20	0	0	0	0
Payments based on input use	45	26	22	21	41
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	9	5	1	0	2
Miscellaneous payments	0	0	0	0	0
Norway					
Market Price Support	51	46	42	43	46
Payments based on output	23	22	21	20	18
Payments based on area planted/animal numbers	9	13	9	9	10
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	17	18	27	27	25
Payments based on input constraints	2	1	1	1	1
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Poland					
Market Price Support	66	n.c.	87	86	87
Payments based on output	0	0	0	0	0
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	9	0	0	0	0
Payments based on input use	26	n.c.	13	14	13
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0

Table III.9. **OECD: Composition of Producer Support Estimate (cont'd)**
(percentage share in PSE)

	1986-88	1991-93	1996-98	1997p	1998p
Switzerland					
Market Price Support	87	80	65	64	66
Payments based on output	1	1	1	1	2
Payments based on area planted/animal numbers	6	8	15	16	15
Payments based on historical entitlements	0	5	12	12	10
Payments based on input use	2	3	3	3	3
Payments based on input constraints	0	0	1	2	2
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	3	3	3	3	2
Turkey					
Market Price Support	76	83	72	79	86
Payments based on output	0	2	2	1	1
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	24	15	26	19	13
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
United States					
Market Price Support	47	55	50	48	50
Payments based on output	7	1	1	1	6
Payments based on area planted/animal numbers	26	19	2	1	6
Payments based on historical entitlements	0	0	19	21	18
Payments based on input use	13	14	15	15	10
Payments based on input constraints	2	5	6	6	4
Payments based on overall farm income	2	2	3	3	2
Miscellaneous payments	3	4	5	5	3
OECD 24					
Market Price Support	77	76	65	63	67
Payments based on output	6	5	3	3	4
Payments based on area planted/animal numbers	7	9	14	15	13
Payments based on historical entitlements	0	0	4	4	4
Payments based on input use	8	7	9	9	8
Payments based on input constraints	1	2	3	4	3
Payments based on overall farm income	1	0	1	1	1
Miscellaneous payments	1	1	1	1	1
OECD					
Market Price Support	77	77	67	66	68
Payments based on output	5	4	3	3	3
Payments based on area planted/animal numbers	6	8	13	13	12
Payments based on historical entitlements	0	0	4	4	4
Payments based on input use	8	7	9	9	8
Payments based on input constraints	1	2	3	3	3
Payments based on overall farm income	1	0	1	1	1
Miscellaneous payments	1	1	1	1	1

Notes: See Part II.2 for detailed explanations. p: provisional, n.c.: not calculated. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995. Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.10. OECD: General Services Support Estimate by country

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
US$ mn	421	518	555	588	487
ECU mn	380	420	473	519	436
Percentage of TSE	31	29	30	30	28
Canada					
US$ mn	1 442	1 824	1 274	1 206	1 115
ECU mn	1 307	1 477	1 081	1 063	997
Percentage of TSE	20	24	28	29	26
Czech Republic					
US$ mn	19	19	111	110	99
ECU mn	18	16	95	97	89
Percentage of TSE	0	1	16	21	12
European Union					
US$ mn	9 685	15 516	9 169	9 585	8 407
ECU mn	8 756	12 597	7 823	8 454	7 517
Percentage of TSE	9	10	7	8	6
Hungary					
US$ mn	83	81	113	92	126
ECU mn	76	66	97	81	113
Percentage of TSE	2	8	16	18	16
Iceland					
US$ mn	23	22	17	18	16
ECU mn	20	17	14	16	14
Percentage of TSE	9	8	10	12	9
Japan					
US$ mn	8 793	13 845	15 295	15 551	11 343
ECU mn	7 909	11 299	12 941	13 716	10 143
Percentage of TSE	15	21	23	24	20
Korea					
US$ mn	2 011	3 944	4 267	4 663	3 060
ECU mn	1 817	3 204	3 617	4 112	2 737
Percentage of TSE	14	16	18	18	19
Mexico					
US$ mn	680	1 108	347	370	354
ECU mn	637	903	298	326	317
Percentage of TSE	21	9	7	6	6
New Zealand					
US$ mn	104	56	64	69	54
ECU mn	94	45	55	61	48
Percentage of TSE	18	39	43	40	55
Norway					
US$ mn	128	164	119	100	89
ECU mn	116	133	100	88	80
Percentage of TSE	4	5	4	4	3
Poland					
US$ mn	291	393	488	465	474
ECU mn	265	318	416	410	424
Percentage of TSE	4	20	11	12	11
Switzerland					
US$ mn	383	408	373	351	348
ECU mn	346	331	318	310	311
Percentage of TSE	6	6	6	6	6

Table III.10. **OECD: General Services Support Estimate by country (cont'd)**

	1986-88	1991-93	1996-98	1997p	1998p
Turkey					
US$ mn	202	436	5 216	5 059	7 253
ECU mn	183	354	4 525	4 462	6 485
Percentage of TSE	5	4	31	30	32
United States					
US$ mn	35 470	37 021	28 317	28 233	29 282
ECU mn	32 743	30 147	24 235	24 901	26 184
Percentage of TSE	40	41	33	36	30
OECD 24					
US$ mn	59 626	72 029	60 399	60 760	58 394
ECU mn	54 687	58 621	51 565	53 591	52 216
Percentage of TSE	20	20	19	20	17
OECD					
US$ mn	62 711		65 726	66 460	62 508
ECU mn	57 499	63 030	56 087	58 618	55 895
Percentage of TSE	19	20	19	20	17

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.

Source: OECD, PSE/CSE database.

Table III.11. **OECD: Composition of General Services Support Estimate**
(percentage share in GSSE)

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
Research and Development	60	69	73	72	75
Agricultural schools	0	0	0	0	0
Inspection services	14	6	6	6	5
Infrastructure	10	15	18	18	17
Marketing and promotion	8	7	1	1	1
Public stockholding	0	0	0	0	0
Miscellaneous	7	2	2	2	2
Canada					
Research and Development	18	18	23	23	23
Agricultural schools	15	15	15	16	16
Inspection services	17	19	20	22	21
Infrastructure	25	19	20	20	21
Marketing and promotion	25	29	23	19	19
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
Czech Republic					
Research and Development	54	83	25	21	27
Agricultural schools	24	4	49	47	50
Inspection services	21	11	3	1	1
Infrastructure	0	2	23	31	21
Marketing and promotion	0	0	0	0	0
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
European Union					
Research and Development	11	11	21	20	22
Agricultural schools	2	0	1	1	1
Inspection services	2	1	3	3	4
Infrastructure	9	18	23	20	24
Marketing and promotion	19	15	25	23	27
Public stockholding	57	48	26	32	21
Miscellaneous	0	6	1	1	1
Hungary					
Research and Development	4	6	9	13	10
Agricultural schools	6	8	8	9	7
Inspection services	55	79	71	71	57
Infrastructure	36	6	3	4	4
Marketing and promotion	0	0	8	3	22
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
Iceland					
Research and Development	10	13	15	11	16
Agricultural schools	17	17	27	26	28
Inspection services	4	4	7	7	8
Infrastructure	30	33	27	37	22
Marketing and promotion	1	1	3	3	3
Public stockholding	37	31	21	15	21
Miscellaneous	1	0	1	1	1
Japan					
Research and Development	4	3	4	3	4
Agricultural schools	2	2	2	2	2
Inspection services	1	1	1	1	1
Infrastructure	79	80	79	80	75
Marketing and promotion	2	1	2	1	2
Public stockholding	3	4	3	4	4
Miscellaneous	9	10	10	10	12

Table III.11. **OECD: Composition of General Services Support Estimate (cont'd)**
(percentage share in GSSE)

	1986-88	1991-93	1996-98	1997p	1998p
Korea					
Research and Development	3	4	6	6	6
Agricultural schools	0	1	1	1	1
Inspection services	1	1	2	2	2
Infrastructure	23	26	58	58	61
Marketing and promotion	0	0	0	0	0
Public stockholding	72	67	33	32	30
Miscellaneous	0	0	0	0	0
Mexico					
Research and Development	9	10	26	28	23
Agricultural schools	14	16	30	29	26
Inspection services	0	0	11	11	21
Infrastructure	27	25	15	13	12
Marketing and promotion	2	9	9	9	9
Public stockholding	48	35	0	0	0
Miscellaneous	1	5	9	11	8
New Zealand					
Research and Development	44	78	77	76	78
Agricultural schools	0	0	0	0	1
Inspection services	30	19	22	24	21
Infrastructure	26	3	0	0	0
Marketing and promotion	0	0	0	0	0
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
Norway					
Research and Development	57	72	76	73	73
Agricultural schools	0	0	0	0	0
Inspection services	0	0	0	0	0
Infrastructure	15	11	10	12	10
Marketing and promotion	27	17	9	10	10
Public stockholding	0	0	5	4	7
Miscellaneous	0	0	0	0	0
Poland					
Research and Development	43	27	16	12	20
Agricultural schools	38	14	15	15	14
Inspection services	0	0	4	5	5
Infrastructure	19	24	45	46	41
Marketing and promotion	0	34	21	22	20
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
Switzerland					
Research and Development	22	22	24	24	24
Agricultural schools	4	4	5	5	4
Inspection services	1	1	1	1	1
Infrastructure	22	20	16	16	16
Marketing and promotion	14	15	17	17	17
Public stockholding	1	2	1	1	1
Miscellaneous	36	36	36	36	36
Turkey					
Research and Development	28	20	1	1	1
Agricultural schools	0	0	0	0	0
Inspection services	24	57	2	2	1
Infrastructure	0	0	0	0	0
Marketing and promotion	0	0	96	97	98
Public stockholding	0	0	0	0	0
Miscellaneous	48	23	1	0	0

Table III.11. **OECD: Composition of General Services Support Estimate (cont'd)**

(percentage share in GSSE)

	1986-88	1991-93	1996-98	1997p	1998p
United States					
Research and Development	4	5	7	7	7
Agricultural schools	0	0	0	0	0
Inspection services	1	1	2	2	2
Infrastructure	8	16	3	3	2
Marketing and promotion	83	74	82	82	83
Public stockholding	0	0	0	0	0
Miscellaneous	3	4	5	5	5
OECD 24					
Research and Development	6	7	9	9	9
Agricultural schools	1	1	1	1	1
Inspection services	2	2	2	2	2
Infrastructure	20	29	26	26	20
Marketing and promotion	56	43	52	51	58
Public stockholding	10	12	5	6	4
Miscellaneous	4	5	6	5	5
OECD					
Research and Development	7	7	9	9	9
Agricultural schools	1	1	1	1	1
Inspection services	2	2	2	2	3
Infrastructure	20	29	28	28	22
Marketing and promotion	53	41	48	47	55
Public stockholding	13	15	7	8	5
Miscellaneous	4	5	5	5	5

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.

Source: OECD, PSE/CSE database.

Table III.12. **OECD: Consumer Support Estimate by country**

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
US$ mn	-297	-407	-360	-391	-371
ECU mn	-275	-329	-309	-345	-332
Percentage CSE	-7	-7	-5	-5	-6
Consumer NAC	1.07	1.07	1.05	1.05	1.06
Canada					
US$ mn	-2 525	-2 857	-1 901	-1 936	-2 026
ECU mn	-2 297	-2 319	-1 630	-1 708	-1 811
Percentage CSE	-22	-22	-14	-14	-16
Consumer NAC	1.28	1.28	1.16	1.16	1.19
Czech Republic					
US$ mn	-2 170	-1 229	-283	-159	-385
ECU mn	-1 996	-994	-242	-140	-345
Percentage CSE	-46	-35	-7	-4	-11
Consumer NAC	1.90	1.60	1.08	1.05	1.12
European Union					
US$ mn	-81 077	-85 378	-56 146	-50 844	-70 643
ECU mn	-73 728	-69 086	-48 337	-44 844	-63 170
Percentage CSE	-42	-38	-25	-23	-32
Consumer NAC	1.73	1.63	1.34	1.30	1.48
Hungary					
US$ mn	-1 630	-519	-278	-196	-326
ECU mn	-1 503	-424	-237	-173	-292
Percentage CSE	-30	-12	-7	-5	-9
Consumer NAC	1.43	1.13	1.08	1.06	1.10
Iceland					
US$ mn	-127	-89	-71	-66	-82
ECU mn	-115	-72	-61	-58	-74
Percentage CSE	-68	-52	-40	-39	-49
Consumer NAC	3.17	2.15	1.69	1.63	1.96
Japan					
US$ mn	-64 314	-76 224	-79 107	-73 921	-72 901
ECU mn	-58 191	-62 082	-67 233	-65 199	-65 188
Percentage CSE	-58	-51	-51	-49	-53
Consumer NAC	2.37	2.04	2.06	1.98	2.13
Korea					
US$ mn	-11 973	-22 311	-19 444	-20 453	-11 794
ECU mn	-10 761	-18 124	-16 380	-18 040	-10 546
Percentage CSE	-67	-72	-61	-63	-54
Consumer NAC	3.07	3.60	2.64	2.70	2.16
Mexico					
US$ mn	831	-6 566	-1 201	-2 096	-2 244
ECU mn	838	-5 342	-1 091	-1 848	-2 006
Percentage CSE	8	-26	-5	-8	-9
Consumer NAC	0.94	1.35	1.05	1.09	1.10
New Zealand					
US$ mn	-92	-56	-63	-81	-26
ECU mn	-84	-45	-53	-72	-23
Percentage CSE	-10	-5	-4	-5	-2
Consumer NAC	1.11	1.05	1.04	1.05	1.02
Norway					
US$ mn	-1 427	-1 507	-1 180	-1 151	-1 244
ECU mn	-1 313	-1 219	-1 010	-1 015	-1 112
Percentage CSE	-54	-55	-46	-46	-53
Consumer NAC	2.20	2.24	1.88	1.84	2.12

Table III.12. **OECD: Consumer Support Estimate by country (cont'd)**

	1986-88	1991-93	1996-98	1997p	1998p
Poland					
US$ mn	-1 223	-1 217	-3 614	-3 036	-3 303
ECU mn	-1 235	- 986	-3 060	-2 678	-2 953
Percentage CSE	-8	-8	-21	-19	-22
Consumer NAC	1.12	1.10	1.26	1.23	1.28
Switzerland					
US$ mn	-4 327	-4 180	-3 233	-2 914	-3 296
ECU mn	-3 905	-3 393	-2 755	-2 570	-2 947
Percentage CSE	-69	-63	-57	-55	-62
Consumer NAC	3.20		2.34	2.21	2.63
Turkey					
US$ mn	-2 834	-7 830	-6 375	-7 520	-8 266
ECU mn	-2 590	-6 326	-5 552	-6 632	-7 392
Percentage CSE	-18	-30	-24	-27	-33
Consumer NAC	1.22	1.44	1.33	1.36	1.50
United States					
US$ mn	-9 322	-1 242	1 612	4 624	-4 042
ECU mn	-8 718	-1 030	1 272	4 078	-3 615
Percentage CSE	-8	-1	1	3	-3
Consumer NAC	1.09	1.01	0.99	0.97	1.03
OECD 24					
US$ mn	-175 774	-189 410	-146 824	-134 201	-162 897
ECU mn	-159 760	-153 696	-125 669	-118 365	-145 663
Percentage CSE	-36	-33	-25	-23	-29
Consumer NAC	1.57	1.48	1.33	1.29	1.41
OECD					
US$ mn	-191 939	-221 250	-171 643	-160 141	-180 950
ECU mn	-174 416	-179 566	-146 678	-141 244	-161 806
Percentage CSE	-36	-34	-25	-24	-29
Consumer NAC	1.56	1.51	1.34	1.31	1.40

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.13. **OECD: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
US$ mn	-5 862	-5 799	-1 281	-1 215	-2 288
ECU mn	-5 305	-4 702	-1 129	-1 071	-2 046
Percentage CSE	-25	-22	-5	-4	-10
Consumer NAC	1.33	1.28	1.05	1.05	1.11
Maize					
US$ mn	298	39	2 761	2 570	2 384
ECU mn	290	33	2 340	2 266	2 132
Percentage CSE	2	0	10	9	10
Consumer NAC	0.99	1.00	0.91	0.91	0.91
Other grains					
US$ mn	-1 898	-2 020	-834	-824	-822
ECU mn	-1 733	-1 642	-712	-726	-735
Percentage CSE	-11	-11	-5	-5	-6
Consumer NAC	1.12	1.13	1.05	1.05	1.06
Rice					
US$ mn	-24 479	-28 517	-26 117	-25 520	-22 761
ECU mn	-22 131	-23 196	-22 186	-22 509	-20 353
Percentage CSE	-81	-80	-74	-73	-75
Consumer NAC	5.25	4.97	3.89	3.71	3.94
Oilseeds					
US$ mn	-250	-259	-370	-341	-243
ECU mn	-228	-208	-311	-301	-218
Percentage CSE	-2	-1	-1	-1	-1
Consumer NAC	1.02	1.01	1.01	1.01	1.01
Sugar (refined equivalent)					
US$ mn	-8 064	-8 525	-7 246	-7 308	-6 853
ECU mn	-7 318	-6 911	-6 182	-6 446	-6 128
Percentage CSE	-63	-58	-51	-50	-52
Consumer NAC	2.74	2.41	2.03	2.01	2.09
Milk					
US$ mn	-32 607	-37 536	-37 259	-33 377	-42 281
ECU mn	-29 876	-30 461	-31 903	-29 438	-37 807
Percentage CSE	-57	-54	-47	-44	-55
Consumer NAC	2.45	2.17	1.92	1.79	2.21
Beef and Veal					
US$ mn	-17 215	-20 693	-16 059	-17 216	-17 436
ECU mn	-15 718	-16 736	-13 811	-15 185	-15 591
Percentage CSE	-25	-25	-20	-21	-23
Consumer NAC	1.34	1.33	1.25	1.26	1.29
Pigmeat					
US$ mn	-9 264	-10 402	-4 612	-3 491	-5 863
ECU mn	-8 358	-8 432	-3 951	-3 079	-5 243
Percentage CSE	-22	-20	-10	-7	-14
Consumer NAC	1.28	1.26	1.11	1.07	1.17
Poultry					
US$ mn	-3 809	-3 757	-1 793	-1 841	-1 085
ECU mn	-3 386	-3 039	-1 509	-1 624	-970
Percentage CSE	-18	-14	-6	-6	-3
Consumer NAC	1.23	1.16	1.06	1.06	1.04
Sheepmeat					
US$ mn	-3 627	-2 786	-1 033	-461	-1 462
ECU mn	-3 257	-2 238	-880	-407	-1 307
Percentage CSE	-52	-37	-14	-7	-20
Consumer NAC	2.08	1.61	1.17	1.07	1.26

Table III.13. **OECD: Consumer Support Estimate by commodity (cont'd)**

	1986-88	1991-93	1996-98	1997p	1998p
Wool					
US$ mn	-15	-8	-12	-12	-12
ECU mn	-14	-6	-11	-11	-11
Percentage CSE	-1	-1	-2	-2	-3
Consumer NAC	1.01	1.01	1.03	1.02	1.03
Eggs					
US$ mn	-1 981	-2 058	-1 464	-1 220	-1 491
ECU mn	-1 792	-1 666	-1 245	-1 076	-1 334
Percentage CSE	-14	-13	-9	-7	-10
Consumer NAC	1.16		1.10	1.08	1.11
Other commodities					
US$ mn	-73 734	-89 290	-76 323	-69 884	-80 737
ECU mn	-67 047	-72 567	-65 191	-61 638	-72 195
Percentage CSE	-39	-37	-29	-27	-32
Consumer NAC	1.65	1.58	1.41	1.38	1.47
All commodities					
US$ mn	-191 939	-221 250	-171 643	-160 141	-180 950
ECU mn	-174 416	-179 566	-146 678	-141 244	-161 806
Percentage CSE	-36	-34	-25	-24	-29
Consumer NAC	1.56	1.51	1.34	1.31	1.40

Notes: See Part II.2 for detailed explanations. p: provisional. NAC: Nominal Assistance Coefficient. The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities. Austria, Finland and Sweden are included in the total for "all commodities" for all years, and in the commodity detail from 1995 (since joining the EU).
Source: OECD, PSE/CSE database.

Table III.14. **Composition of Consumer Support Estimate**

(US$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
Transfers to producers from consumers	-298	-407	-360	-391	-371
Other transfers from consumers	0	0	0	0	0
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	0	0	0	0	0
Canada					
Transfers to producers from consumers	-2 758	-2 995	-1 905	-1 933	-2 024
Other transfers from consumers	-31	-55	-6	-4	-2
Transfers to consumers from taxpayers	31	1	4	0	0
Excess feed cost	234	192	6	1	0
Czech Republic					
Transfers to producers from consumers	-3 153	-1 305	-230	-132	-441
Other transfers from consumers	-6	0	-2	-3	-3
Transfers to consumers from taxpayers	806	0	0	0	0
Excess feed cost	182	76	-51	-24	59
European Union					
Transfers to producers from consumers	-87 597	-97 357	-60 617	-54 982	-76 714
Other transfers from consumers	-4 876	-767	-280	-103	-427
Transfers to consumers from taxpayers	3 366	5 505	3 822	3 775	3 986
Excess feed cost	8 185	7 208	979	466	2 512
Hungary					
Transfers to producers from consumers	-1 941	-523	-156	-48	-196
Other transfers from consumers	-7	15	-4	-5	0
Transfers to consumers from taxpayers	301	16	0	0	0
Excess feed cost	16	-25	-118	-143	-131
Iceland					
Transfers to producers from consumers	-156	-137	-68	-64	-81
Other transfers from consumers	-13	-7	-8	-7	-6
Transfers to consumers from taxpayers	42	55	5	5	5
Excess feed cost	0	0	0	0	0
Japan					
Transfers to producers from consumers	-47 827	-52 569	-52 140	-49 132	-45 940
Other transfers from consumers	-16 098	-23 514	-24 276	-22 731	-25 239
Transfers to consumers from taxpayers	-2 811	-2 591	-4 790	-4 119	-3 560
Excess feed cost	2 423	2 450	2 099	2 062	1 838
Korea					
Transfers to producers from consumers	-11 794	-19 485	-18 151	-19 251	-11 544
Other transfers from consumers	-251	-3 052	-1 520	-1 533	-417
Transfers to consumers from taxpayers	73	226	228	331	167
Excess feed cost	0	0	0	0	0
Mexico					
Transfers to producers from consumers	-131	-8 164	-1 892	-2 827	-2 834
Other transfers from consumers	-16	-138	-556	-591	-533
Transfers to consumers from taxpayers	873	1 524	1 224	1 258	1 038
Excess feed cost	105	211	24	65	85
New Zealand					
Transfers to producers from consumers	-90	-55	-61	-79	-24
Other transfers from consumers	-2	-1	-2	-3	-2
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	0	0	0	0	0
Norway					
Transfers to producers from consumers	-1 738	-1 764	-1 328	-1 295	-1 415
Other transfers from consumers	-153	-53	-21	-16	-24
Transfers to consumers from taxpayers	220	100	18	22	15
Excess feed cost	244	211	151	138	180

Table III.14. **Composition of Consumer Support Estimate (cont'd)**

(US$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Poland					
Transfers to producers from consumers	-3 256	-1 080	-3 715	-3 172	-3 539
Other transfers from consumers	-179	-108	-219	-144	-71
Transfers to consumers from taxpayers	1 928	2	4	4	5
Excess feed cost	284	- 32	316	275	301
Switzerland					
Transfers to producers from consumers	-4 539	-4 783	-3 761	-3 430	-3 772
Other transfers from consumers	-548	-446	-291	-232	-265
Transfers to consumers from taxpayers	514	735	612	556	539
Excess feed cost	246		207	193	202
Turkey					
Transfers to producers from consumers	-2 961	-8 156	-8 220	-8 899	-11 212
Other transfers from consumers	-87	-579	-622	-715	-621
Transfers to consumers from taxpayers	74	520	2 048	1 669	2 952
Excess feed cost	139	384	419	426	615
United States					
Transfers to producers from consumers	-19 211	-18 030	-17 871	-14 782	-23 525
Other transfers from consumers	-1 531	-1 408	-1 437	-1 272	-1 592
Transfers to consumers from taxpayers	11 131	17 853	20 918	20 679	21 069
Excess feed cost	289	344	2	0	7
OECD 24					
Transfers to producers from consumers	-174 763	-194 388	-146 331	-134 989	-165 079
Other transfers from consumers	-23 665	-27 105	-26 942	-25 083	-28 178
Transfers to consumers from taxpayers	12 742	22 293	22 637	22 585	25 006
Excess feed cost	12 946	12 251	3 813	3 286	5 353
OECD					
Transfers to producers from consumers	-195 040	-224 944	-170 476	-160 419	-183 633
Other transfers from consumers	-24 123	-30 389	-29 244	-27 360	-29 201
Transfers to consumers from taxpayers	16 724	24 062	24 093	24 179	26 216
Excess feed cost	13 533	12 482	3 984	3 459	5 668

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.15. **Composition of Consumer Support Estimate**

(ECU mn)

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
Transfers to producers from consumers	-273	-329	-308	-345	-332
Other transfers from consumers	0	0	0	0	0
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	0	0	0	0	0
Canada					
Transfers to producers from consumers	-2 499	-2 426	-1 628	-1 705	-1 810
Other transfers from consumers	-28	-46	-5	-3	-2
Transfers to consumers from taxpayers	31	1	3	0	0
Excess feed cost	214	156	5	1	0
Czech Republic					
Transfers to producers from consumers	-2 875	-1 056	-201	-116	-395
Other transfers from consumers	-5	0	-2	-3	-3
Transfers to consumers from taxpayers	730	0	0	0	0
Excess feed cost	169	63	-39	-21	53
European Union					
Transfers to producers from consumers	-79 101	-78 668	-52 051	-48 495	-68 598
Other transfers from consumers	-4 429	-612	-238	-91	-382
Transfers to consumers from taxpayers	3 013	4 464	3 261	3 330	3 564
Excess feed cost	7 324	5 846	835	411	2 246
Hungary					
Transfers to producers from consumers	-1 785	-429	-131	-42	-175
Other transfers from consumers	-7	11	-3	-4	0
Transfers to consumers from taxpayers	279	13	0	0	0
Excess feed cost	23	-18	-102	-126	-117
Iceland					
Transfers to producers from consumers	-139	-110	-58	-56	-73
Other transfers from consumers	-11	-5	-6	-6	-6
Transfers to consumers from taxpayers	37	44	4	4	5
Excess feed cost	0	0	0	0	0
Japan					
Transfers to producers from consumers	-43 032	-42 615	-44 101	-43 335	-41 080
Other transfers from consumers	-14 391	-19 243	-20 668	-20 049	-22 569
Transfers to consumers from taxpayers	-2 579	-2 109	-4 015	-3 633	-3 183
Excess feed cost	2 184	1 993	1 777	1 819	1 644
Korea					
Transfers to producers from consumers	-10 531	-15 792	-15 262	-16 979	-10 323
Other transfers from consumers	-229	-2 488	-1 257	-1 353	-373
Transfers to consumers from taxpayers	66	185	195	292	149
Excess feed cost	0	0	0	0	0
Mexico					
Transfers to producers from consumers	-82	-6 626	-1 680	-2 494	-2 534
Other transfers from consumers	-14	-112	-474	-522	-476
Transfers to consumers from taxpayers	815	1 235	1 037	1 109	928
Excess feed cost	92	170	25	58	76
New Zealand					
Transfers to producers from consumers	-81	-44	-51	-69	-21
Other transfers from consumers	-2	-1	-2	-2	-2
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	0	0	0	0	0
Norway					
Transfers to producers from consumers	-1 582	-1 426	-1 134	-1 143	-1 265
Other transfers from consumers	-142	-43	-17	-14	-21
Transfers to consumers from taxpayers	200	80	15	19	13
Excess feed cost	220	171	129	122	161

Table III.15. **Composition of Consumer Support Estimate (cont'd)**

(ECU mn)

	1986-88	1991-93	1996-98	1997p	1998p
Poland					
Transfers to producers from consumers	-3 049	-874	-3 141	-2 798	-3 164
Other transfers from consumers	-162	-88	-179	-127	-63
Transfers to consumers from taxpayers	1 723	2	4	4	4
Excess feed cost	263	-23	267	243	270
Switzerland					
Transfers to producers from consumers	-4 071	-3 875	-3 194	-3 026	-3 373
Other transfers from consumers	-490	-362	-245	-205	-237
Transfers to consumers from taxpayers	461	595	517	490	482
Excess feed cost	219		176	170	180
Turkey					
Transfers to producers from consumers	-2 686	-6 590	-7 138	-7 849	-10 026
Other transfers from consumers	-78	-464	-533	-631	-555
Transfers to consumers from taxpayers	65	426	1 765	1 472	2 639
Excess feed cost	127	312	365	376	550
United States					
Transfers to producers from consumers	-17 565	-14 662	-15 332	-13 038	-21 036
Other transfers from consumers	-1 397	-1 142	-1 225	-1 122	-1 424
Transfers to consumers from taxpayers	10 043	14 493	17 820	18 238	18 840
Excess feed cost	266	281	2	0	6
OECD 24					
Transfers to producers from consumers	-158 905	-157 572	-125 382	-119 060	-147 614
Other transfers from consumers	-21 391	-22 177	-23 014	-22 124	-25 197
Transfers to consumers from taxpayers	11 500	18 119	19 431	19 920	22 360
Excess feed cost	11 800	9 918	3 297	2 898	4 787
OECD					
Transfers to producers from consumers	-177 328	-182 392	-145 862	-141 489	-164 204
Other transfers from consumers	-21 810	-24 858	-24 935	-24 132	-26 111
Transfers to consumers from taxpayers	15 138	19 556	20 671	21 325	23 442
Excess feed cost	12 347	10 111	3 449	3 051	5 068

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.16. **OECD: Total Support Estimate by country**

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
US$ mn	1 365	1 795	1 871	1 963	1 726
ECU mn	1 245	1 456	1 597	1 732	1 543
Percentage of GDP	0.68	0.62	0.49	0.50	0.49
Canada					
US$ mn	7 113	7 563	4 540	4 193	4 291
ECU mn	6 494	6 121	3 861	3 699	3 837
Percentage of GDP	1.69	1.30	0.75	0.68	0.72
Czech Republic					
US$ mn	5 431	1 635	703	519	831
ECU mn	4 974	1 325	600	458	743
Percentage of GDP	n.c.	5.53	1.28	1.00	1.51
European Union					
US$ mn	112 671	152 048	129 262	123 030	142 201
ECU mn	102 180	123 308	110 747	108 513	127 156
Percentage of GDP	2.29	1.50	1.14	1.18	1.36
Hungary					
US$ mn	3 458	998	698	525	768
ECU mn	3 175	812	594	463	687
Percentage of GDP	n.c.	2.74	1.52	1.16	1.61
Iceland					
US$ mn	260	270	164	158	180
ECU mn	234	217	140	139	161
Percentage of GDP	5.11	4.07	2.14	2.12	2.20
Japan					
US$ mn	58 055	66 882	66 144	64 072	56 842
ECU mn	52 521	54 366	56 141	56 511	50 828
Percentage of GDP	2.40	1.76	1.57	1.53	1.50
Korea					
US$ mn	14 315	24 561	24 218	26 114	15 997
ECU mn	12 853	19 943	20 469	23 033	14 304
Percentage of GDP	10.06	7.90	5.86	5.90	5.37
Mexico					
US$ mn	3 237	12 611	5 278	6 266	5 997
ECU mn	2 933	10 253	4 567	5 527	5 363
Percentage of GDP	2.07	3.47	1.36	1.56	1.43
New Zealand					
US$ mn	581	142	150	174	98
ECU mn	549	115	127	153	88
Percentage of GDP	1.85	0.34	0.24	0.27	0.19
Norway					
US$ mn	3 120	3 506	2 881	2 807	2 830
ECU mn	2 837	2 839	2 459	2 476	2 530
Percentage of GDP	3.58	2.92	1.89	1.83	1.95
Poland					
US$ mn	6 555	1 957	4 409	3 873	4 225
ECU mn	6 049	1 584	3 745	3 416	3 778
Percentage of GDP	n.c.	2.32	3.15	2.85	2.80
Switzerland					
US$ mn	5 895	6 802	6 391	5 912	6 246
ECU mn	5 323	5 521	5 443	5 215	5 585
Percentage of GDP	3.57	2.86	2.36	2.32	2.38

Table III.16. **OECD: Total Support Estimate by country (cont'd)**

	1986-88	1991-93	1996-98	1997p	1998p
Turkey					
US$ mn	3 962	10 204	17 020	17 049	22 830
ECU mn	3 593	8 274	14 754	15 037	20 415
Percentage of GDP	4.83	6.37	8.58	8.93	10.67
United States					
US$ mn	88 029	89 855	85 073	79 528	97 311
ECU mn	80 909	73 107	72 974	70 144	87 015
Percentage of GDP	1.88	1.44	1.05	0.98	1.15
OECD 24					
US$ mn	292 999	351 880	313 496	298 887	334 554
ECU mn	266 829	285 690	268 243	263 618	299 158
Percentage of GDP	2.10	1.59	1.23	1.22	1.37
OECD					
US$ mn	325 996	393 520	348 802	336 185	362 373
ECU mn	296 814	319 508	298 218	296 515	324 034
Percentage of GDP	n.c.	1.71	1.32	1.32	1.43

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.17. **OECD: Total Support Estimate per capita**

	1986-88	1991-93	1996-98	1997p	1998p
US$					
Australia	84	103	101	106	92
Canada	268	266	150	138	140
Czech Republic	525	158	68	50	81
European Union	348	439	347	330	381
Hungary	330	97	69	52	76
Iceland	1 053	1 033	601	579	656
Japan	475	537	524	508	449
Korea	343	563	528	568	344
Mexico	40	147	56	67	63
New Zealand	177	41	40	46	26
Norway	745	818	656	639	641
Poland	174	51	114	100	109
Switzerland	890	990	902	834	879
Turkey	75	175	266	267	352
United States	363	352	319	298	363
OECD 24	269	297	258	241	280
OECD	246	277	237	225	249
ECU					
Australia	77	83	86	93	82
Canada	245	215	128	122	125
Czech Republic	481	128	58	44	72
European Union	316	356	297	291	341
Hungary	303	79	58	46	68
Iceland	947	832	515	511	586
Japan	430	436	445	448	402
Korea	308	457	446	501	308
Mexico	36	120	49	59	56
New Zealand	167	33	34	41	23
Norway	677	662	560	564	573
Poland	161	41	97	88	98
Switzerland	804	804	768	736	786
Turkey	68	142	230	236	315
United States	334	286	273	263	325
OECD 24	245	241	221	213	250
OECD	224	224	203	198	223

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.18. **OECD: Composition of Total Support Estimate by country**

(US$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
Transfer from consumers	298	407	360	391	371
Transfer from taxpayers	1 068	1 388	1 511	1 572	1 355
Budget revenues	0	0	0	0	0
Canada					
Transfer from consumers	2 790	3 050	1 911	1 937	2 026
Transfer from taxpayers	4 355	4 568	2 635	2 260	2 267
Budget revenues	-31	-55	-6	-4	-2
Czech Republic					
Transfer from consumers	3 159	1 305	232	135	444
Transfer from taxpayers	2 277	330	473	387	389
Budget revenues	-6	0	-2	-3	-3
European Union					
Transfer from consumers	92 473	98 124	60 897	55 085	77 141
Transfer from taxpayers	25 074	54 691	68 645	68 048	65 487
Budget revenues	-4 876	-767	-280	-103	-427
Hungary					
Transfer from consumers	1 948	509	160	52	196
Transfer from taxpayers	1 517	474	543	477	573
Budget revenues	-7	15	-4	-5	0
Iceland					
Transfer from consumers	168	144	76	71	88
Transfer from taxpayers	104	133	96	94	99
Budget revenues	-13	-7	-8	-7	-6
Japan					
Transfer from consumers	63 926	76 084	76 416	71 864	71 179
Transfer from taxpayers	10 228	14 313	14 004	14 940	10 902
Budget revenues	-16 098	-23 514	-24 276	-22 731	-25 239
Korea					
Transfer from consumers	12 046	22 537	19 671	20 784	11 961
Transfer from taxpayers	2 521	5 076	6 067	6 863	4 452
Budget revenues	-251	-3 052	-1 520	-1 533	-417
Mexico					
Transfer from consumers	147	8 301	2 449	3 419	3 366
Transfer from taxpayers	3 106	4 447	3 385	3 439	3 164
Budget revenues	-16	-138	-556	-591	-533
New Zealand					
Transfer from consumers	92	56	63	81	26
Transfer from taxpayers	491	87	89	95	74
Budget revenues	-2	-1	-2	-3	-2
Norway					
Transfer from consumers	1 891	1 817	1 349	1 311	1 439
Transfer from taxpayers	1 382	1 742	1 553	1 512	1 415
Budget revenues	-153	-53	-21	-16	-24
Poland					
Transfer from consumers	3 435	1 188	3 934	3 316	3 609
Transfer from taxpayers	3 299	877	694	702	687
Budget revenues	-179	-108	-219	-144	-71
Switzerland					
Transfer from consumers	5 087	5 229	4 052	3 663	4 037
Transfer from taxpayers	1 356	2 019	2 630	2 482	2 474
Budget revenues	-548	-446	-291	-232	-265

Table III.18. OECD: Composition of Total Support Estimate by country (cont'd)

(US$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Turkey					
Transfer from consumers	3 047	8 735	8 842	9 614	11 833
Transfer from taxpayers	1 001	2 048	8 800	8 150	11 618
Budget revenues	-87	-579	-622	-715	-621
United States					
Transfer from consumers	20 742	19 438	19 308	16 055	25 118
Transfer from taxpayers	68 818	71 825	67 202	64 746	73 785
Budget revenues	-1 531	-1 408	-1 437	-1 272	-1 592
OECD 24					
Transfer from consumers	198 429	221 493	173 273	160 072	193 257
Transfer from taxpayers	118 236	157 492	167 164	163 898	169 475
Budget revenues	-23 665	-27 105	-26 942	-25 083	-28 178
OECD					
Transfer from consumers	219 163	255 333	199 720	187 779	212 834
Transfer from taxpayers	130 956	168 576	178 326	175 766	178 740
Budget revenues	-24 123	-30 389	-29 244	-27 360	-29 201

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.19. **OECD: Composition of Total Support Estimate by country**

(ECU mn)

	1986-88	1991-93	1996-98	1997p	1998p
Australia					
Transfer from consumers	275	329	309	345	332
Transfer from taxpayers	970	1 126	1 288	1 387	1 211
Budget revenues	0	0	0	0	0
Canada					
Transfer from consumers	2 544	2 476	1 638	1 708	1 811
Transfer from taxpayers	3 978	3 692	2 228	1 994	2 027
Budget revenues	-28	-46	-5	-3	-2
Czech Republic					
Transfer from consumers	2 901	1 058	203	119	397
Transfer from taxpayers	2 079	267	399	342	348
Budget revenues	-5	0	-2	-3	-3
European Union					
Transfer from consumers	84 084	79 403	52 444	48 585	68 979
Transfer from taxpayers	22 555	44 517	58 542	60 018	58 558
Budget revenues	-4 459	-613	-239	-91	-382
Hungary					
Transfer from consumers	1 804	419	135	46	175
Transfer from taxpayers	1 378	382	463	421	512
Budget revenues	-7	11	-3	-4	0
Iceland					
Transfer from consumers	151	116	65	63	78
Transfer from taxpayers	94	107	82	83	88
Budget revenues	-11	-5	-6	-6	-6
Japan					
Transfer from consumers	57 792	61 966	64 987	63 384	63 649
Transfer from taxpayers	9 208	11 677	11 889	13 177	9 749
Budget revenues	-14 480	-19 277	-20 735	-20 049	-22 569
Korea					
Transfer from consumers	10 827	18 310	16 576	18 332	10 696
Transfer from taxpayers	2 257	4 126	5 154	6 054	3 981
Budget revenues	-231	-2 492	-1 261	-1 353	-373
Mexico					
Transfer from consumers	76	6 750	2 156	3 015	3 010
Transfer from taxpayers	2 870	3 615	2 887	3 033	2 829
Budget revenues	-14	-112	-476	-522	-476
New Zealand					
Transfer from consumers	84	45	53	72	23
Transfer from taxpayers	467	71	76	84	66
Budget revenues	-2	-1	-2	-2	-2
Norway					
Transfer from consumers	1 736	1 471	1 155	1 156	1 287
Transfer from taxpayers	1 243	1 411	1 321	1 333	1 265
Budget revenues	-143	-43	-18	-14	-21
Poland					
Transfer from consumers	3 235	965	3 331	2 925	3 227
Transfer from taxpayers	2 977	707	593	619	614
Budget revenues	-163	-88	-179	-127	-63
Switzerland					
Transfer from consumers	4 589	4 244	3 451	3 231	3 610
Transfer from taxpayers	1 227	1 639	2 238	2 189	2 212
Budget revenues	-493	-363	-246	-205	-237

Table III.19. **OECD: Composition of Total Support Estimate by country (cont'd)**

(ECU mn)

	1986-88	1991-93	1996-98	1997p	1998p
Turkey					
Transfer from consumers	2 782	7 065	7 688	8 480	10 581
Transfer from taxpayers	889	1 674	7 601	7 188	10 389
Budget revenues	-78	-465	-534	-631	-555
United States					
Transfer from consumers	19 096	15 831	16 607	14 160	22 460
Transfer from taxpayers	63 221	58 420	57 596	57 106	65 979
Budget revenues	-1 407	-1 144	-1 229	-1 122	-1 424
OECD 24					
Transfer from consumers	180 296	179 749	148 396	141 184	172 810
Transfer from taxpayers	107 924	128 118	142 860	144 558	151 545
Budget revenues	-21 391	-22 177	-23 014	-22 124	-25 197
OECD					
Transfer from consumers	199 138	207 250	170 797	165 621	190 316
Transfer from taxpayers	119 486	137 116	152 356	155 026	159 829
Budget revenues	-21 810	-24 858	-24 935	-24 132	-26 111

Notes: See Part II.2 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. OECD 24 excludes most recent Member countries: Czech Republic (1995), Hungary (1996), Korea (1996), Mexico (1994), and Poland (1996). Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database.

Table III.20. **Australia: Estimates of support to agriculture**
(A$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**20 101**	**22 186**	**27 942**	**27 423**	**28 190**
of which share of common commodities (%)	*79*	*73*	*72*	*73*	*72*
Total value of consumption (at farm gate)	**6 475**	**8 491**	**10 252**	**10 504**	**10 345**
Producer Support Estimate (PSE)	**1 328**	**1 746**	**1 843**	**1 853**	**1 973**
Market price support	735	1 062	1 055	1 084	1 246
of which common commodities	*582*	*771*	*764*	*789*	*897*
Payments based on output	0	119	77	77	77
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	218	327	334	356	302
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	286	152	272	230	241
Miscellaneous payments	89	86	105	105	107
Percentage PSE	**7**	**8**	**6**	**7**	**7**
Producer NAC	**1.07**	**1.08**	**1.07**	**1.07**	**1.07**
General Services Support Estimate (GSSE)	**585**	**710**	**774**	**792**	**776**
Research and development	352	492	562	573	579
Agricultural schools	0	0	0	0	0
Inspection services	84	44	44	48	36
Infrastructure	59	109	142	146	134
Marketing and promotion	49	51	11	11	11
Public stockholding	0	0	0	0	0
Miscellaneous	41	14	14	14	14
GSSE as a share of TSE (%)	**30.6**	**28.9**	**29.6**	**29.9**	**28.2**
Consumer Support Estimate (CSE)	**-421**	**-554**	**-508**	**-527**	**-591**
Transfers to producers from consumers	**-421**	**-554**	**-508**	**-527**	**-591**
Other transfers from consumers	**0**	**0**	**0**	**0**	**0**
Transfers to consumers from taxpayers	**0**	**0**	**0**	**0**	**0**
Excess feed cost	**0**	**0**	**0**	**0**	**0**
Percentage CSE	**-7**	**-7**	**-5**	**-5**	**-6**
Consumer NAC	**1.07**	**1.07**	**1.05**	**1.05**	**1.06**
Total Support Estimate (TSE)	**1 914**	**2 455**	**2 616**	**2 645**	**2 748**
Transfers from consumers	421	554	508	527	591
Transfers from taxpayers	1 492	1 902	2 108	2 118	2 157
Budget revenues	0	0	0	0	0
TSE as a share of GDP (%)	**0.7**	**0.6**	**0.5**	**0.5**	**0.5**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.21. **Australia: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
A$ mn	161	118	173	152	165
Percentage PSE	8	6	5	5	4
Producer NAC	1.09	1.06	1.05	1.05	1.05
Maize					
A$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
A$ mn	23	39	48	46	39
Percentage PSE	3	4	4	4	4
Producer NAC	1.03	1.04	1.04	1.04	1.04
Rice					
A$ mn	18	10	13	14	12
Percentage PSE	19	6	5	5	5
Producer NAC	1.25	1.06	1.06	1.05	1.06
Oilseeds					
A$ mn	6	7	11	11	12
Percentage PSE	6	5	3	3	2
Producer NAC	1.06	1.06	1.03	1.03	1.02
Sugar (refined equivalent)					
A$ mn	85	67	57	48	42
Percentage PSE	13	8	5	4	3
Producer NAC	1.15	1.09	1.05	1.04	1.04
Milk					
A$ mn	500	780	836	874	982
Percentage PSE	33	34	27	28	31
Producer NAC	1.52	1.52	1.37	1.39	1.44
Beef and Veal					
A$ mn	170	146	164	163	146
Percentage PSE	6	4	4	4	4
Producer NAC	1.06	1.04	1.05	1.04	1.04
Pigmeat					
A$ mn	12	20	22	21	21
Percentage PSE	2	3	3	3	3
Producer NAC	1.02	1.03	1.03	1.03	1.03
Poultry					
A$ mn	22	21	38	38	39
Percentage PSE	3	2	3	3	3
Producer NAC	1.03	1.03	1.03	1.03	1.03
Sheepmeat					
A$ mn	20	38	38	36	33
Percentage PSE	3	7	4	4	3
Producer NAC	1.03	1.07	1.04	1.04	1.04
Wool					
A$ mn	113	195	139	139	117
Percentage PSE	2	7	6	5	5
Producer NAC	1.02	1.08	1.06	1.06	1.06
Eggs					
A$ mn	45	15	14	14	15
Percentage PSE	17	7	7	7	6
Producer NAC	1.22	1.07	1.07	1.08	1.07
Other commodities					
A$ mn	154	291	291	295	349
Percentage PSE	3	4	3	3	4
Producer NAC	1.03	1.04	1.03	1.03	1.04
All commodities					
A$ mn	1 328	1 746	1 843	1 853	1 973
Percentage PSE	7	8	6	7	7
Producer NAC	1.07	1.08	1.07	1.07	1.07

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

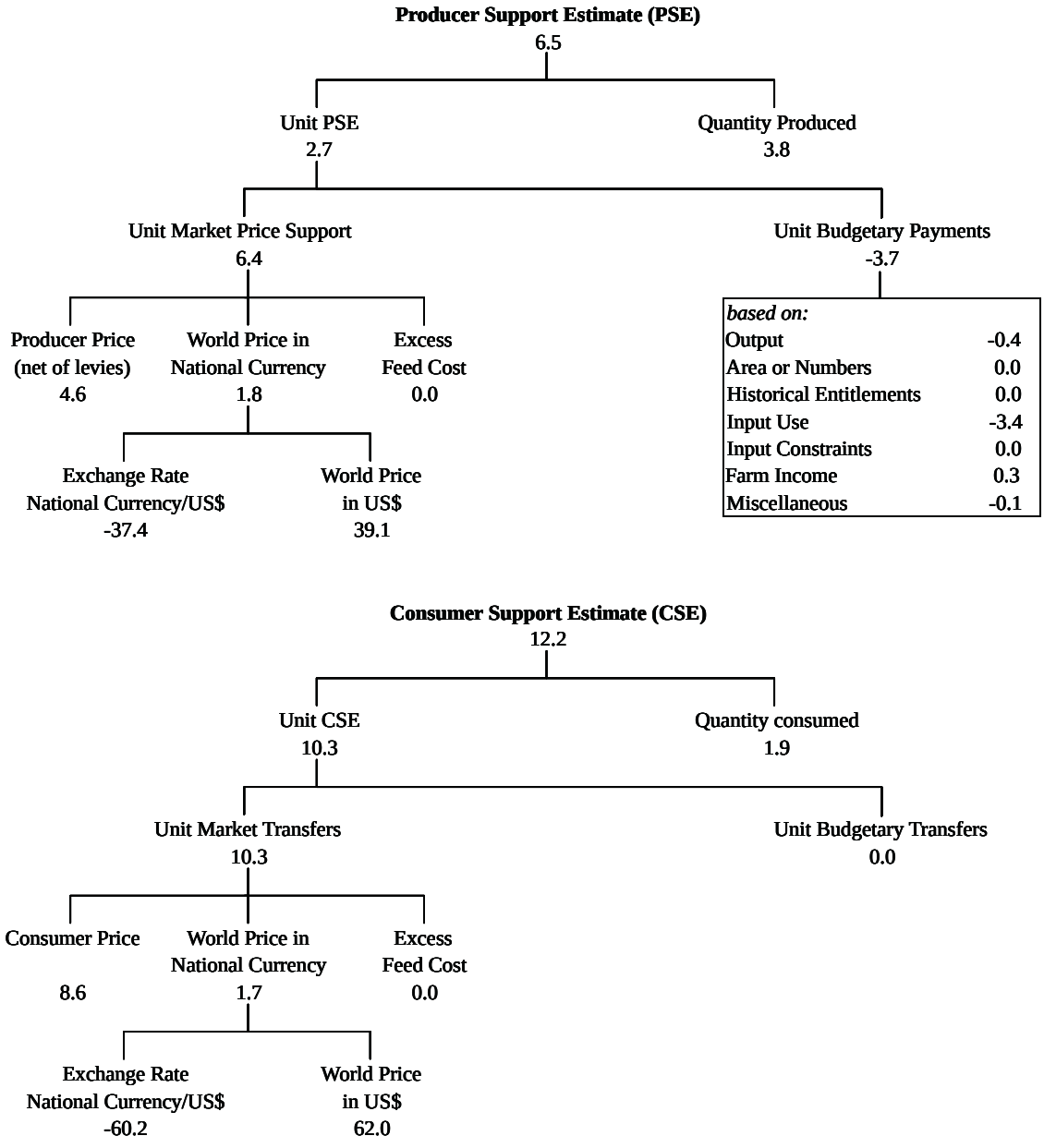
Table III.22. **Australia: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
A$ mn	-2	0	0	0	0
Percentage CSE	-1	0	0	0	0
Consumer NAC	1.01	1.00	1.00	1.00	1.00
Maize					
A$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
A$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Rice					
A$ mn	-4	-1	-1	-1	-2
Percentage CSE	-12	-2	-2	-1	-2
Consumer NAC	1.14	1.02	1.02	1.02	1.02
Oilseeds					
A$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Sugar (refined equivalent)					
A$ mn	-16	-10	-3	0	0
Percentage CSE	-11	-6	-1	0	0
Consumer NAC	1.12	1.06	1.01	1.00	1.00
Milk					
A$ mn	-276	-380	-359	-377	-419
Percentage CSE	-31	-32	-25	-26	-28
Consumer NAC	1.48	1.48	1.33	1.35	1.40
Beef and Veal					
A$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Pigmeat					
A$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Poultry					
A$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Sheepmeat					
A$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Wool					
A$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Eggs					
A$ mn	-36	-10	-5	-5	-5
Percentage CSE	-14	-4	-2	-3	-2
Consumer NAC	1.18	1.05	1.03	1.03	1.02
Other commodities					
A$ mn	-88	-152	-140	-144	-166
Percentage CSE	-7	-7	-5	-5	-6
Consumer NAC	1.07	1.07	1.05	1.05	1.06
All commodities					
A$ mn	-421	-554	-508	-527	-591
Percentage CSE	-7	-7	-5	-5	-6
Consumer NAC	1.07	1.07	1.05	1.05	1.06

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.

Source: OECD, PSE/CSE database.

Figure III.2. **Australia: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 6.4 percentage points to the 6.5 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.23. Canada: Estimates of support to agriculture
(C$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**18 227**	**20 038**	**27 759**	**28 205**	**27 541**
of which share of common commodities (%)	*83*	*81*	*80*	*79*	*79*
Total value of consumption (at farm gate)	**15 212**	**15 889**	**19 188**	**19 282**	**18 782**
Producer Support Estimate (PSE)	**7 445**	**6 906**	**4 597**	**4 138**	**4 712**
Market price support	3 683	3 807	2 635	2 644	2 979
of which common commodities	*3 065*	*3 097*	*2 098*	*2 101*	*2 348*
Payments based on output	1 262	540	386	343	343
Payments based on area planted/animal numbers	1 217	1 432	220	177	343
Payments based on historical entitlements	0	0	359	3	0
Payments based on input use	1 121	856	559	562	566
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	0	166	418	420	443
Miscellaneous payments	162	105	21	-12	37
Percentage PSE	**34**	**30**	**15**	**14**	**16**
Producer NAC	**1.52**	**1.43**	**1.18**	**1.16**	**1.19**
General Services Support Estimate (GSSE)	**1 891**	**2 206**	**1 790**	**1 670**	**1 654**
Research and development	332	398	410	376	379
Agricultural schools	277	321	263	262	262
Inspection services	327	428	352	372	351
Infrastructure	473	423	349	337	347
Marketing and promotion	482	636	416	322	314
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**20.2**	**24.2**	**28.0**	**28.8**	**26.0**
Consumer Support Estimate (CSE)	**-3 327**	**-3 463**	**-2 687**	**-2 682**	**-3 005**
Transfers to producers from consumers	-3 638	-3 628	-2 692	-2 677	-3 003
Other transfers from consumers	-41	-70	-9	-5	-3
Transfers to consumers from taxpayers	42	2	6	0	0
Excess feed cost	310	233	8	1	0
Percentage CSE	**-22**	**-22**	**-14**	**-14**	**-16**
Consumer NAC	**1.28**	**1.28**	**1.16**	**1.16**	**1.19**
Total Support Estimate (TSE)	**9 378**	**9 114**	**6 393**	**5 808**	**6 366**
Transfers from consumers	3 680	3 697	2 701	2 683	3 005
Transfers from taxpayers	5 740	5 486	3 701	3 130	3 363
Budget revenues	-41	-70	-9	-5	-3
TSE as a share of GDP (%)	**1.7**	**1.3**	**0.8**	**0.7**	**0.7**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.24. **Canada: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
C$ mn	2 049	1 507	477	245	273
Percentage PSE	45	31	11	7	9
Producer NAC	1.83	1.47	1.12	1.07	1.09
Maize					
C$ mn	210	222	78	68	98
Percentage PSE	25	25	8	7	11
Producer NAC	1.36	1.37	1.09	1.08	1.13
Other grains					
C$ mn	674	437	136	67	83
Percentage PSE	52	37	10	7	9
Producer NAC	2.46	1.59	1.11	1.08	1.10
Rice					
C$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
C$ mn	380	369	222	179	213
Percentage PSE	25	20	7	5	6
Producer NAC	1.34	1.27	1.07	1.06	1.07
Sugar (refined equivalent)					
C$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
C$ mn	2 325	2 318	2 105	2 105	2 380
Percentage PSE	62	61	52	52	58
Producer NAC	2.69	2.55	2.11	2.08	2.40
Beef and Veal					
C$ mn	344	308	235	228	256
Percentage PSE	9	7	5	5	6
Producer NAC	1.10	1.08	1.06	1.05	1.06
Pigmeat					
C$ mn	99	89	177	144	169
Percentage PSE	5	4	6	5	6
Producer NAC	1.05	1.05	1.06	1.05	1.06
Poultry					
C$ mn	192	307	82	84	71
Percentage PSE	18	25	5	5	4
Producer NAC	1.23	1.34	1.05	1.06	1.04
Sheepmeat					
C$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool					
C$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
C$ mn	126	195	175	175	157
Percentage PSE	25	36	26	27	24
Producer NAC	1.38	1.57	1.36	1.37	1.31
Other commodities					
C$ mn	1 044	1 153	911	842	1 012
Percentage PSE	43	44	15	12	14
Producer NAC	1.78	1.80	1.17	1.14	1.16
All commodities					
C$ mn	7 445	6 906	4 597	4 138	4 712
Percentage PSE	34	30	15	14	16
Producer NAC	1.52	1.43	1.18	1.16	1.19

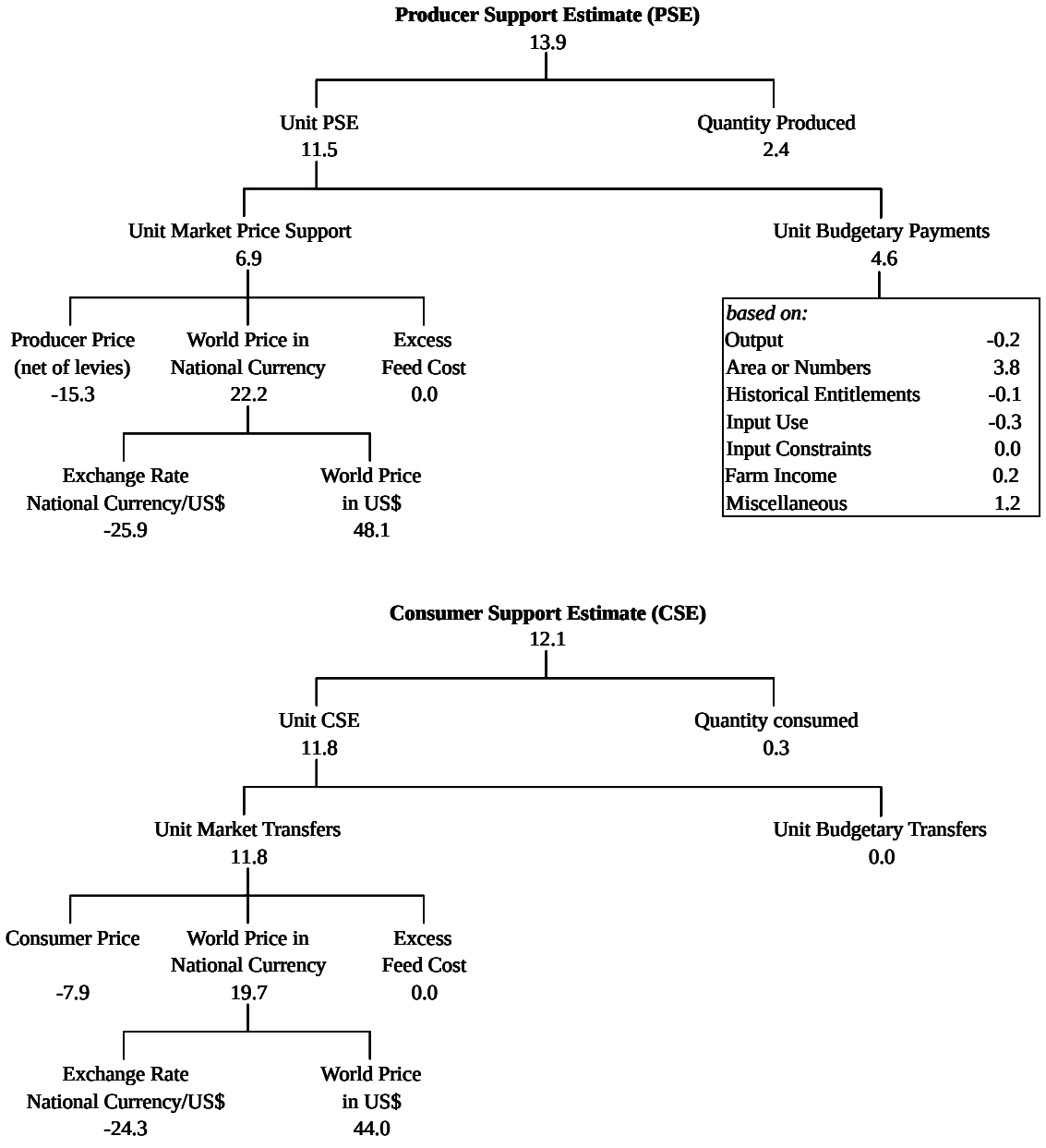
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.25. **Canada: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
C$ mn	-260	-69	6	0	0
Percentage CSE	-25	-7	0	0	0
Consumer NAC	1.37	1.08	1.00	1.00	1.00
Maize					
C$ mn	-2	-2	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Other grains					
C$ mn	12	-15	0	0	0
Percentage CSE	4	-2	0	0	0
Consumer NAC	0.97	1.02	1.00	1.00	1.00
Rice					
C$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
C$ mn	-48	-44	0	0	0
Percentage CSE	-6	-5	0	0	0
Consumer NAC	1.07	1.05	1.00	1.00	1.00
Sugar (refined equivalent)					
C$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
C$ mn	-2 091	-2 120	-1 933	-1 912	-2 198
Percentage CSE	-64	-62	-51	-50	-57
Consumer NAC	2.95	2.62	2.04	1.99	2.33
Beef and Veal					
C$ mn	-61	-57	-1	-3	0
Percentage CSE	-2	-2	0	0	0
Consumer NAC	1.02	1.02	1.00	1.00	1.00
Pigmeat					
C$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Poultry					
C$ mn	-157	-287	-43	-49	-28
Percentage CSE	-15	-23	-3	-3	-2
Consumer NAC	1.19	1.30	1.03	1.03	1.02
Sheepmeat					
C$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool					
C$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
C$ mn	-109	-181	-166	-166	-143
Percentage CSE	-23	-35	-25	-26	-22
Consumer NAC	1.34	1.55	1.33	1.34	1.28
Other commodities					
C$ mn	-612	-688	-550	-552	-637
Percentage CSE	-24	-23	-14	-14	-16
Consumer NAC	1.32	1.30	1.16	1.16	1.19
All commodities					
C$ mn	-3 327	-3 463	-2 687	-2 682	-3 005
Percentage CSE	-22	-22	-14	-14	-16
Consumer NAC	1.28	1.28	1.16	1.16	1.19

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.3. **Canada: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 6.9 percentage points to the 13.9 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.26. Czech Republic: Estimates of support to agriculture

(CKr mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**91 684**	**123 938**	**128 767**	**127 107**	**127 600**
of which share of common commodities (%)	*68*	*64*	*69*	*72*	*66*
Total value of consumption (at farm gate)	**74 454**	**102 022**	**114 883**	**113 445**	**115 766**
Producer Support Estimate (PSE)	**62 096**	**46 966**	**17 951**	**12 973**	**23 611**
Market price support	48 501	44 617	11 839	6 775	16 030
of which common commodities	*33 074*	*28 675*	*8 153*	*4 896*	*10 650*
Payments based on output	2 088	0	0	0	0
Payments based on area planted/animal numbers	0	229	647	332	1 190
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	3 001	2 255	4 969	5 866	4 904
Payments based on input constraints	0	345	15	0	46
Payments based on overall farming income	8 506	-480	480	0	1 441
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**59**	**37**	**13**	**10**	**17**
Producer NAC	**2.50**	**1.64**	**1.15**	**1.11**	**1.21**
General Services Support Estimate (GSSE)	**262**	**554**	**3 356**	**3 489**	**3 205**
Research and development	142	458	828	728	878
Agricultural schools	64	21	1 646	1 644	1 601
Inspection services	56	64	87	41	36
Infrastructure	0	11	785	1 066	680
Marketing and promotion	0	0	10	10	10
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**0.4**	**1.2**	**15.8**	**21.2**	**12.0**
Consumer Support Estimate (CSE)	**-29 231**	**-35 685**	**-8 585**	**-5 036**	**-12 443**
Transfers to producers from consumers	-42 482	-37 929	-7 201	-4 180	-14 252
Other transfers from consumers	-78	5	-75	-97	-95
Transfers to consumers from taxpayers	10 895	0	0	0	0
Excess feed cost	2 433	2 239	-1 309	-759	1 904
Percentage CSE	**-46**	**-35**	**-7**	**-4**	**-11**
Consumer NAC	**1.90**	**1.60**	**1.08**	**1.05**	**1.12**
Total Support Estimate (TSE)	**73 253**	**47 520**	**21 307**	**16 462**	**26 816**
Transfers from consumers	42 559	37 924	7 277	4 277	14 347
Transfers from taxpayers	30 772	9 591	14 106	12 282	12 563
Budget revenues	-78	5	-75	-97	-95
TSE as a share of GDP (%)	**n.c.**	**5.5**	**1.3**	**1.0**	**1.5**

Notes: See Part II.2 for detailed explanations. p: provisional, n.c.: not calculated; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.27. Czech Republic: Producer Support Estimate by commodity

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
CKr mn	2 479	2 008	-633	-103	2 380
Percentage PSE	36	21	-5	-1	17
Producer NAC	1.60	1.41	0.99	0.99	1.20
Maize					
CKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
CKr mn	2 686	1 572	-583	-294	1 186
Percentage PSE	52	25	-8	-3	17
Producer NAC	2.30	1.38	0.97	0.97	1.21
Rice					
CKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
CKr mn	645	343	-168	-117	54
Percentage PSE	53	24	-5	-3	1
Producer NAC	2.33	1.45	0.95	0.97	1.01
Sugar (refined equivalent)					
CKr mn	1 514	1 644	653	494	392
Percentage PSE	64	49	18	15	13
Producer NAC	2.91	2.08	1.23	1.18	1.15
Milk					
CKr mn	13 193	9 346	7 731	6 002	10 504
Percentage PSE	62	44	34	29	44
Producer NAC	2.84	1.83	1.55	1.40	1.80
Beef and Veal					
CKr mn	9 203	6 601	2 226	1 319	1 687
Percentage PSE	73	48	20	12	16
Producer NAC	3.75	2.13	1.26	1.14	1.19
Pigmeat					
CKr mn	7 983	6 600	1 198	-731	-1 526
Percentage PSE	58	35	4	-3	-9
Producer NAC	2.39	1.58	1.07	0.97	0.92
Poultry					
CKr mn	2 128	1 525	478	1 007	-658
Percentage PSE	63	38	10	19	-14
Producer NAC	2.76	1.62	1.15	1.24	0.88
Sheepmeat					
CKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool					
CKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
CKr mn	1 863	516	1 952	2 132	2 363
Percentage PSE	51	13	32	32	37
Producer NAC	2.12	1.18	1.47	1.48	1.58
Other commodities					
CKr mn	20 401	16 811	5 097	3 264	7 230
Percentage PSE	59	36	12	9	16
Producer NAC	2.47	1.62	1.14	1.10	1.19
All commodities					
CKr mn	62 096	46 966	17 951	12 973	23 611
Percentage PSE	59	37	13	10	17
Producer NAC	2.50	1.64	1.15	1.11	1.21

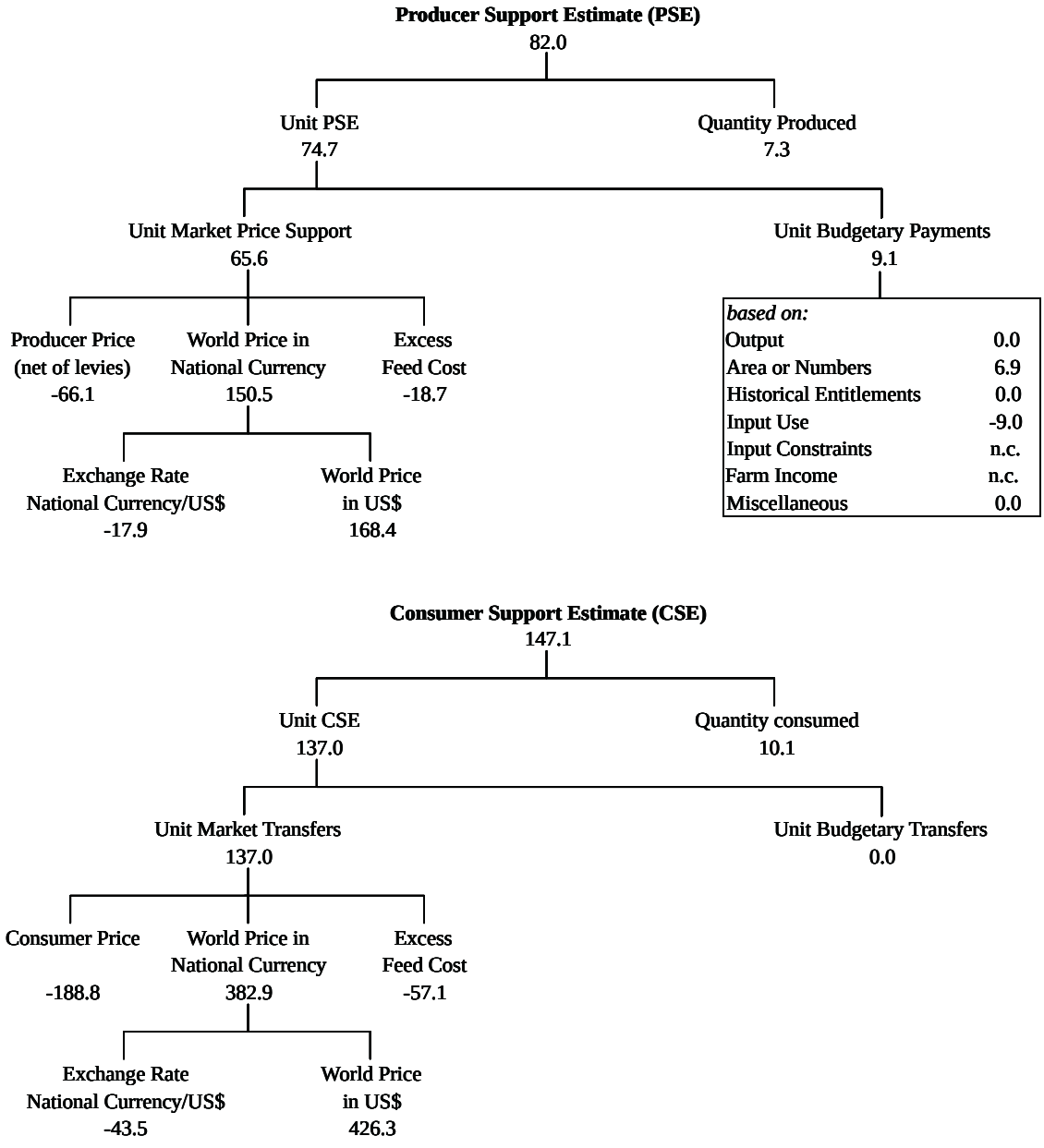
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.28. Czech Republic: Consumer Support Estimate by commodity

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
CKr mn	232	-483	330	207	-644
Percentage CSE	5	-6	3	1	-5
Consumer NAC	0.95	1.07	0.98	0.99	1.05
Maize					
CKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
CKr mn	-421	-258	171	127	-255
Percentage CSE	-10	-4	2	2	-4
Consumer NAC	1.11	1.05	0.98	0.98	1.04
Rice					
CKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
CKr mn	-444	-291	256	209	109
Percentage CSE	-45	-23	8	6	2
Consumer NAC	1.98	1.43	0.92	0.94	0.98
Sugar (refined equivalent)					
CKr mn	-330	-1 305	-463	-336	-260
Percentage CSE	-35	-48	-16	-12	-10
Consumer NAC	1.61	2.00	1.19	1.14	1.11
Milk					
CKr mn	172	-5 453	-3 850	-2 951	-5 691
Percentage CSE	4	-45	-28	-22	-39
Consumer NAC	1.06	1.88	1.41	1.28	1.65
Beef and Veal					
CKr mn	-5 189	-5 086	-902	-181	-482
Percentage CSE	-64	-50	-9	-2	-5
Consumer NAC	2.92	2.25	1.11	1.02	1.06
Pigmeat					
CKr mn	-6 820	-7 055	52	1 695	1 345
Percentage CSE	-60	-40	1	8	9
Consumer NAC	2.52	1.73	1.00	0.92	0.92
Poultry					
CKr mn	-1 454	-1 521	-269	-833	597
Percentage CSE	-61	-42	-5	-15	13
Consumer NAC	2.56	1.77	1.07	1.18	0.89
Sheepmeat					
CKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool					
CKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
CKr mn	-1 436	-689	-1 591	-1 787	-2 347
Percentage CSE	-49	-18	-27	-29	-39
Consumer NAC	2.10	1.28	1.40	1.40	1.64
Other commodities					
CKr mn	-13 541	-13 545	-2 320	-1 186	-4 816
Percentage CSE	-58	-37	-6	-4	-12
Consumer NAC	2.43	1.68	1.07	1.04	1.14
All commodities					
CKr mn	-29 231	-35 685	-8 585	-5 036	-12 443
Percentage CSE	-46	-35	-7	-4	-11
Consumer NAC	1.90	1.60	1.08	1.05	1.12

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.4. **Czech Republic: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 65.6 percentage points to the 82.0 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.29. European Union: Estimates of support to agriculture
(ECU mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**182 471**	**200 203**	**210 509**	**210 506**	**212 077**
of which share of common commodities (%)	*64*	*64*	*63*	*65*	*60*
Total value of consumption (at farm gate)	**179 414**	**184 295**	**195 817**	**197 230**	**198 924**
Producer Support Estimate (PSE)	**90 392**	**106 238**	**99 653**	**96 729**	**116 075**
Market price support	75 922	79 947	55 663	51 688	71 852
of which common commodities	*48 687*	*51 433*	*35 304*	*33 456*	*43 447*
Payments based on output	5 507	7 209	3 634	3 632	3 776
Payments based on area planted/animal numbers	2 161	9 499	26 308	27 242	26 610
Payments based on historical entitlements	0	0	735	715	678
Payments based on input use	6 090	6 839	8 612	8 685	8 815
Payments based on input constraints	635	1 705	3 844	4 042	3 695
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	77	1 038	856	725	649
Percentage PSE	**46**	**47**	**39**	**38**	**45**
Producer NAC	**1.86**	**1.88**	**1.65**	**1.61**	**1.83**
General Services Support Estimate (GSSE)	**8 756**	**12 597**	**7 823**	**8 454**	**7 517**
Research and development	971	1 385	1 655	1 653	1 672
Agricultural schools	132	53	81	79	78
Inspection services	164	117	263	279	306
Infrastructure	775	2 326	1 760	1 705	1 779
Marketing and promotion	1 677	1 913	1 956	1 975	2 021
Public stockholding	5 011	6 081	2 024	2 680	1 580
Miscellaneous	26	722	84	82	82
GSSE as a share of TSE (%)	**8.6**	**10.2**	**7.1**	**7.8**	**5.9**
Consumer Support Estimate (CSE)	**-73 728**	**-69 086**	**-48 337**	**-44 844**	**-63 170**
Transfers to producers from consumers	-79 624	-78 790	-52 205	-48 495	-68 598
Other transfers from consumers	-4 459	-613	-239	-91	-382
Transfers to consumers from taxpayers	3 031	4 472	3 271	3 330	3 564
Excess feed cost	7 324	5 846	835	411	2 246
Percentage CSE	**-42**	**-38**	**-25**	**-23**	**-32**
Consumer NAC	**1.73**	**1.63**	**1.34**	**1.30**	**1.48**
Total Support Estimate (TSE)	**102 180**	**123 308**	**110 747**	**108 513**	**127 156**
Transfers from consumers	84 084	79 403	52 444	48 585	68 979
Transfers from taxpayers	22 555	44 517	58 542	60 018	58 558
Budget revenues	-4 459	-613	-239	-91	-382
TSE as a share of GDP (%)	**2.3**	**1.5**	**1.1**	**1.2**	**1.4**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.30. European Union: Producer Support Estimate by commodity

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
ECU mn	8 250	10 443	10 717	9 933	12 855
Percentage PSE	54	56	46	44	56
Producer NAC	2.17	2.28	1.88	1.77	2.25
Maize					
ECU mn	2 731	3 183	2 181	2 396	2 578
Percentage PSE	51	54	34	35	44
Producer NAC	2.11	2.19	1.55	1.54	1.79
Other grains					
ECU mn	6 031	6 373	8 450	8 141	9 446
Percentage PSE	60	63	58	55	68
Producer NAC	2.60	2.72	2.46	2.24	3.08
Rice					
ECU mn	363	341	267	208	303
Percentage PSE	57	49	27	21	29
Producer NAC	2.41	1.96	1.37	1.26	1.41
Oilseeds					
ECU mn	3 961	4 682	2 872	3 153	3 260
Percentage PSE	70	69	48	49	49
Producer NAC	3.35	3.42	1.92	1.98	1.95
Sugar (refined equivalent)					
ECU mn	2 494	2 771	1 806	1 828	1 855
Percentage PSE	53	52	38	36	43
Producer NAC	2.13	2.10	1.62	1.55	1.75
Milk					
ECU mn	18 389	19 562	19 908	18 994	21 378
Percentage PSE	58	57	53	50	57
Producer NAC	2.42	2.35	2.12	2.01	2.32
Beef and Veal					
ECU mn	10 297	15 119	18 341	19 192	20 815
Percentage PSE	48	54	53	55	62
Producer NAC	1.96	2.24	2.20	2.24	2.61
Pigmeat					
ECU mn	2 171	2 469	736	439	1 521
Percentage PSE	13	12	4	2	8
Producer NAC	1.14	1.14	1.04	1.02	1.08
Poultry					
ECU mn	1 361	1 494	1 447	1 447	1 130
Percentage PSE	23	22	19	19	15
Producer NAC	1.31	1.29	1.24	1.24	1.18
Sheepmeat					
ECU mn	3 633	5 079	5 546	5 769	5 287
Percentage PSE	70	71	65	64	65
Producer NAC	3.47	3.41	2.86	2.77	2.84
Wool					
ECU mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
ECU mn	597	310	202	60	255
Percentage PSE	12	6	4	1	6
Producer NAC	1.14	1.07	1.05	1.01	1.07
Other commodities					
ECU mn	30 113	34 412	27 180	25 169	35 391
Percentage PSE	44	44	33	31	39
Producer NAC	1.80	1.80	1.49	1.45	1.64
All commodities					
ECU mn	90 392	106 238	99 653	96 729	116 075
Percentage PSE	46	47	39	38	45
Producer NAC	1.86	1.88	1.65	1.61	1.83

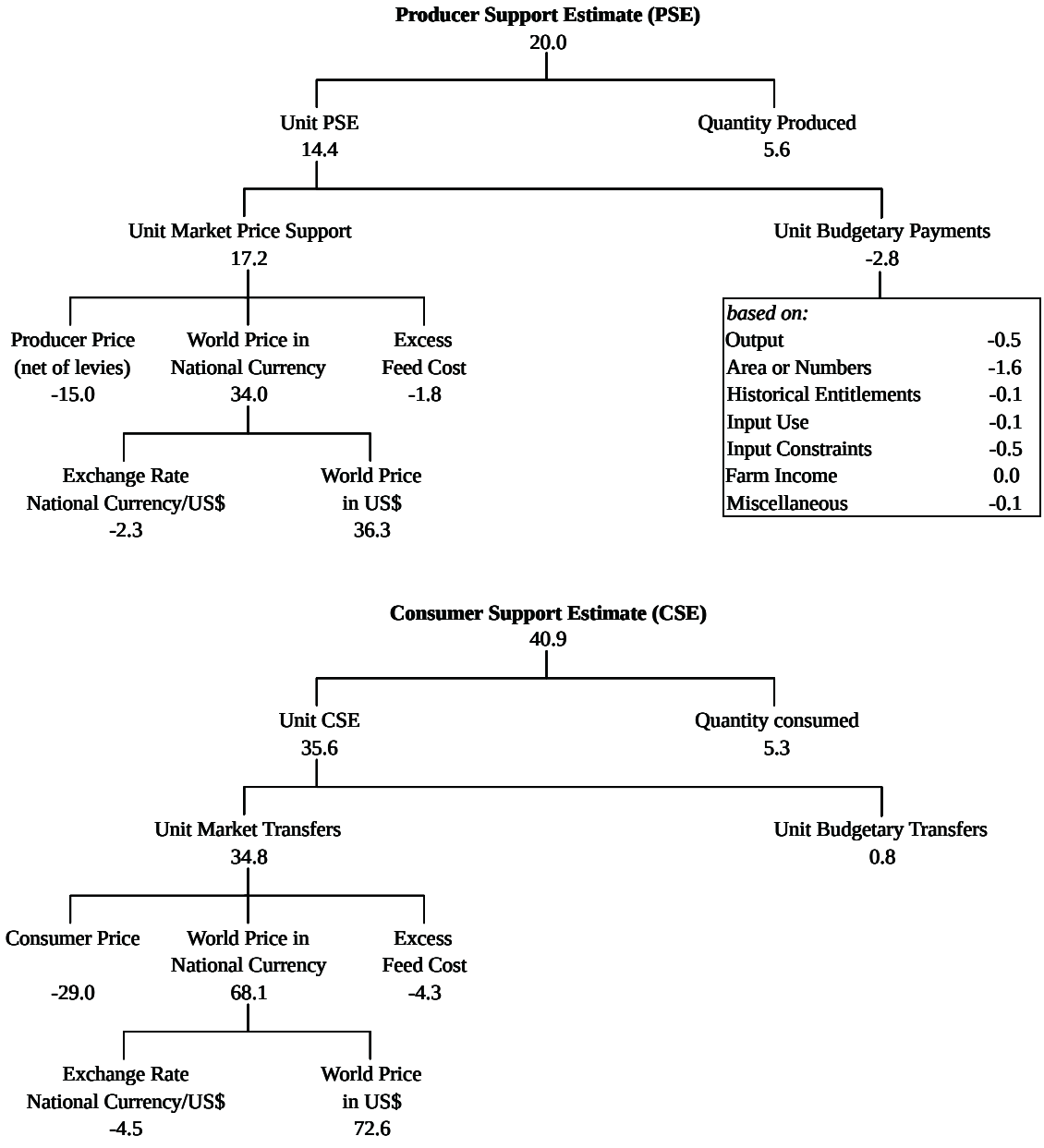
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
UE-12 for 1986-94, UE-15 from 1995, EU includes ex-GDR from 1990.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities.
Source: OECD, PSE/CSE database.

Table III.31. **European Union: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
ECU mn	-3 364	-2 842	-27	294	-930
Percentage CSE	-31	-27	-1	3	-10
Consumer NAC	1.45	1.38	1.01	0.97	1.11
Maize					
ECU mn	-407	-271	-7	27	-88
Percentage CSE	-8	-6	0	1	-2
Consumer NAC	1.08	1.06	1.00	0.99	1.02
Other grains					
ECU mn	-896	-759	-167	-90	-365
Percentage CSE	-12	-12	-3	-2	-7
Consumer NAC	1.13	1.13	1.03	1.02	1.08
Rice					
ECU mn	-363	-365	-195	-156	-201
Percentage CSE	-58	-49	-25	-20	-26
Consumer NAC	2.45	1.97	1.34	1.25	1.35
Oilseeds					
ECU mn	31	2	2	2	2
Percentage CSE	1	0	0	0	0
Consumer NAC	0.99	1.00	1.00	1.00	1.00
Sugar (refined equivalent)					
ECU mn	-3 853	-3 364	-2 929	-3 024	-2 893
Percentage CSE	-77	-70	-64	-63	-68
Consumer NAC	4.47	3.38	2.78	2.69	3.10
Milk					
ECU mn	-15 036	-15 945	-15 960	-14 946	-17 745
Percentage CSE	-61	-58	-50	-47	-56
Consumer NAC	2.66	2.38	2.00	1.88	2.25
Beef and Veal					
ECU mn	-11 724	-11 904	-9 962	-11 107	-12 470
Percentage CSE	-48	-51	-40	-43	-51
Consumer NAC	1.95	2.13	1.72	1.75	2.05
Pigmeat					
ECU mn	-4 781	-4 397	-590	-187	-1 857
Percentage CSE	-28	-23	-3	-1	-10
Consumer NAC	1.40	1.29	1.04	1.01	1.12
Poultry					
ECU mn	-2 270	-2 179	-1 396	-1 379	-1 199
Percentage CSE	-41	-35	-21	-20	-18
Consumer NAC	1.70	1.55	1.26	1.25	1.22
Sheepmeat					
ECU mn	-3 088	-2 019	-838	-372	-1 204
Percentage CSE	-64	-46	-19	-9	-26
Consumer NAC	2.86	1.93	1.24	1.10	1.35
Wool					
ECU mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
ECU mn	-904	-546	-218	-69	-311
Percentage CSE	-19	-11	-5	-2	-8
Consumer NAC	1.23	1.13	1.05	1.02	1.09
Other commodities					
ECU mn	-27 075	-24 496	-16 049	-13 838	-23 908
Percentage CSE	-44	-40	-23	-21	-32
Consumer NAC	1.81	1.66	1.31	1.26	1.47
All commodities					
ECU mn	-73 728	-69 086	-48 337	-44 844	-63 170
Percentage CSE	-42	-38	-25	-23	-32
Consumer NAC	1.73	1.63	1.34	1.30	1.48

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.5. **European Union: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 17.2 percentage points to the 20.0 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.32. **Hungary: Estimates of support to agriculture**

(Ft mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**287 762**	**429 029**	**1 036 468**	**994 251**	**1 100 794**
of which share of common commodities (%)	*69*	*68*	*65*	*72*	*64*
Total value of consumption (at farm gate)	**239 641**	**373 882**	**730 837**	**696 219**	**749 491**
Producer Support Estimate (PSE)	**126 812**	**74 362**	**107 369**	**80 803**	**137 541**
Market price support	96 347	54 935	48 652	22 613	70 639
of which common commodities	*66 045*	*37 129*	*31 772*	*16 277*	*44 999*
Payments based on output	0	0	5 587	8 380	8 380
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	10 833	13 155	44 745	40 555	49 322
Payments based on input constraints	0	406	392	376	800
Payments based on overall farming income	18 832	1 000	7 660	8 879	7 400
Miscellaneous payments	800	4 867	333	0	1 000
Percentage PSE	**40**	**17**	**10**	**8**	**12**
Producer NAC	**1.68**	**1.20**	**1.11**	**1.08**	**1.13**
General Services Support Estimate (GSSE)	**3 437**	**6 701**	**20 944**	**17 140**	**27 097**
Research and development	137	416	1 975	2 218	2 762
Agricultural schools	199	564	1 586	1 515	1 962
Inspection services	1 882	5 321	14 517	12 170	15 413
Infrastructure	1 220	400	707	760	960
Marketing and promotion	0	0	2 159	478	6 000
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**2.4**	**8.1**	**16.3**	**17.5**	**16.5**
Consumer Support Estimate (CSE)	**-67 086**	**-43 231**	**-51 310**	**-36 499**	**-69 940**
Transfers to producers from consumers	-79 472	-44 143	-28 342	-8 914	-41 930
Other transfers from consumers	-253	1 111	-692	-862	0
Transfers to consumers from taxpayers	12 233	1 167	0	0	0
Excess feed cost	406	-1 365	-22 275	-26 723	-28 010
Percentage CSE	**-30**	**-12**	**-7**	**-5**	**-9**
Consumer NAC	**1.43**	**1.13**	**1.08**	**1.06**	**1.10**
Total Support Estimate (TSE)	**142 483**	**82 230**	**128 313**	**97 944**	**164 639**
Transfers from consumers	79 725	43 033	29 035	9 776	41 930
Transfers from taxpayers	63 011	38 087	99 970	89 030	122 708
Budget revenues	-253	1 111	-692	-862	0
TSE as a share of GDP (%)	**n.c.**	**2.7**	**1.5**	**1.2**	**1.6**

Notes: See Part II.2 for detailed explanations. p: provisional, n.c.: not calculated; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.33. **Hungary: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
Ft mn	2 602	-1 814	-13 157	-15 167	-25 405
Percentage PSE	11	-7	-15	-13	-32
Producer NAC	1.15	0.95	0.88	0.88	0.76
Maize					
Ft mn	2 457	676	-27 354	-37 151	-29 353
Percentage PSE	8	2	-24	-32	-28
Producer NAC	1.11	1.05	0.81	0.76	0.78
Other grains					
Ft mn	1 454	65	-1 144	-1 741	-3 770
Percentage PSE	37	1	-5	-6	-18
Producer NAC	1.72	1.05	0.96	0.95	0.85
Rice					
Ft mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
Ft mn	4 220	-1 483	5 038	3 763	4 818
Percentage PSE	46	-16	16	16	13
Producer NAC	2.01	0.96	1.19	1.19	1.15
Sugar (refined equivalent)					
Ft mn	2 968	3 223	9 150	10 653	7 465
Percentage PSE	55	45	43	48	40
Producer NAC	2.39	1.83	1.78	1.93	1.66
Milk					
Ft mn	10 400	15 172	40 147	39 734	61 650
Percentage PSE	45	37	40	41	53
Producer NAC	1.92	1.59	1.73	1.70	2.13
Beef and Veal					
Ft mn	10 448	7 032	3 267	2 521	3 604
Percentage PSE	69	39	14	12	15
Producer NAC	3.28	1.74	1.17	1.14	1.17
Pigmeat					
Ft mn	33 249	13 110	9 891	2 565	19 129
Percentage PSE	53	16	6	1	10
Producer NAC	2.14	1.19	1.06	1.02	1.12
Poultry					
Ft mn	12 015	5 135	24 971	29 744	25 098
Percentage PSE	44	15	25	28	24
Producer NAC	1.81	1.17	1.33	1.39	1.32
Sheepmeat					
Ft mn	1 697	796	127	185	-437
Percentage PSE	39	15	2	2	-6
Producer NAC	1.64	1.25	1.02	1.02	0.95
Wool					
Ft mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
Ft mn	5 411	7 894	21 369	25 267	26 961
Percentage PSE	48	34	47	51	56
Producer NAC	2.03	1.58	1.93	2.05	2.25
Other commodities					
Ft mn	39 893	24 556	35 065	20 432	47 781
Percentage PSE	40	17	9	7	11
Producer NAC	1.68	1.21	1.10	1.08	1.13
All commodities					
Ft mn	126 812	74 362	107 369	80 803	137 541
Percentage PSE	40	17	10	8	12
Producer NAC	1.68	1.20	1.11	1.08	1.13

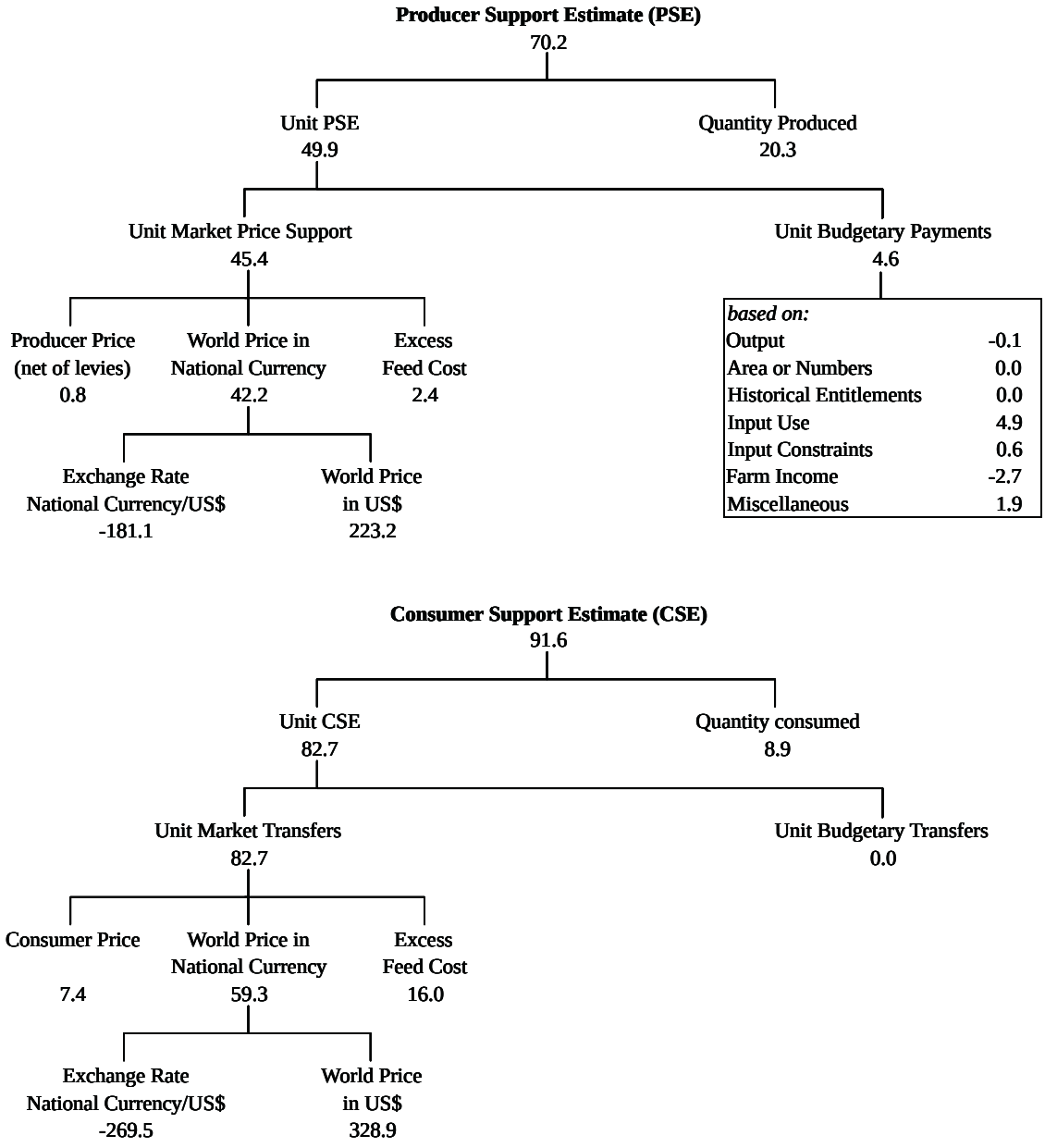
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.34. **Hungary: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
Ft mn	9	2 558	7 101	8 475	11 032
Percentage CSE	0	8	13	12	25
Consumer NAC	1.01	0.94	0.89	0.89	0.80
Maize					
Ft mn	78	588	6 746	11 270	6 039
Percentage CSE	0	2	9	14	9
Consumer NAC	1.00	0.98	0.92	0.88	0.92
Other grains					
Ft mn	-396	85	347	539	893
Percentage CSE	-9	2	2	2	5
Consumer NAC	1.10	0.99	0.98	0.98	0.95
Rice					
Ft mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
Ft mn	-2 829	2 359	-3 636	-3 237	-2 392
Percentage CSE	-40	22	-12	-12	-8
Consumer NAC	1.82	0.92	1.13	1.13	1.09
Sugar (refined equivalent)					
Ft mn	-1 912	-2 725	-6 368	-7 630	-5 728
Percentage CSE	-51	-42	-41	-46	-36
Consumer NAC	2.17	1.75	1.69	1.84	1.57
Milk					
Ft mn	-33	-10 272	-27 227	-26 705	-42 557
Percentage CSE	-2	-31	-34	-34	-47
Consumer NAC	1.08	1.47	1.55	1.51	1.88
Beef and Veal					
Ft mn	-6 019	-4 911	335	1 263	685
Percentage CSE	-64	-36	2	8	3
Consumer NAC	2.84	1.61	0.98	0.92	0.97
Pigmeat					
Ft mn	-23 116	-7 278	4 849	9 843	2 670
Percentage CSE	-44	-12	6	13	3
Consumer NAC	1.81	1.14	0.94	0.89	0.97
Poultry					
Ft mn	-3 619	-2 774	-9 259	-11 504	-8 246
Percentage CSE	-32	-10	-14	-17	-12
Consumer NAC	1.48	1.12	1.17	1.20	1.14
Sheepmeat					
Ft mn	-277	-397	303	332	669
Percentage CSE	-29	-11	8	9	18
Consumer NAC	1.41	1.17	0.93	0.92	0.85
Wool					
Ft mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
Ft mn	-3 950	-6 483	-14 336	-16 406	-17 786
Percentage CSE	-44	-31	-40	-44	-48
Consumer NAC	1.89	1.51	1.69	1.78	1.92
Other commodities					
Ft mn	-25 021	-13 983	-10 165	-2 739	-15 220
Percentage CSE	-34	-12	-4	-1	-6
Consumer NAC	1.53	1.13	1.04	1.01	1.06
All commodities					
Ft mn	-67 086	-43 231	-51 310	-36 499	-69 940
Percentage CSE	-30	-12	-7	-5	-9
Consumer NAC	1.43	1.13	1.08	1.06	1.10

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.6. **Hungary: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 45.4 percentage points to the 70.2 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.35. **Iceland: Estimates of support to agriculture**

(IKr mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**9 644**	**13 191**	**11 268**	**11 306**	**11 080**
of which share of common commodities (%)	*81*	*77*	*72*	*70*	*78*
Total value of consumption (at farm gate)	**9 326**	**13 693**	**12 699**	**12 478**	**12 321**
Producer Support Estimate (PSE)	**8 001**	**11 737**	**9 876**	**9 553**	**11 302**
Market price support	6 987	8 434	4 786	4 507	5 971
of which common commodities	*5 677*	*6 474*	***3 432***	***3 166***	***4 662***
Payments based on output	113	2 198	4 317	4 267	4 541
Payments based on area planted/animal numbers	48	49	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	853	1 056	773	778	790
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**75**	**71**	**60**	**58**	**69**
Producer NAC	**4.03**	**3.61**	**2.59**	**2.41**	**3.21**
General Services Support Estimate (GSSE)	**935**	**1 313**	**1 178**	**1 304**	**1 116**
Research and development	93	166	172	146	176
Agricultural schools	149	224	318	342	316
Inspection services	39	57	86	95	92
Infrastructure	281	443	320	476	250
Marketing and promotion	10	17	36	36	36
Public stockholding	359	405	239	200	236
Miscellaneous	5	2	8	9	9
GSSE as a share of TSE (%)	**8.8**	**8.1**	**10.3**	**11.7**	**8.7**
Consumer Support Estimate (CSE)	**-5 155**	**-5 391**	**-4 925**	**-4 702**	**-5 867**
Transfers to producers from consumers	**-6 368**	**-8 228**	**-4 746**	**-4 511**	**-5 775**
Other transfers from consumers	**-517**	**-414**	**-523**	**-519**	**-461**
Transfers to consumers from taxpayers	**1 730**	**3 252**	**344**	**328**	**369**
Excess feed cost	**0**	**0**	**0**	**0**	**0**
Percentage CSE	**-68**	**-52**	**-40**	**-39**	**-49**
Consumer NAC	**3.17**	**2.15**	**1.69**	**1.63**	**1.96**
Total Support Estimate (TSE)	**10 666**	**16 302**	**11 398**	**11 184**	**12 787**
Transfers from consumers	6 885	8 643	5 269	5 030	6 236
Transfers from taxpayers	4 298	8 073	6 652	6 673	7 012
Budget revenues	-517	-414	-523	-519	-461
TSE as a share of GDP (%)	**5.1**	**4.1**	**2.1**	**2.1**	**2.2**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.36. **Iceland: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
IKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Maize					
IKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
IKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Rice					
IKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
IKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Sugar (refined equivalent)					
IKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
IKr mn	2 738	4 477	4 602	4 398	5 327
Percentage PSE	82	81	77	75	81
Producer NAC	5.67	5.31	4.37	4.06	5.35
Beef and Veal					
IKr mn	347	546	391	437	501
Percentage PSE	56	51	40	44	51
Producer NAC	2.35	2.24	1.73	1.79	2.05
Pigmeat					
IKr mn	373	687	529	499	641
Percentage PSE	79	75	56	52	68
Producer NAC	4.76	4.06	2.37	2.07	3.08
Poultry					
IKr mn	238	371	573	586	714
Percentage PSE	86	84	83	84	84
Producer NAC	7.31	6.42	6.00	6.15	6.24
Sheepmeat					
IKr mn	2 407	2 857	1 635	1 528	2 002
Percentage PSE	74	69	48	44	55
Producer NAC	3.99	3.52	1.93	1.79	2.23
Wool					
IKr mn	47	130	185	176	196
Percentage PSE	25	55	64	60	68
Producer NAC	1.33	2.21	2.81	2.51	3.16
Eggs					
IKr mn	304	449	432	411	443
Percentage PSE	80	79	76	74	79
Producer NAC	5.08	4.77	4.12	3.87	4.67
Other commodities					
IKr mn	1 547	2 220	1 528	1 519	1 478
Percentage PSE	74	61	45	43	57
Producer NAC	3.94	2.75	1.88	1.75	2.32
All commodities					
IKr mn	8 001	11 737	9 876	9 553	11 302
Percentage PSE	75	71	60	58	69
Producer NAC	4.03	3.61	2.59	2.41	3.21

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities

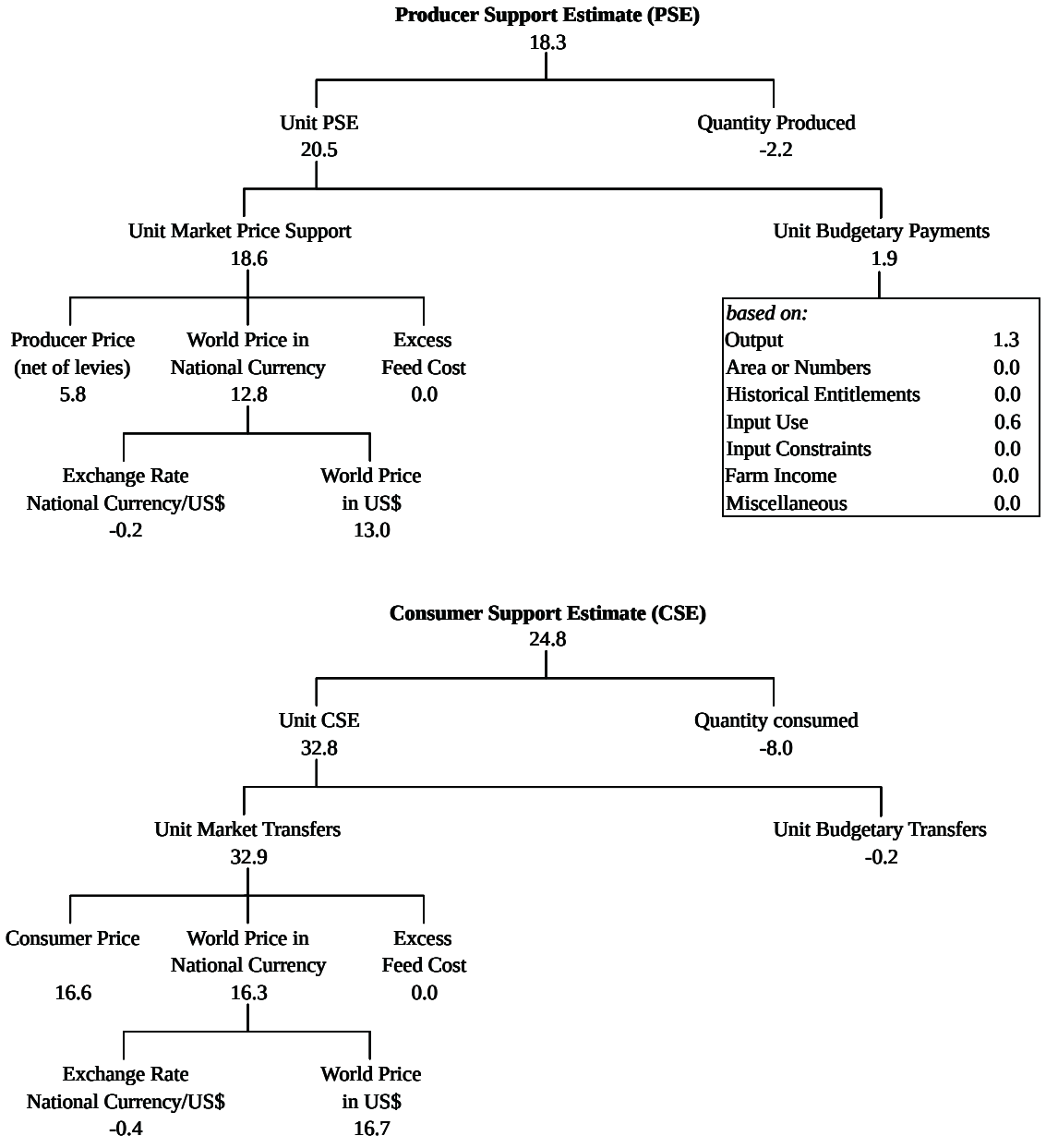
Source: OECD, PSE/CSE database.

Table III.37. **Iceland: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
IKr mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Maize					
IKr mn	-119	-43	0	0	0
Percentage CSE	325	-83	0	0	0
Consumer NAC	0.05	0.74	1.00	1.00	1.00
Other grains					
IKr mn	-32	-22	0	0	0
Percentage CSE	-173	-32	0	0	0
Consumer NAC	0.53	1.47	1.00	1.00	1.00
Rice					
IKr mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Oilseeds					
IKr mn	-24	-10	0	0	0
Percentage CSE	-2 064	-22	0	0	0
Consumer NAC	- 2.60	1.29	1.00	1.00	1.00
Sugar (refined equivalent)					
IKr mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Milk					
IKr mn	-1 578	-1 638	-1 745	-1 625	-2 209
Percentage CSE	-74	-61	-56	-54	-66
Consumer NAC	4.29	2.70	2.36	2.19	2.94
Beef and Veal					
IKr mn	-270	-343	-367	-412	-474
Percentage CSE	-49	-41	-39	-43	-50
Consumer NAC	2.08	1.82	1.68	1.75	1.98
Pigmeat					
IKr mn	-345	-591	-522	-495	-628
Percentage CSE	-79	-73	-56	-52	-68
Consumer NAC	4.75	3.70	2.37	2.07	3.08
Poultry					
IKr mn	-210	-322	-553	-539	-676
Percentage CSE	-87	-83	-83	-83	-84
Consumer NAC	7.81	5.99	6.07	5.96	6.37
Sheepmeat					
IKr mn	-1 066	-107	106	137	-153
Percentage CSE	-63	155	9	9	-10
Consumer NAC	2.83	1.14	0.94	0.92	1.11
Wool					
IKr mn	76	102	43	93	22
Percentage CSE	104	-1 840	160	430	32
Consumer NAC	0.49	- 0.04	0.60	0.19	0.76
Eggs					
IKr mn	-292	-396	-381	-364	-381
Percentage CSE	-80	-77	-76	-74	-79
Consumer NAC	5.13	4.41	4.12	3.86	4.66
Other commodities					
IKr mn	-1 295	-2 022	-1 506	-1 497	-1 367
Percentage CSE	-74	-62	-42	-40	-51
Consumer NAC	3.85	2.88	1.74	1.68	2.02
All commodities					
IKr mn	-5 155	-5 391	-4 925	-4 702	-5 867
Percentage CSE	-68	-52	-40	-39	-49
Consumer NAC	3.17	2.15	1.69	1.63	1.96

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.7. **Iceland: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Budgetary Payments contributed 1.9 percentage points to the 18.1 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.38. **Japan: Estimates of support to agriculture**

(¥ bn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**10 995**	**11 166**	**9 996**	**9 942**	**9 599**
of which share of common commodities (%)	*61*	*56*	*56*	*57*	*55*
Total value of consumption (at farm gate)	**15 836**	**18 088**	**17 829**	**17 597**	**17 486**
Producer Support Estimate (PSE)	**7 611**	**6 878**	**6 629**	**6 369**	**6 422**
Market price support	6 865	6 230	6 063	5 784	5 861
of which common commodities	*4 213*	*3 476*	*3 405*	*3 272*	*3 224*
Payments based on output	220	207	152	168	159
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	298	301	286	284	285
Payments based on input constraints	228	140	128	133	117
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**65**	**58**	**63**	**61**	**63**
Producer NAC	**2.85**	**2.40**	**2.69**	**2.53**	**2.72**
General Services Support Estimate (GSSE)	**1 272**	**1 694**	**1 811**	**1 882**	**1 485**
Research and development	46	59	63	61	67
Agricultural schools	30	28	29	29	28
Inspection services	8	9	11	11	11
Infrastructure	1 009	1 358	1 435	1 505	1 114
Marketing and promotion	22	20	27	27	26
Public stockholding	43	58	62	67	57
Miscellaneous	115	162	185	182	184
GSSE as a share of TSE (%)	**15.0**	**20.5**	**23.0**	**24.3**	**20.0**
Consumer Support Estimate (CSE)	**-9 374**	**-9 381**	**-9 445**	**-8 944**	**-9 544**
Transfers to producers from consumers	**-6 983**	**-6 502**	**-6 211**	**-5 945**	**-6 014**
Other transfers from consumers	**-2 324**	**-2 862**	**-2 920**	**-2 751**	**-3 304**
Transfers to consumers from taxpayers	**-422**	**-318**	**-564**	**-498**	**-466**
Excess feed cost	**354**	**301**	**250**	**249**	**241**
Percentage CSE	**-58**	**-51**	**-51**	**-49**	**-53**
Consumer NAC	**2.37**	**2.04**	**2.06**	**1.98**	**2.13**
Total Support Estimate (TSE)	**8 461**	**8 254**	**7 876**	**7 753**	**7 441**
Transfers from consumers	9 306	9 364	9 131	8 696	9 318
Transfers from taxpayers	1 479	1 752	1 665	1 808	1 427
Budget revenues	-2 324	-2 862	-2 920	-2 751	-3 304
TSE as a share of GDP (%)	**2.4**	**1.8**	**1.6**	**1.5**	**1.5**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.39. **Japan: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
¥ bn	165	107	79	83	82
Percentage PSE	88	86	86	86	86
Producer NAC	8.80	7.21	7.22	7.33	7.25
Maize					
¥ bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
¥ bn	53	32	19	20	15
Percentage PSE	76	70	67	67	68
Producer NAC	4.17	3.33	3.04	3.07	3.11
Rice					
¥ bn	2 967	2 363	2 438	2 362	2 236
Percentage PSE	85	83	81	78	84
Producer NAC	6.63	6.06	5.34	4.65	6.16
Oilseeds					
¥ bn	47	12	10	9	10
Percentage PSE	74	32	35	36	36
Producer NAC	4.12	1.50	1.55	1.57	1.57
Sugar (refined equivalent)					
¥ bn	85	66	58	57	63
Percentage PSE	66	63	60	59	61
Producer NAC	3.00	2.73	2.52	2.44	2.58
Milk					
¥ bn	632	666	596	593	605
Percentage PSE	84	82	78	77	80
Producer NAC	6.59	5.56	4.50	4.33	4.88
Beef and Veal					
¥ bn	377	278	225	229	208
Percentage PSE	44	35	33	33	32
Producer NAC	1.80	1.55	1.50	1.49	1.47
Pigmeat					
¥ bn	294	301	263	216	303
Percentage PSE	42	50	51	43	59
Producer NAC	1.76	2.01	2.07	1.74	2.44
Poultry					
¥ bn	49	42	36	35	38
Percentage PSE	12	11	11	11	12
Producer NAC	1.14	1.13	1.13	1.13	1.13
Sheepmeat					
¥ bn	0	0	0	0	0
Percentage PSE	0	0	0	0	0
Producer NAC	1.00	1.00	1.00	1.00	1.00
Wool					
¥ bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
¥ bn	74	74	69	77	51
Percentage PSE	18	18	17	17	16
Producer NAC	1.22	1.22	1.20	1.20	1.20
Other commodities					
¥ bn	2 867	2 937	2 835	2 688	2 812
Percentage PSE	61	52	62	59	60
Producer NAC	2.59	2.09	2.61	2.46	2.50
All commodities					
¥ bn	7 611	6 878	6 629	6 369	6 422
Percentage PSE	65	58	63	61	63
Producer NAC	2.85	2.40	2.69	2.53	2.72

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities

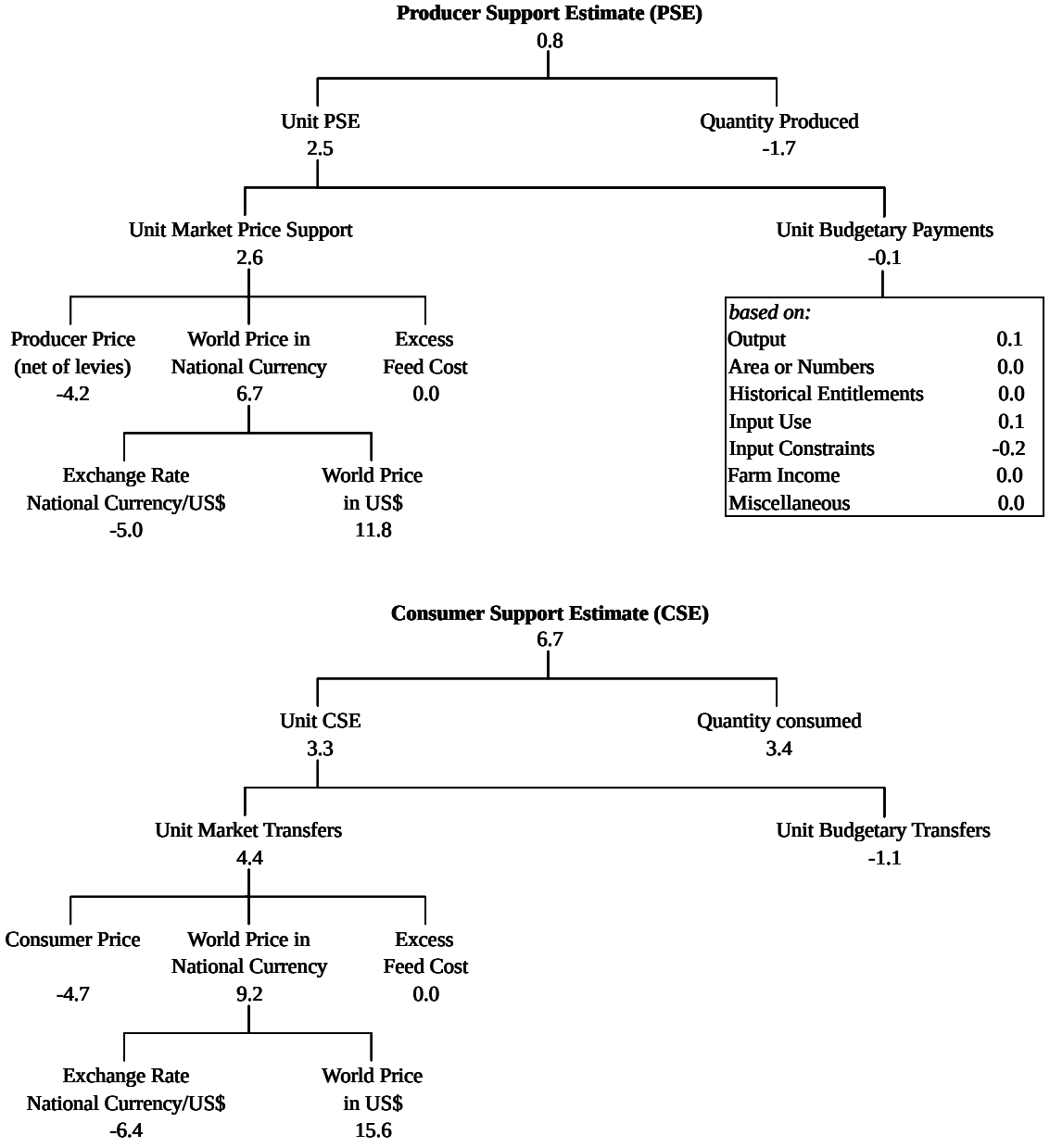
Source: OECD, PSE/CSE database.

Table III.40. **Japan: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
¥ bn	-263	-185	-150	-157	-150
Percentage CSE	-45	-38	-36	-37	-36
Consumer NAC	1.83	1.61	1.56	1.59	1.57
Maize					
¥ bn	-4	-2	-2	-2	-1
Percentage CSE	-2	-1	-1	-1	0
Consumer NAC	1.02	1.01	1.01	1.01	1.00
Other grains					
¥ bn	-87	-83	-86	-90	-86
Percentage CSE	-21	-20	-22	-23	-24
Consumer NAC	1.26	1.26	1.29	1.30	1.31
Rice					
¥ bn	-2 721	-2 483	-2 307	-2 202	-2 415
Percentage CSE	-83	-81	-79	-77	-83
Consumer NAC	6.12	5.38	4.90	4.35	5.73
Oilseeds					
¥ bn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Sugar (refined equivalent)					
¥ bn	-252	-218	-148	-143	-142
Percentage CSE	-57	-51	-44	-42	-44
Consumer NAC	2.31	2.06	1.77	1.73	1.78
Milk					
¥ bn	-567	-612	-548	-546	-556
Percentage CSE	-78	-76	-69	-68	-71
Consumer NAC	4.77	4.19	3.22	3.10	3.45
Beef and Veal					
¥ bn	-558	-479	-547	-573	-529
Percentage CSE	-43	-31	-31	-31	-30
Consumer NAC	1.76	1.46	1.44	1.44	1.42
Pigmeat					
¥ bn	-356	-419	-407	-338	-444
Percentage CSE	-41	-49	-50	-42	-58
Consumer NAC	1.73	1.98	2.04	1.72	2.40
Poultry					
¥ bn	-51	-48	-47	-46	-47
Percentage CSE	-11	-10	-10	-11	-10
Consumer NAC	1.13	1.12	1.12	1.12	1.12
Sheepmeat					
¥ bn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Wool					
¥ bn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Eggs					
¥ bn	-71	-70	-67	-74	-49
Percentage CSE	-17	-17	-16	-16	-15
Consumer NAC	1.20	1.20	1.19	1.18	1.18
Other commodities					
¥ bn	-4 445	-4 782	-5 135	-4 774	-5 124
Percentage CSE	-64	-55	-57	-55	-58
Consumer NAC	2.78	2.24	2.35	2.23	2.39
All commodities					
¥ bn	-9 374	-9 381	-9 445	-8 944	-9 544
Percentage CSE	-58	-51	-51	-49	-53
Consumer NAC	2.37	2.04	2.06	1.98	2.13

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.8. **Japan: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Budgetary Payments contributed -0.1 percentage points to the 0.8 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.41. **Korea: Estimates of support to agriculture**

(Won bn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**13 624**	**20 100**	**28 881**	**29 258**	**29 258**
of which share of common commodities (%)	*63*	*57*	*56*	*55*	*55*
Total value of consumption (at farm gate)	**14 254**	**24 013**	**31 176**	**31 208**	**31 021**
Producer Support Estimate (PSE)	**9 757**	**15 732**	**19 431**	**20 075**	**17 882**
Market price support	9 660	15 047	18 334	18 933	16 800
of which common commodities	*6 104*	*8 569*	*10 180*	*10 460*	*9 282*
Payments based on output	0	0	0	0	0
Payments based on area planted/animal numbers	0	2	13	11	19
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	69	382	817	863	812
Payments based on input constraints	0	19	81	86	93
Payments based on overall farming income	28	282	187	182	158
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**71**	**76**	**65**	**66**	**59**
Producer NAC	**3.52**	**4.12**	**2.89**	**2.94**	**2.44**
General Services Support Estimate (GSSE)	**1 613**	**3 046**	**4 267**	**4 432**	**4 286**
Research and development	52	131	270	260	272
Agricultural schools	5	27	48	56	47
Inspection services	21	44	86	88	81
Infrastructure	374	807	2 458	2 576	2 607
Marketing and promotion	0	2	14	13	11
Public stockholding	1 162	2 035	1 390	1 439	1 267
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**14.1**	**16.1**	**17.8**	**17.9**	**19.1**
Consumer Support Estimate (CSE)	**-9 576**	**-17 223**	**-18 980**	**-19 441**	**-16 516**
Transfers to producers from consumers	-9 430	-15 031	-17 832	-18 298	-16 166
Other transfers from consumers	-205	-2 367	-1 380	-1 458	-584
Transfers to consumers from taxpayers	59	175	232	315	234
Excess feed cost	0	0	0	0	0
Percentage CSE	**-67**	**-72**	**-61**	**-63**	**-54**
Consumer NAC	**3.07**	**3.60**	**2.64**	**2.70**	**2.16**
Total Support Estimate (TSE)	**11 430**	**18 953**	**23 931**	**24 822**	**22 402**
Transfers from consumers	9 635	17 398	19 212	19 756	16 750
Transfers from taxpayers	2 000	3 922	6 099	6 524	6 235
Budget revenues	-205	-2 367	-1 380	-1 458	-584
TSE as a share of GDP (%)	**10.1**	**7.9**	**5.9**	**5.9**	**5.4**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.42. **Korea: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Maize					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
Won bn	222	260	182	158	142
Percentage PSE	73	82	76	79	70
Producer NAC	3.71	5.68	4.32	4.82	3.36
Rice					
Won bn	4 541	6 064	7 268	7 649	6 641
Percentage PSE	82	87	77	80	71
Producer NAC	5.62	7.98	4.55	4.96	3.42
Oilseeds					
Won bn	157	185	232	232	212
Percentage PSE	79	84	82	83	77
Producer NAC	4.78	6.26	5.81	5.72	4.43
Sugar (refined equivalent)					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
Won bn	331	524	647	593	745
Percentage PSE	74	73	66	66	65
Producer NAC	4.01	3.75	2.94	2.96	2.88
Beef and Veal					
Won bn	508	822	1 109	1 232	844
Percentage PSE	54	68	57	61	42
Producer NAC	2.26	3.15	2.49	2.59	1.74
Pigmeat					
Won bn	310	754	784	668	783
Percentage PSE	33	46	36	32	35
Producer NAC	1.50	1.89	1.58	1.47	1.54
Poultry					
Won bn	122	253	470	479	411
Percentage PSE	44	50	62	67	49
Producer NAC	1.85	2.01	2.77	3.01	1.96
Sheepmeat					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
Won bn	-27	61	96	95	135
Percentage PSE	-10	14	14	14	18
Producer NAC	0.92	1.19	1.16	1.17	1.21
Other commodities					
Won bn	3 591	6 810	8 643	8 970	7 970
Percentage PSE	74	77	64	64	59
Producer NAC	4.86	4.42	2.81	2.79	2.43
All commodities					
Won bn	9 757	15 732	19 431	20 075	17 882
Percentage PSE	71	76	65	66	59
Producer NAC	3.52	4.12	2.89	2.94	2.44

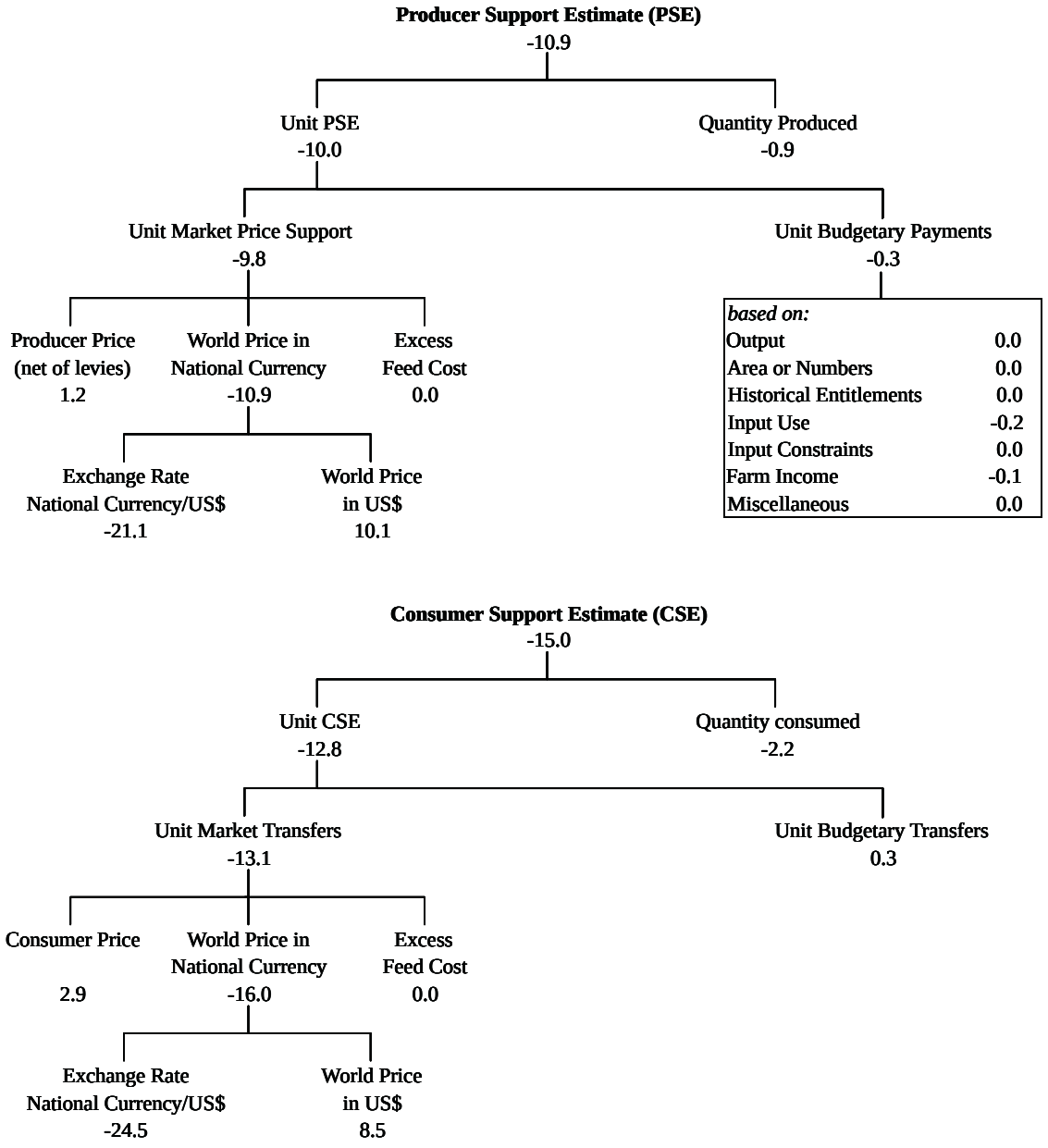
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.43. **Korea: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Maize					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
Won bn	-210	-253	-175	-153	-135
Percentage CSE	-71	-78	-63	-64	-52
Consumer NAC	3.42	4.61	2.85	2.74	2.07
Rice					
Won bn	-4 452	-6 197	-6 631	-6 934	-5 947
Percentage CSE	-82	-87	-76	-79	-70
Consumer NAC	5.58	7.64	4.37	4.77	3.29
Oilseeds					
Won bn	-176	-184	-254	-244	-245
Percentage CSE	-42	-40	-31	-30	-23
Consumer NAC	1.72	1.69	1.46	1.42	1.30
Sugar (refined equivalent)					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
Won bn	-325	-534	-724	-711	-777
Percentage CSE	-73	-72	-64	-65	-64
Consumer NAC	3.93	3.63	2.81	2.83	2.76
Beef and Veal					
Won bn	-495	-1 612	-1 510	-1 543	-810
Percentage CSE	-52	-66	-53	-57	-36
Consumer NAC	2.17	3.00	2.29	2.30	1.57
Pigmeat					
Won bn	-303	-716	-700	-578	-677
Percentage CSE	-32	-45	-34	-29	-32
Consumer NAC	1.50	1.85	1.52	1.40	1.48
Poultry					
Won bn	-117	-234	-450	-460	-394
Percentage CSE	-43	-48	-60	-64	-46
Consumer NAC	1.81	1.94	2.61	2.80	1.86
Sheepmeat					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool					
Won bn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
Won bn	28	-51	-76	-74	-110
Percentage CSE	11	-11	-11	-12	-15
Consumer NAC	0.92	1.16	1.13	1.13	1.17
Other commodities					
Won bn	-3 527	-7 443	-8 460	-8 743	-7 421
Percentage CSE	-67	-72	-61	-63	-54
Consumer NAC	3.07	3.61	2.64	2.71	2.16
All commodities					
Won bn	-9 576	-17 223	-18 980	-19 441	-16 516
Percentage CSE	-67	-72	-61	-63	-54
Consumer NAC	3.07	3.60	2.64	2.70	2.16

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.9. **Korea: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed -9.8 percentage points to the -10.9 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.44. Mexico: Estimates of support to agriculture
(M$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**23 588**	**86 539**	**204 949**	**211 312**	**211 312**
of which share of common commodities (%)	*67*	*61*	*63*	*63*	*63*
Total value of consumption (at farm gate)	**21 373**	**82 744**	**222 726**	**219 665**	**232 806**
Producer Support Estimate (PSE)	**2 912**	**30 745**	**31 056**	**36 752**	**42 153**
Market price support	837	26 509	17 284	23 840	28 581
of which common commodities	*561*	*16 297*	*10 920*	*15 058*	*18 052*
Payments based on output	2	160	36	25	53
Payments based on area planted/animal numbers	1	10	611	548	854
Payments based on historical entitlements	0	0	7 625	7 547	8 522
Payments based on input use	2 073	4 066	5 265	4 492	3 738
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	0	0	235	300	405
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**10**	**34**	**14**	**16**	**19**
Producer NAC	**1.11**	**1.51**	**1.17**	**1.20**	**1.23**
General Services Support Estimate (GSSE)	**848**	**3 416**	**2 862**	**2 932**	**3 240**
Research and development	77	339	750	822	754
Agricultural schools	125	550	849	849	849
Inspection services	0	0	332	315	681
Infrastructure	223	809	416	368	396
Marketing and promotion	18	322	252	259	287
Public stockholding	400	1 210	0	0	0
Miscellaneous	6	187	263	319	273
GSSE as a share of TSE (%)	**17.5**	**8.8**	**6.5**	**5.9**	**5.9**
Consumer Support Estimate (CSE)	**569**	**-20 232**	**-10 515**	**-16 607**	**-20 538**
Transfers to producers from consumers	-653	-25 158	-16 154	-22 405	-25 937
Other transfers from consumers	-34	-424	-4 569	-4 686	-4 876
Transfers to consumers from taxpayers	1 087	4 700	9 975	9 967	9 502
Excess feed cost	169	650	232	517	773
Percentage CSE	**8**	**-26**	**-5**	**-8**	**-9**
Consumer NAC	**0.94**	**1.35**	**1.05**	**1.09**	**1.10**
Total Support Estimate (TSE)	**4 847**	**38 861**	**43 893**	**49 652**	**54 895**
Transfers from consumers	686	25 583	20 722	27 091	30 813
Transfers from taxpayers	4 194	13 702	27 739	27 247	28 958
Budget revenues	-34	-424	-4 569	-4 686	-4 876
TSE as a share of GDP (%)	**2.1**	**3.5**	**1.4**	**1.6**	**1.4**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.45. **Mexico: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
M$ mn	-7	733	1 253	812	1 544
Percentage PSE	-2	31	22	16	30
Producer NAC	0.99	1.46	1.29	1.18	1.42
Maize					
M$ mn	1 068	6 485	6 356	8 418	8 706
Percentage PSE	37	51	23	30	32
Producer NAC	1.64	2.04	1.32	1.42	1.47
Other grains					
M$ mn	328	731	1 551	1 601	1 810
Percentage PSE	28	32	18	21	21
Producer NAC	1.40	1.47	1.23	1.27	1.27
Rice					
M$ mn	-36	38	67	17	18
Percentage PSE	-31	15	9	2	2
Producer NAC	0.77	1.19	1.11	1.02	1.02
Oilseeds					
M$ mn	25	130	44	46	66
Percentage PSE	13	23	12	10	11
Producer NAC	1.15	1.31	1.14	1.11	1.13
Sugar (refined equivalent)					
M$ mn	96	1 867	3 378	3 174	4 043
Percentage PSE	17	54	34	32	34
Producer NAC	1.25	2.17	1.51	1.47	1.52
Milk					
M$ mn	504	3 526	5 886	6 058	8 638
Percentage PSE	37	54	34	36	44
Producer NAC	1.70	2.17	1.54	1.56	1.80
Beef and Veal					
M$ mn	-633	1 709	231	174	855
Percentage PSE	-35	22	1	1	5
Producer NAC	0.75	1.29	1.01	1.01	1.06
Pigmeat					
M$ mn	156	1 701	3 163	3 822	4 705
Percentage PSE	-16	34	24	27	37
Producer NAC	0.98	1.52	1.35	1.38	1.58
Poultry					
M$ mn	344	1 871	654	1 893	735
Percentage PSE	20	40	3	12	4
Producer NAC	1.33	1.66	1.04	1.14	1.04
Sheepmeat					
M$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool					
M$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
M$ mn	-155	60	-1 883	-1 384	-2 983
Percentage PSE	-28	-1	-20	-14	-31
Producer NAC	0.81	1.03	0.84	0.87	0.76
Other commodities					
M$ mn	1 222	11 894	10 356	12 120	14 017
Percentage PSE	9	28	11	12	15
Producer NAC	1.10	1.40	1.12	1.14	1.18
All commodities					
M$ mn	2 912	30 745	31 056	36 752	42 153
Percentage PSE	10	34	14	16	19
Producer NAC	1.11	1.51	1.17	1.20	1.23

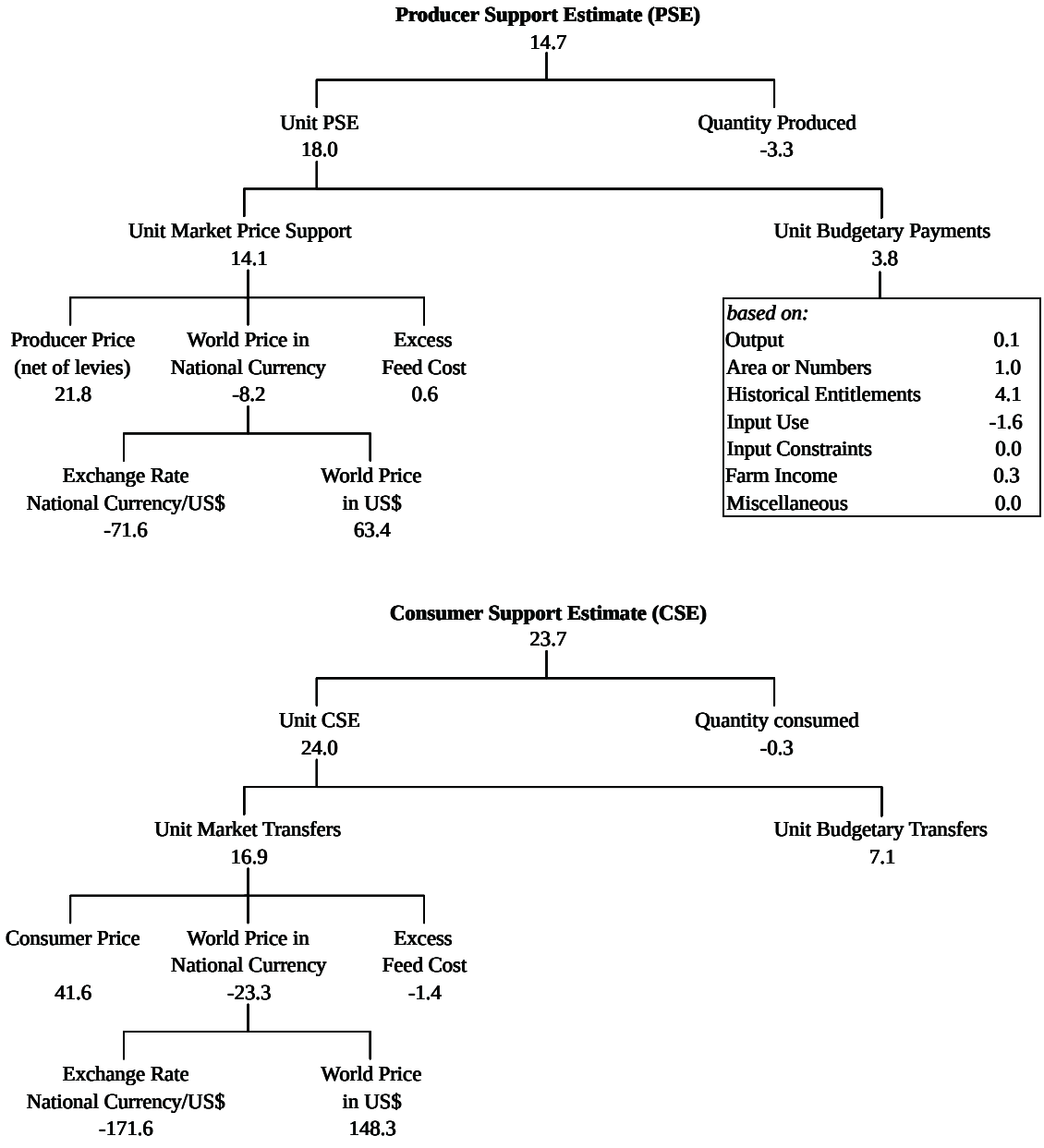
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.46. **Mexico: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
M$ mn	340	122	-186	334	-28
Percentage CSE	218	9	-2	6	0
Consumer NAC	0.50	0.98	1.02	0.95	1.00
Maize					
M$ mn	-267	-3 471	5 777	3 942	3 421
Percentage CSE	-2	-34	26	21	15
Consumer NAC	1.09	1.52	0.80	0.82	0.87
Other grains					
M$ mn	-14	-87	318	396	307
Percentage CSE	-2	-3	4	5	4
Consumer NAC	1.02	1.03	0.96	0.95	0.96
Rice					
M$ mn	81	21	4	27	95
Percentage CSE	144	6	0	1	4
Consumer NAC	0.43	0.94	1.01	0.99	0.96
Oilseeds					
M$ mn	17	-68	-440	-490	-343
Percentage CSE	6	-3	-6	-5	-5
Consumer NAC	0.94	1.03	1.06	1.06	1.05
Sugar (refined equivalent)					
M$ mn	28	-1 699	-4 587	-4 703	-5 441
Percentage CSE	-4	-50	-45	-44	-47
Consumer NAC	1.07	1.98	1.83	1.79	1.90
Milk					
M$ mn	-130	-1 687	-2 576	-2 547	-5 078
Percentage CSE	-17	-31	-16	-18	-30
Consumer NAC	1.28	1.46	1.22	1.21	1.44
Beef and Veal					
M$ mn	724	-1 120	319	472	-273
Percentage CSE	45	-17	2	3	-1
Consumer NAC	0.70	1.21	0.98	0.97	1.01
Pigmeat					
M$ mn	-41	-1 304	-2 903	-3 450	-4 261
Percentage CSE	24	-25	-21	-22	-31
Consumer NAC	0.91	1.34	1.28	1.29	1.46
Poultry					
M$ mn	-225	-1 412	-335	-1 432	-236
Percentage CSE	-10	-29	-1	-8	-1
Consumer NAC	1.16	1.40	1.02	1.09	1.01
Sheepmeat					
M$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool					
M$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
M$ mn	223	148	2 086	1 650	3 259
Percentage CSE	37	7	22	18	34
Consumer NAC	0.76	0.96	0.82	0.85	0.74
Other commodities					
M$ mn	-168	-9 676	-7 992	-10 807	-11 960
Percentage CSE	1	-30	-10	-13	-14
Consumer NAC	1.00	1.44	1.11	1.15	1.16
All commodities					
M$ mn	569	-20 232	-10 515	-16 607	-20 538
Percentage CSE	8	-26	-5	-8	-9
Consumer NAC	0.94	1.35	1.05	1.09	1.10

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.10. **Mexico: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 14.1 percentage points to the 14.7 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.47. New Zealand: Estimates of support to agriculture
(NZ$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**6 929**	**8 803**	**9 869**	**10 020**	**10 182**
of which share of common commodities (%)	*72*	*70*	*73*	*74*	*72*
Total value of consumption (at farm gate)	**1 676**	**2 190**	**2 367**	**2 386**	**2 438**
Producer Support Estimate (PSE)	**858**	**156**	**132**	**159**	**82**
Market price support	161	108	97	124	47
of which common commodities	*115*	*76*	*71*	*92*	*33*
Payments based on output	3	0	0	0	0
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	315	0	0	0	0
Payments based on input use	337	40	34	34	34
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	42	8	1	0	1
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**11**	**2**	**1**	**2**	**1**
Producer NAC	**1.13**	**1.02**	**1.01**	**1.02**	**1.01**
General Services Support Estimate (GSSE)	**177**	**101**	**102**	**104**	**101**
Research and development	77	78	79	79	79
Agricultural schools	0	0	0	0	1
Inspection services	54	19	23	25	21
Infrastructure	47	3	0	0	0
Marketing and promotion	0	0	0	0	0
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**17.1**	**39.2**	**43.6**	**39.6**	**55.2**
Consumer Support Estimate (CSE)	**-159**	**-101**	**-97**	**-123**	**-48**
Transfers to producers from consumers	-154	-99	-93	-119	-45
Other transfers from consumers	-4	-3	-3	-4	-3
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	0	0	0	0	0
Percentage CSE	**-10**	**-5**	**-4**	**-5**	**-2**
Consumer NAC	**1.11**	**1.05**	**1.04**	**1.05**	**1.02**
Total Support Estimate (TSE)	**1 035**	**256**	**235**	**263**	**183**
Transfers from consumers	159	101	97	123	48
Transfers from taxpayers	881	157	141	144	138
Budget revenues	-4	-3	-3	-4	-3
TSE as a share of GDP (%)	**1.9**	**0.3**	**0.2**	**0.3**	**0.2**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.48. New Zealand: Producer Support Estimate by commodity

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
NZ$ mn	5	0	0	0	0
Percentage PSE	7	0	0	0	0
Producer NAC	1.07	1.00	1.00	1.00	1.00
Maize					
NZ$ mn	1	0	0	0	0
Percentage PSE	2	0	0	0	0
Producer NAC	1.02	1.00	1.00	1.00	1.00
Other grains					
NZ$ mn	1	0	0	0	0
Percentage PSE	2	0	0	0	0
Producer NAC	1.02	1.00	1.00	1.00	1.00
Rice					
NZ$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
NZ$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Sugar (refined equivalent)					
NZ$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
NZ$ mn	124	12	12	12	12
Percentage PSE	9	1	0	0	0
Producer NAC	1.10	1.01	1.00	1.00	1.00
Beef and Veal					
NZ$ mn	74	16	13	13	13
Percentage PSE	7	1	1	1	1
Producer NAC	1.07	1.01	1.01	1.01	1.01
Pigmeat					
NZ$ mn	6	3	3	3	3
Percentage PSE	5	2	2	2	2
Producer NAC	1.05	1.02	1.02	1.02	1.02
Poultry					
NZ$ mn	59	67	65	84	27
Percentage PSE	57	49	37	47	15
Producer NAC	2.86	2.00	1.68	1.89	1.18
Sheepmeat					
NZ$ mn	362	8	4	5	5
Percentage PSE	24	1	0	0	0
Producer NAC	1.56	1.01	1.00	1.00	1.00
Wool					
NZ$ mn	86	5	0	0	0
Percentage PSE	6	1	0	0	0
Producer NAC	1.06	1.01	1.00	1.00	1.00
Eggs					
NZ$ mn	37	10	8	10	8
Percentage PSE	45	16	14	17	14
Producer NAC	1.83	1.19	1.16	1.20	1.16
Other commodities					
NZ$ mn	103	34	27	33	14
Percentage PSE	5	1	1	1	0
Producer NAC	1.05	1.01	1.01	1.01	1.00
All commodities					
NZ$ mn	858	156	132	159	82
Percentage PSE	11	2	1	2	1
Producer NAC	1.13	1.02	1.01	1.02	1.01

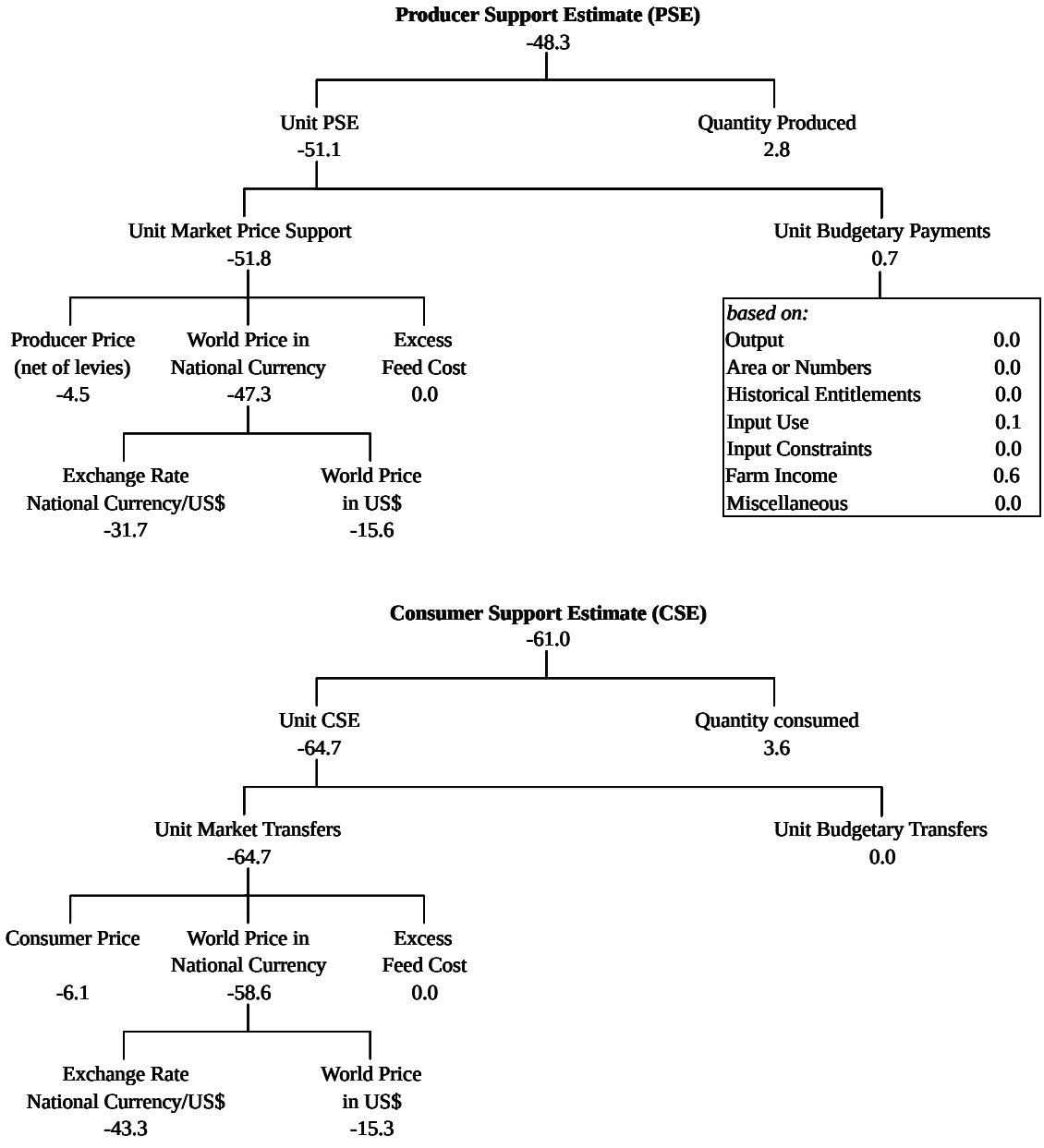
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.49. New Zealand: Consumer Support Estimate by commodity

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
NZ$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Maize					
NZ$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Other grains					
NZ$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Rice					
NZ$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
NZ$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Sugar (refined equivalent)					
NZ$ mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
NZ$ mn	-21	0	0	0	0
Percentage CSE	-8	0	0	0	0
Consumer NAC	1.09	1.00	1.00	1.00	1.00
Beef and Veal					
NZ$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Pigmeat					
NZ$ mn	-2	0	0	0	0
Percentage CSE	-2	0	0	0	0
Consumer NAC	1.02	1.00	1.00	1.00	1.00
Poultry					
NZ$ mn	-53	-59	-60	-78	-24
Percentage CSE	-56	-49	-37	-47	-15
Consumer NAC	2.80	1.98	1.66	1.87	1.17
Sheepmeat					
NZ$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Wool					
NZ$ mn	0	0	0	0	0
Percentage CSE	0	0	0	0	0
Consumer NAC	1.00	1.00	1.00	1.00	1.00
Eggs					
NZ$ mn	-38	-12	-11	-12	-10
Percentage CSE	-44	-15	-14	-17	-14
Consumer NAC	1.81	1.19	1.16	1.20	1.16
Other commodities					
NZ$ mn	-45	-30	-26	-32	-14
Percentage CSE	-10	-5	-4	-5	-2
Consumer NAC	1.11	1.05	1.04	1.05	1.02
All commodities					
NZ$ mn	-159	-101	-97	-123	-48
Percentage CSE	-10	-5	-4	-5	-2
Consumer NAC	1.11	1.05	1.04	1.05	1.02

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.11. **New Zealand: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Budgetary Payments contributed 0.7 percentage points to the -48.3 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.50. **Norway: Estimates of support to agriculture**
(NKr mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**19 011**	**19 234**	**18 364**	**18 228**	**18 355**
of which share of common commodities (%)	*67*	*78*	*81*	*82*	*84*
Total value of consumption (at farm gate)	**19 650**	**18 610**	**18 010**	**17 965**	**17 874**
Producer Support Estimate (PSE)	**19 050**	**21 298**	**19 259**	**18 989**	**20 565**
Market price support	9 648	9 825	8 354	8 107	9 384
of which common commodities	*6 480*	*7 688*	*6 767*	*6 628*	*7 850*
Payments based on output	4 297	4 673	3 759	3 722	3 637
Payments based on area planted/animal numbers	1 637	2 855	1 810	1 725	2 072
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	3 148	3 763	5 055	5 163	5 165
Payments based on input constraints	320	183	281	273	308
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**67**	**69**	**66**	**65**	**70**
Producer NAC	**3.04**	**3.28**	**2.94**	**2.88**	**3.29**
General Services Support Estimate (GSSE)	**877**	**1 078**	**823**	**709**	**673**
Research and development	504	777	632	519	490
Agricultural schools	0	0	0	0	0
Inspection services	0	0	0	0	0
Infrastructure	133	121	79	87	70
Marketing and promotion	240	181	74	73	66
Public stockholding	0	0	38	30	48
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**4.1**	**4.7**	**4.1**	**3.6**	**3.2**
Consumer Support Estimate (CSE)	**-9 888**	**-9 889**	**-8 305**	**-8 142**	**-9 384**
Transfers to producers from consumers	-12 013	-11 580	-9 355	-9 161	-10 676
Other transfers from consumers	-1 074	-350	-144	-111	-181
Transfers to consumers from taxpayers	1 522	649	125	154	113
Excess feed cost	1 676	1 392	1 069	975	1 361
Percentage CSE	**-54**	**-55**	**-46**	**-46**	**-53**
Consumer NAC	**2.20**	**2.24**	**1.88**	**1.84**	**2.12**
Total Support Estimate (TSE)	**21 450**	**23 025**	**20 207**	**19 853**	**21 352**
Transfers from consumers	13 086	11 929	9 499	9 272	10 858
Transfers from taxpayers	9 437	11 446	10 852	10 691	10 675
Budget revenues	-1 074	-350	-144	-111	-181
TSE as a share of GDP (%)	**3.6**	**2.9**	**1.9**	**1.8**	**2.0**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.51. **Norway: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
NKr mn	461	623	634	598	781
Percentage PSE	80	77	68	69	72
Producer NAC	4.96	4.49	3.15	3.25	3.58
Maize					
NKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
NKr mn	2 453	2 129	2 121	2 095	2 305
Percentage PSE	82	76	71	71	78
Producer NAC	5.60	4.12	3.61	3.40	4.48
Rice					
NKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
NKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Sugar (refined equivalent)					
NKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
NKr mn	6 593	9 011	8 256	8 159	8 718
Percentage PSE	75	79	77	76	78
Producer NAC	4.04	4.79	4.30	4.11	4.63
Beef and Veal					
NKr mn	2 487	3 177	3 083	3 242	3 333
Percentage PSE	67	67	66	68	69
Producer NAC	3.07	3.08	2.98	3.16	3.25
Pigmeat					
NKr mn	1 579	1 410	1 035	911	1 277
Percentage PSE	58	52	41	36	48
Producer NAC	2.39	2.10	1.70	1.57	1.93
Poultry					
NKr mn	177	245	229	249	189
Percentage PSE	56	54	43	44	37
Producer NAC	2.45	2.20	1.76	1.79	1.59
Sheepmeat					
NKr mn	1 014	1 302	1 263	1 189	1 346
Percentage PSE	70	72	67	64	70
Producer NAC	3.38	3.59	3.09	2.80	3.35
Wool					
NKr mn	237	530	405	403	421
Percentage PSE	71	90	84	83	86
Producer NAC	3.43	9.60	6.38	5.79	7.00
Eggs					
NKr mn	519	427	244	251	263
Percentage PSE	55	49	41	41	45
Producer NAC	2.26	1.98	1.69	1.71	1.82
Other commodities					
NKr mn	3 529	2 443	1 990	1 892	1 934
Percentage PSE	54	54	51	51	57
Producer NAC	2.16	2.20	2.06	2.03	2.32
All commodities					
NKr mn	19 050	21 298	19 259	18 989	20 565
Percentage PSE	67	69	66	65	70
Producer NAC	3.04	3.28	2.94	2.88	3.29

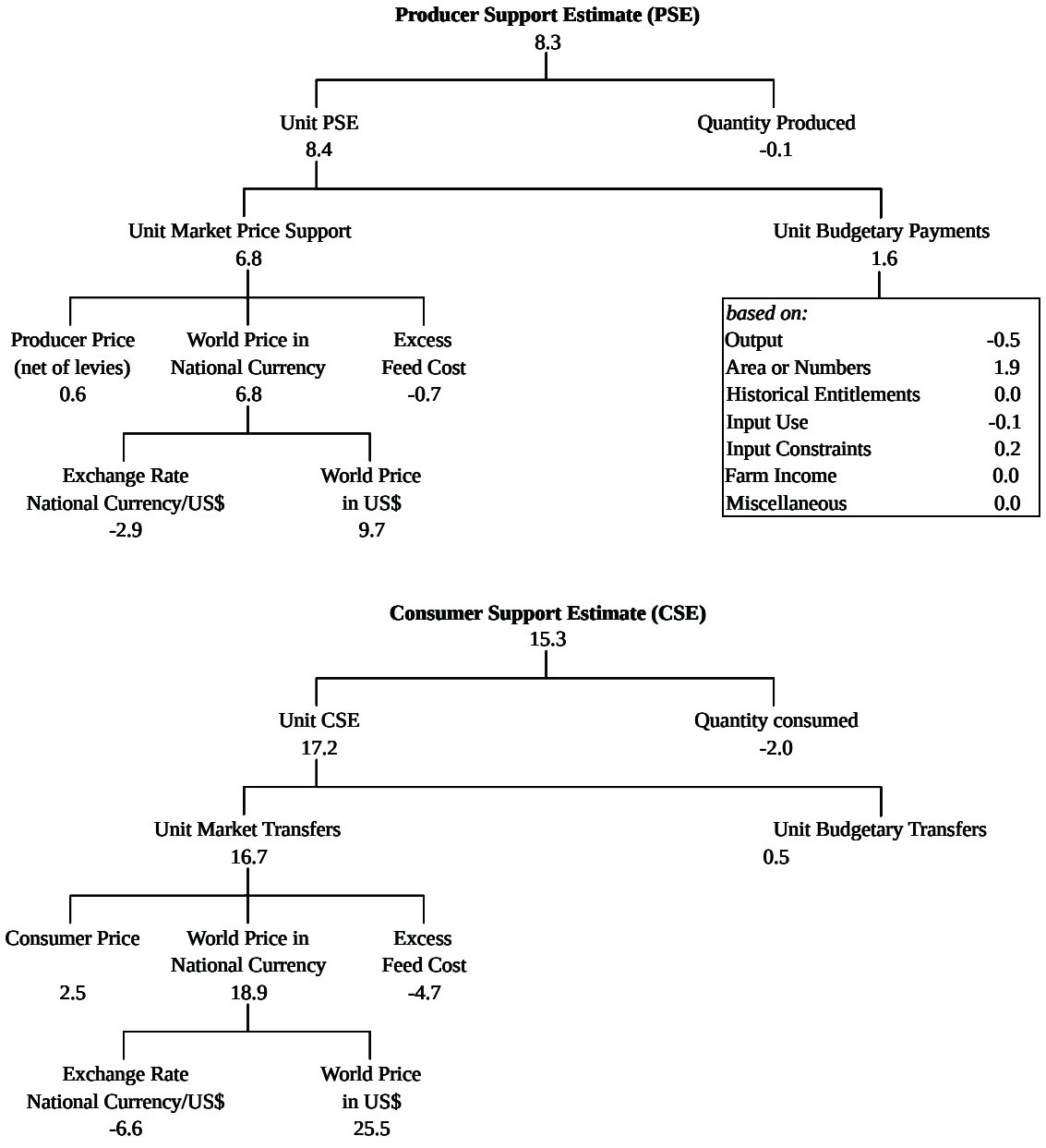
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.52. **Norway: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
NKr mn	-121	-367	-130	-148	-150
Percentage CSE	-19	-46	-15	-17	-18
Consumer NAC	1.25	1.99	1.18	1.20	1.22
Maize					
NKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains					
NKr mn	-608	-194	-78	-74	-111
Percentage CSE	-21	-9	-4	-4	-6
Consumer NAC	1.27	1.10	1.04	1.04	1.06
Rice					
NKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
NKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Sugar (refined equivalent)					
NKr mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk					
NKr mn	-418	-2 461	-3 107	-3 103	-3 506
Percentage CSE	-24	-62	-63	-62	-68
Consumer NAC	1.32	2.64	2.72	2.64	3.12
Beef and Veal					
NKr mn	-1 415	-1 438	-1 334	-1 452	-1 592
Percentage CSE	-58	-54	-49	-53	-56
Consumer NAC	2.49	2.32	2.01	2.15	2.30
Pigmeat					
NKr mn	-1 672	-1 657	-1 190	-1 063	-1 507
Percentage CSE	-73	-68	-51	-46	-63
Consumer NAC	3.67	3.14	2.11	1.86	2.70
Poultry					
NKr mn	-297	-394	-289	-311	-269
Percentage CSE	-85	-78	-58	-58	-56
Consumer NAC	7.12	4.71	2.37	2.37	2.26
Sheepmeat					
NKr mn	-379	-308	-103	-29	-168
Percentage CSE	-60	-48	-16	-5	-24
Consumer NAC	2.63	2.04	1.20	1.05	1.32
Wool					
NKr mn	-62	0	0	0	0
Percentage CSE	-54	0	0	0	0
Consumer NAC	2.19	1.00	1.00	1.00	1.00
Eggs					
NKr mn	-573	-477	-275	-271	-307
Percentage CSE	-74	-69	-54	-54	-61
Consumer NAC	4.01	3.24	2.21	2.16	2.58
Other commodities					
NKr mn	-4 343	-2 593	-1 799	-1 691	-1 774
Percentage CSE	-66	-64	-53	-52	-61
Consumer NAC	3.00	2.81	2.16	2.07	2.55
All commodities					
NKr mn	-9 888	-9 889	-8 305	-8 142	-9 384
Percentage CSE	-54	-55	-46	-46	-53
Consumer NAC	2.20	2.24	1.88	1.84	2.12

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.12. **Norway: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 6.8 percentage points to the 8.3 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.53. **Poland: Estimates of support to agriculture**

(Zl mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**363**	**17 569**	**51 216**	**51 304**	**51 304**
of which share of common commodities (%)	*67*	*59*	*63*	*63*	*65*
Total value of consumption (at farm gate)	**390**	**18 642**	**53 803**	**52 575**	**53 067**
Producer Support Estimate (PSE)	**127**	**2 453**	**12 212**	**11 156**	**13 083**
Market price support	84	1 754	10 607	9 554	11 354
of which common commodities	*57*	*1 037*	*6 644*	*6 036*	*7 414*
Payments based on output	0	0	0	0	0
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	11	0	0	0	0
Payments based on input use	33	699	1 604	1 602	1 728
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**32**	**12**	**23**	**21**	**25**
Producer NAC	**1.48**	**1.14**	**1.30**	**1.27**	**1.33**
General Services Support Estimate (GSSE)	**9**	**536**	**1 533**	**1 524**	**1 656**
Research and development	4	146	248	189	330
Agricultural schools	3	76	223	222	231
Inspection services	0	0	56	77	91
Infrastructure	2	129	691	705	680
Marketing and promotion	0	184	315	331	325
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**4.5**	**17.9**	**11.1**	**12.0**	**11.2**
Consumer Support Estimate (CSE)	**-22**	**-1 998**	**-11 207**	**-9 950**	**-11 534**
Transfers to producers from consumers	-92	-1 846	-11 569	-10 394	-12 357
Other transfers from consumers	-5	-170	-636	-472	-246
Transfers to consumers from taxpayers	68	3	13	14	16
Excess feed cost	8	14	985	902	1 053
Percentage CSE	**-8**	**-8**	**-21**	**-19**	**-22**
Consumer NAC	**1.12**	**1.10**	**1.26**	**1.23**	**1.28**
Total Support Estimate (TSE)	**204**	**2 992**	**13 758**	**12 693**	**14 755**
Transfers from consumers	97	2 016	12 205	10 866	12 603
Transfers from taxpayers	112	1 146	2 188	2 299	2 399
Budget revenues	-5	-170	-636	-472	-246
TSE as a share of GDP (%)	**n.c.**	**2.3**	**3.2**	**2.9**	**2.8**

Notes: See Part II.2 for detailed explanations. p: provisional, n.c.: not calculated; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.54. **Poland: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
Zl mn	13	59	1 210	884	1 384
Percentage PSE	39	-6	25	20	29
Producer NAC	1.65	1.01	1.34	1.25	1.41
Maize					
Zl mn	0	14	50	51	60
Percentage PSE	27	29	23	23	25
Producer NAC	1.38	1.42	1.31	1.31	1.34
Other grains					
Zl mn	4	68	897	886	885
Percentage PSE	17	-2	23	22	24
Producer NAC	1.28	1.02	1.31	1.28	1.31
Rice					
Zl mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
Zl mn	3	19	95	50	132
Percentage PSE	37	8	16	9	13
Producer NAC	1.61	1.12	1.20	1.10	1.15
Sugar (refined equivalent)					
Zl mn	4	118	693	563	766
Percentage PSE	35	28	43	36	49
Producer NAC	1.63	1.40	1.78	1.56	1.96
Milk					
Zl mn	8	20	1 021	828	1 772
Percentage PSE	15	-3	13	11	22
Producer NAC	1.22	0.99	1.16	1.12	1.28
Beef and Veal					
Zl mn	10	-89	203	158	-66
Percentage PSE	29	-8	6	5	-2
Producer NAC	1.42	0.93	1.08	1.05	0.98
Pigmeat					
Zl mn	24	550	1 682	2 091	1 519
Percentage PSE	35	15	19	24	15
Producer NAC	1.59	1.19	1.24	1.32	1.18
Poultry					
Zl mn	7	340	570	565	417
Percentage PSE	47	57	29	26	23
Producer NAC	1.92	2.57	1.42	1.35	1.30
Sheepmeat					
Zl mn	1	-1	5	5	5
Percentage PSE	25	-5	11	11	10
Producer NAC	1.33	0.98	1.12	1.13	1.12
Wool					
Zl mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
Zl mn	7	320	1 099	819	1 564
Percentage PSE	42	49	53	46	64
Producer NAC	1.77	1.99	2.21	1.85	2.76
Other commodities					
Zl mn	45	1 035	4 688	4 256	4 645
Percentage PSE	69	13	26	23	29
Producer NAC	0.17	1.16	1.35	1.30	1.41
All commodities					
Zl mn	127	2 453	12 212	11 156	13 083
Percentage PSE	32	12	23	21	25
Producer NAC	1.48	1.14	1.30	1.27	1.33

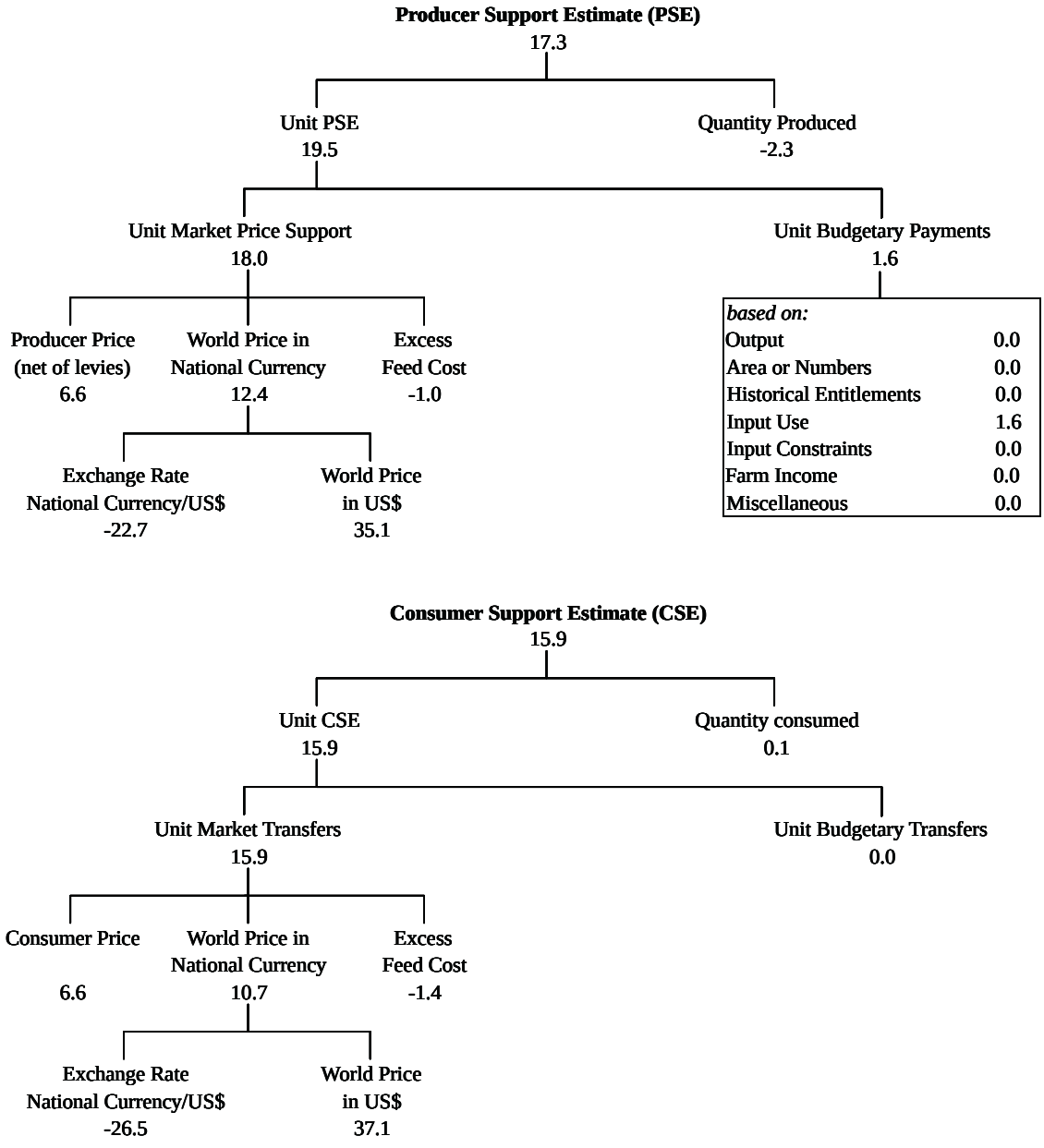
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.55. **Poland: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
Zl mn	1	-33	-750	-478	-728
Percentage CSE	3	4	-14	-10	-15
Consumer NAC	0.98	0.98	1.17	1.11	1.18
Maize					
Zl mn	0	-22	-55	-50	-57
Percentage CSE	-12	-13	-12	-11	-12
Consumer NAC	1.14	1.17	1.14	1.13	1.14
Other grains					
Zl mn	5	-15	-261	-255	-227
Percentage CSE	13	2	-7	-6	-6
Consumer NAC	0.90	0.99	1.07	1.07	1.07
Rice					
Zl mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
Zl mn	2	-13	-77	-11	-69
Percentage CSE	400	0	-10	-2	-7
Consumer NAC	0.30	1.04	1.12	1.02	1.08
Sugar (refined equivalent)					
Zl mn	-1	-86	-494	-400	-568
Percentage CSE	-15	-24	-41	-33	-47
Consumer NAC	1.34	1.34	1.71	1.50	1.88
Milk					
Zl mn	21	44	-1 131	-914	-1 827
Percentage CSE	52	7	-16	-13	-25
Consumer NAC	0.78	0.95	1.20	1.15	1.33
Beef and Veal					
Zl mn	0	124	-266	-205	-11
Percentage CSE	-2	14	-9	-7	0
Consumer NAC	1.06	0.88	1.11	1.07	1.00
Pigmeat					
Zl mn	-7	-482	-1 700	-2 055	-1 543
Percentage CSE	-16	-13	-22	-27	-17
Consumer NAC	1.22	1.16	1.28	1.36	1.21
Poultry					
Zl mn	-5	-352	-784	-762	-526
Percentage CSE	-44	-55	-34	-29	-28
Consumer NAC	1.79	2.46	1.52	1.42	1.40
Sheepmeat					
Zl mn	0	1	-3	-2	-2
Percentage CSE	-6	8	-10	-11	-9
Consumer NAC	1.06	0.95	1.11	1.12	1.10
Wool					
Zl mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
Zl mn	-6	-333	-1 119	-823	-1 610
Percentage CSE	-42	-47	-56	-48	-66
Consumer NAC	1.78	1.94	2.34	1.93	2.97
Other commodities					
Zl mn	-32	-832	-4 566	-3 996	-4 368
Percentage CSE	-26	-8	-23	-21	-24
Consumer NAC	1.37	1.10	1.29	1.26	1.31
All commodities					
Zl mn	-22	-1 998	-11 207	-9 950	-11 534
Percentage CSE	-8	-8	-21	-19	-22
Consumer NAC	1.12	1.10	1.26	1.23	1.28

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.13. **Poland: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Budgetary Payments contributed 1.6 percentage points to the 17.3 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.56. Switzerland: Estimates of support to agriculture
(SF mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**9 654**	**9 865**	**8 120**	**8 042**	**8 042**
of which share of common commodities (%)	*85*	*85*	*86*	*87*	*87*
Total value of consumption (at farm gate)	**10 691**	**10 540**	**8 627**	**8 510**	**8 488**
Producer Support Estimate (PSE)	**7 841**	**8 141**	**7 420**	**7 258**	**7 769**
Market price support	6 838	6 525	4 857	4 666	5 162
of which common commodities	*5 815*	*5 550*	*4 187*	*4 052*	*4 467*
Payments based on output	102	99	101	99	117
Payments based on area planted/animal numbers	479	652	1 095	1 129	1 132
Payments based on historical entitlements	15	394	852	857	809
Payments based on input use	191	238	206	207	207
Payments based on input constraints	0	21	125	116	159
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	216	211	185	183	183
Percentage PSE	**74**	**71**	**69**	**68**	**73**
Producer NAC	**3.81**	**3.44**	**3.30**	**3.15**	**3.70**
General Services Support Estimate (GSSE)	**602**	**587**	**511**	**509**	**505**
Research and development	131	131	122	123	121
Agricultural schools	25	26	23	24	22
Inspection services	5	5	5	5	5
Infrastructure	135	117	82	80	80
Marketing and promotion	86	86	86	86	86
Public stockholding	3	11	8	7	7
Miscellaneous	216	211	185	183	183
GSSE as a share of TSE (%)	**6.5**	**6.0**	**5.8**	**5.9**	**5.6**
Consumer Support Estimate (CSE)	**-6 784**	**-6 014**	**-4 438**	**-4 225**	**-4 778**
Transfers to producers from consumers	-7 116	-6 880	-5 162	-4 974	-5 469
Other transfers from consumers	-856	-643	-395	-337	-384
Transfers to consumers from taxpayers	806	1 058	835	806	782
Excess feed cost	383	452	284	280	292
Percentage CSE	**-69**	**-63**	**-57**	**-55**	**-62**
Consumer NAC	**3.20**	**2.74**	**2.34**	**2.21**	**2.63**
Total Support Estimate (TSE)	**9 248**	**9 785**	**8 766**	**8 573**	**9 055**
Transfers from consumers	7 973	7 523	5 557	5 311	5 852
Transfers from taxpayers	2 132	2 905	3 604	3 599	3 587
Budget revenues	-856	-643	-395	-337	-384
TSE as a share of GDP (%)	**3.6**	**2.9**	**2.4**	**2.3**	**2.4**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.57. **Switzerland: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
SF mn	438	484	402	397	429
Percentage PSE	77	69	57	58	61
Producer NAC	4.34	3.25	2.36	2.37	2.57
Maize					
SF mn	165	157	105	106	107
Percentage PSE	80	74	67	66	70
Producer NAC	5.05	3.86	3.03	2.98	3.36
Other grains					
SF mn	278	320	191	187	192
Percentage PSE	86	80	68	67	71
Producer NAC	7.02	5.08	3.14	3.07	3.43
Rice					
SF mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
SF mn	86	88	80	82	83
Percentage PSE	87	86	82	82	82
Producer NAC	8.20	7.32	5.62	5.64	5.66
Sugar (refined equivalent)					
SF mn	105	109	146	142	137
Percentage PSE	74	73	76	77	74
Producer NAC	3.86	3.77	4.10	4.26	3.83
Milk					
SF mn	2 881	3 384	3 210	3 136	3 287
Percentage PSE	78	78	75	74	77
Producer NAC	4.71	4.49	4.05	3.78	4.41
Beef and Veal					
SF mn	1 449	1 218	827	846	913
Percentage PSE	74	68	62	62	67
Producer NAC	3.90	3.26	2.65	2.65	3.05
Pigmeat					
SF mn	974	875	1 004	969	1 135
Percentage PSE	58	53	62	59	69
Producer NAC	2.41	2.14	2.70	2.46	3.28
Poultry					
SF mn	129	160	184	184	186
Percentage PSE	78	77	79	78	79
Producer NAC	4.63	4.37	4.80	4.58	4.72
Sheepmeat					
SF mn	40	61	66	63	68
Percentage PSE	71	72	70	67	73
Producer NAC	3.46	3.63	3.39	3.05	3.66
Wool					
SF mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
SF mn	200	179	177	171	178
Percentage PSE	79	76	78	77	80
Producer NAC	4.78	4.23	4.58	4.31	4.96
Other commodities					
SF mn	1 094	1 106	1 028	975	1 054
Percentage PSE	72	69	70	69	73
Producer NAC	3.62	3.22	3.31	3.19	3.72
All commodities					
SF mn	7 841	8 141	7 420	7 258	7 769
Percentage PSE	74	71	69	68	73
Producer NAC	3.81	3.44	3.30	3.15	3.70

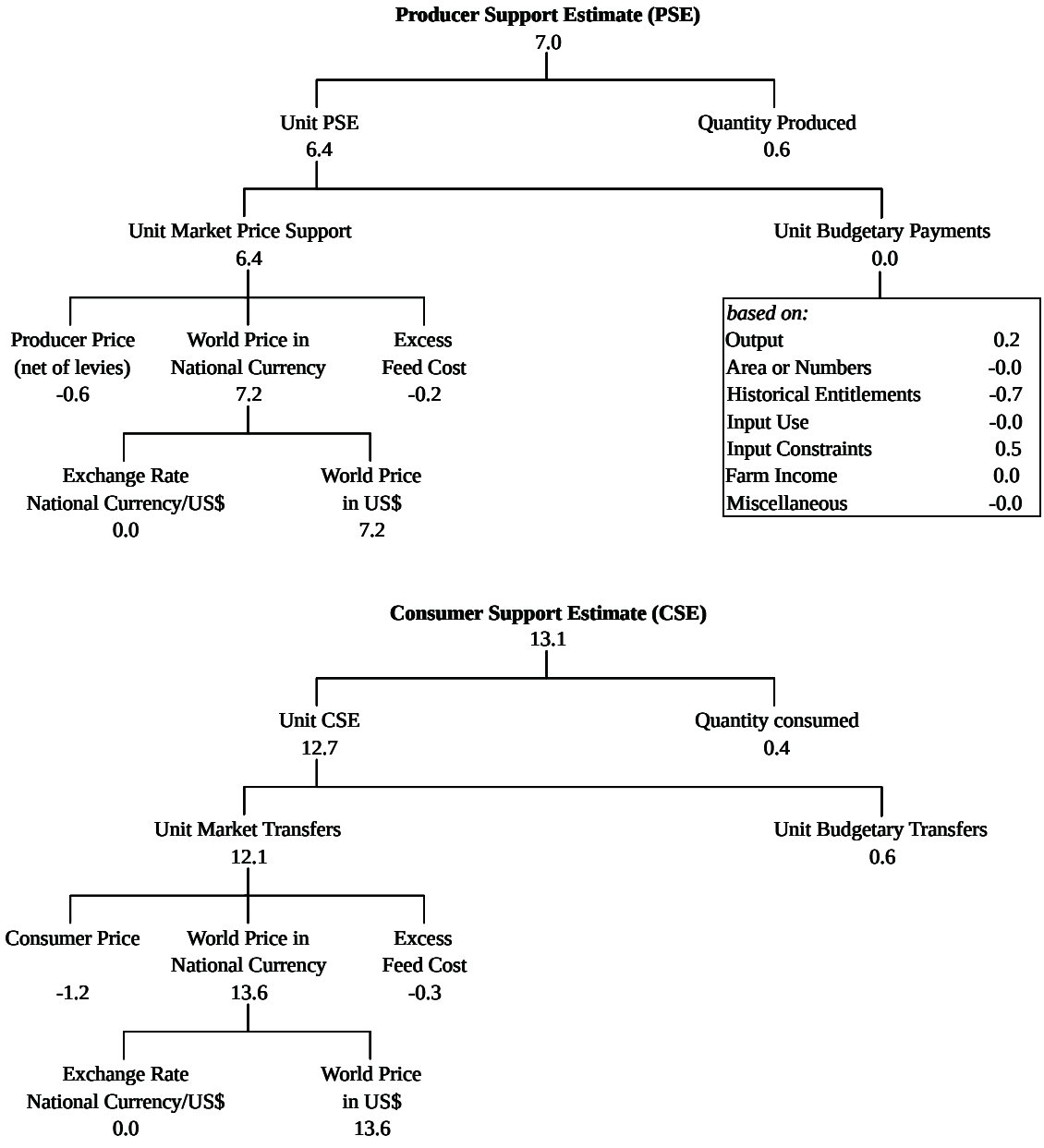
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.58. **Switzerland: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
SF mn	-309	-280	-238	-235	-267
Percentage CSE	-49	-41	-37	-38	-42
Consumer NAC	1.96	1.70	1.60	1.60	1.73
Maize					
SF mn	-72	-4	-5	-4	-3
Percentage CSE	-27	-2	-3	-3	-3
Consumer NAC	1.38	1.02	1.03	1.03	1.03
Other grains					
SF mn	-115	-6	-2	-1	-2
Percentage CSE	-28	-2	-1	-1	-1
Consumer NAC	1.40	1.02	1.01	1.01	1.01
Rice					
SF mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
SF mn	-179	-158	-77	-36	-92
Percentage CSE	-89	-86	-66	-51	-72
Consumer NAC	9.38	7.27	3.22	2.03	3.60
Sugar (refined equivalent)					
SF mn	-152	-204	-179	-175	-160
Percentage CSE	-67	-73	-68	-69	-64
Consumer NAC	3.09	3.64	3.19	3.20	2.82
Milk					
SF mn	-2 010	-1 988	-1 565	-1 518	-1 621
Percentage CSE	-77	-73	-65	-63	-68
Consumer NAC	4.39	3.75	2.87	2.67	3.15
Beef and Veal					
SF mn	-1 279	-914	-462	-469	-573
Percentage CSE	-71	-61	-49	-50	-58
Consumer NAC	3.49	2.70	2.00	1.98	2.38
Pigmeat					
SF mn	-1 091	-945	-805	-758	-929
Percentage CSE	-69	-64	-61	-57	-71
Consumer NAC	3.33	2.87	2.67	2.32	3.46
Poultry					
SF mn	-133	-154	-143	-142	-144
Percentage CSE	-74	-72	-66	-65	-66
Consumer NAC	3.91	3.62	2.99	2.82	2.96
Sheepmeat					
SF mn	-43	-59	-49	-46	-51
Percentage CSE	-63	-63	-48	-43	-51
Consumer NAC	2.78	2.74	1.93	1.75	2.04
Wool					
SF mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
SF mn	-207	-177	-145	-140	-146
Percentage CSE	-73	-69	-66	-64	-70
Consumer NAC	3.73	3.20	2.97	2.77	3.29
Other commodities					
SF mn	-1 193	-1 125	-767	-700	-789
Percentage CSE	-75	-71	-64	-62	-69
Consumer NAC	3.95	3.51	2.84	2.66	3.22
All commodities					
SF mn	-6 784	-6 014	-4 438	-4 225	-4 778
Percentage CSE	-69	-63	-57	-55	-62
Consumer NAC	3.20	2.74	2.34	2.21	2.63

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.14. **Switzerland: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 6.4 percentage points to the 7.0 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.59. **Turkey: Estimates of support to agriculture**

(TL mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**18 179**	**218 100**	**5 105 900**	**4 757 128**	**7 881 253**
of which share of common commodities (%)	*35*	*41*	*47*	*45*	*48*
Total value of consumption (at farm gate)	**16 751**	**193 160**	**4 807 359**	**4 544 555**	**7 254 032**
Producer Support Estimate (PSE)	**3 647**	**65 148**	**1 789 165**	**1 564 724**	**3 288 666**
Market price support	2 740	53 171	1 463 096	1 240 523	2 814 872
of which common commodities	*950*	*21 672*	*681 033*	*562 012*	*1 341 570*
Payments based on output	12	1 675	21 303	20 291	32 850
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	895	10 302	304 765	303 909	440 943
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**20**	**30**	**29**	**31**	**39**
Producer NAC	**1.25**	**1.45**	**1.44**	**1.44**	**1.65**
General Services Support Estimate (GSSE)	**206**	**3 261**	**975 765**	**766 948**	**1 889 162**
Research and development	58	648	7 502	6 053	12 142
Agricultural schools	0	0	0	0	0
Inspection services	55	1 977	13 165	13 731	20 078
Infrastructure	0	0	0	0	0
Marketing and promotion	0	0	950 509	745 079	1 853 590
Public stockholding	0	0	0	0	0
Miscellaneous	93	636	4 589	2 085	3 353
GSSE as a share of TSE (%)	**5.2**	**4.6**	**31.0**	**29.7**	**31.8**
Consumer Support Estimate (CSE)	**-2 689**	**-54 165**	**-1 188 196**	**-1 139 958**	**-2 153 158**
Transfers to producers from consumers	-2 818	-56 533	-1 546 493	-1 349 158	-2 920 419
Other transfers from consumers	-82	-3 711	-104 372	-108 399	-161 662
Transfers to consumers from taxpayers	90	3 267	381 864	252 955	768 821
Excess feed cost	121	2 813	80 805	64 644	160 101
Percentage CSE	**-18**	**-30**	**-24**	**-27**	**-33**
Consumer NAC	**1.22**	**1.44**	**1.33**	**1.36**	**1.50**
Total Support Estimate (TSE)	**3 942**	**71 676**	**3 146 794**	**2 584 627**	**5 946 649**
Transfers from consumers	2 900	60 245	1 650 865	1 457 557	3 082 080
Transfers from taxpayers	1 124	15 143	1 600 301	1 235 468	3 026 231
Budget revenues	-82	-3 711	-104 372	-108 399	-161 662
TSE as a share of GDP (%)	**4.8**	**6.4**	**8.6**	**8.9**	**10.7**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.60. **Turkey: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
TL mn	815	7 341	228 280	202 071	436 366
Percentage PSE	34	34	30	33	42
Producer NAC	1.57	1.56	1.46	1.49	1.73
Maize					
TL mn	58	1 057	26 554	23 984	47 451
Percentage PSE	21	38	35	38	43
Producer NAC	1.27	1.64	1.55	1.62	1.74
Other grains					
TL mn	141	3 460	85 969	66 976	164 497
Percentage PSE	28	43	34	32	47
Producer NAC	1.46	1.78	1.55	1.47	1.90
Rice					
TL mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
TL mn	107	947	30 749	31 562	46 563
Percentage PSE	39	41	47	49	45
Producer NAC	1.71	1.74	1.89	1.96	1.82
Sugar (refined equivalent)					
TL mn	72	2 439	121 489	105 070	233 656
Percentage PSE	23	40	51	56	61
Producer NAC	1.31	1.67	2.13	2.29	2.56
Milk					
TL mn	305	6 685	187 069	180 255	305 494
Percentage PSE	36	50	50	52	54
Producer NAC	1.63	1.99	2.00	2.07	2.17
Beef and Veal					
TL mn	-48	3 326	113 336	96 682	217 833
Percentage PSE	0	32	35	40	48
Producer NAC	1.02	1.49	1.59	1.65	1.91
Pigmeat					
TL mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Poultry					
TL mn	97	1 326	10 946	4 194	21 832
Percentage PSE	26	25	7	3	9
Producer NAC	1.35	1.34	1.08	1.03	1.10
Sheepmeat					
TL mn	80	1 280	9 362	9 264	16 789
Percentage PSE	12	15	5	6	7
Producer NAC	1.14	1.18	1.06	1.07	1.08
Wool					
TL mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
TL mn	49	916	59 678	41 711	115 192
Percentage PSE	17	19	35	31	44
Producer NAC	1.21	1.29	1.55	1.44	1.80
Other commodities					
TL mn	1 970	36 373	915 733	802 955	1 682 994
Percentage PSE	17	28	26	27	36
Producer NAC	1.20	1.39	1.38	1.38	1.57
All commodities					
TL mn	3 647	65 148	1 789 165	1 564 724	3 288 666
Percentage PSE	20	30	29	31	39
Producer NAC	1.25	1.45	1.44	1.44	1.65

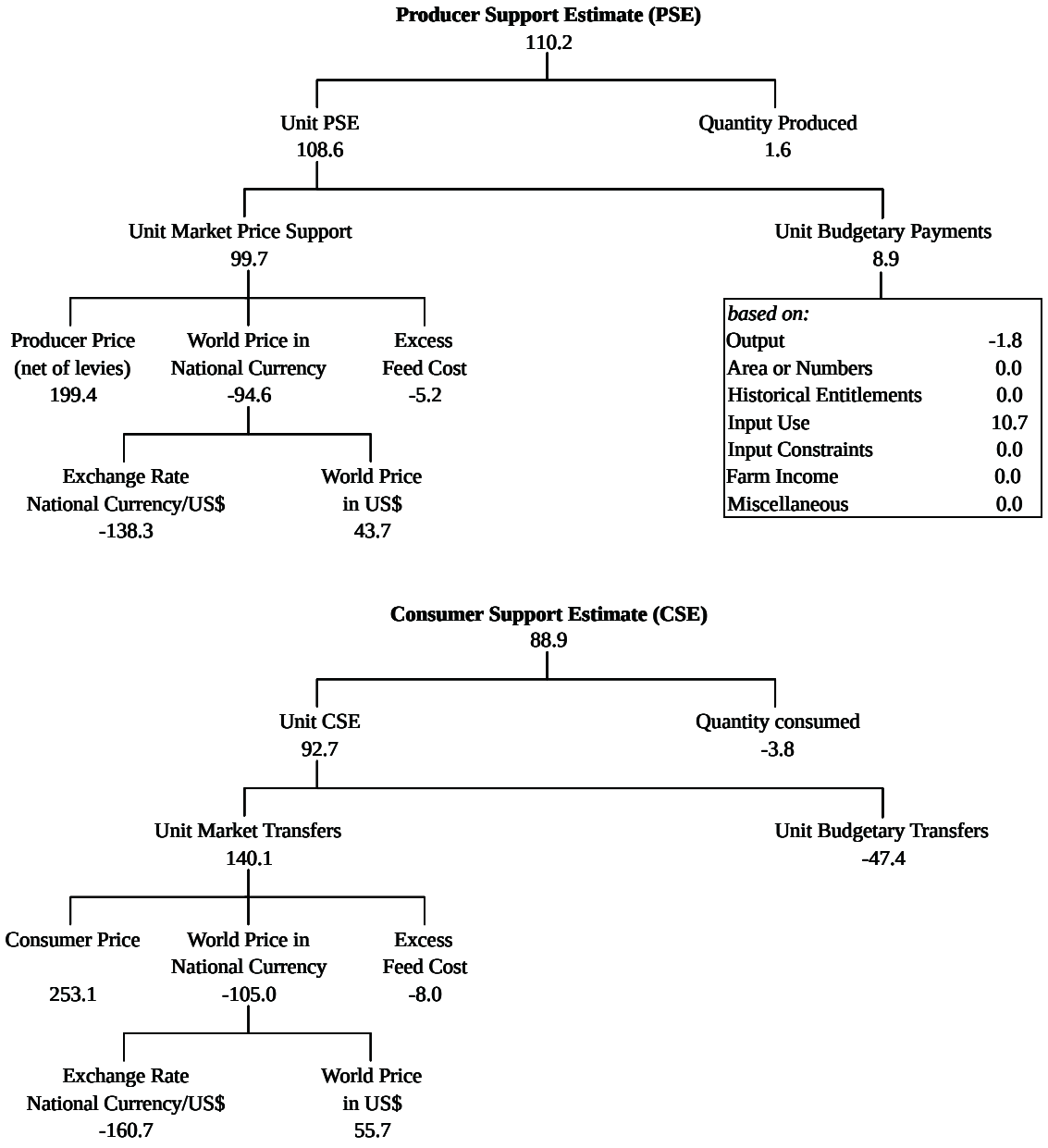
Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities
Source: OECD, PSE/CSE database.

Table III.61. **Turkey: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
TL mn	-439	-3 360	-74 202	-112 632	-118 849
Percentage CSE	-22	-21	-11	-20	-17
Consumer NAC	1.32	1.31	1.14	1.25	1.20
Maize					
TL mn	-40	-944	-1 589	-6 579	2 747
Percentage CSE	-11	-25	-3	-9	3
Consumer NAC	1.12	1.35	1.03	1.10	0.97
Other grains					
TL mn	-10	-370	19 375	2 443	50 536
Percentage CSE	-3	-5	10	1	24
Consumer NAC	1.03	1.06	0.91	0.99	0.81
Rice					
TL mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds					
TL mn	-76	-936	-48 485	-48 068	-72 877
Percentage CSE	-30	-34	-42	-44	-40
Consumer NAC	1.49	1.57	1.71	1.78	1.67
Sugar (refined equivalent)					
TL mn	-18	-1 585	-62 181	-78 315	-87 783
Percentage CSE	-9	-35	-41	-50	-43
Consumer NAC	1.10	1.54	1.73	2.00	1.76
Milk					
TL mn	-257	-6 878	-196 168	-180 738	-338 966
Percentage CSE	-36	-53	-52	-54	-61
Consumer NAC	1.67	2.15	2.15	2.18	2.56
Beef and Veal					
TL mn	88	-3 909	-110 911	-85 169	-239 580
Percentage CSE	4	-34	-31	-36	-52
Consumer NAC	1.00	1.57	1.57	1.57	2.06
Pigmeat					
TL mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Poultry					
TL mn	-39	-1 341	-12 089	-3 949	-28 698
Percentage CSE	-9	-28	-7	-3	-13
Consumer NAC	1.11	1.39	1.08	1.03	1.14
Sheepmeat					
TL mn	-61	-1 283	-3 264	-342	-15 188
Percentage CSE	-14	-17	0	0	-7
Consumer NAC	1.17	1.21	1.00	1.00	1.08
Wool					
TL mn	n.c.	n.c.	n.c.	n.c.	n.c.
Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Eggs					
TL mn	-28	-1 115	-67 366	-47 975	-131 192
Percentage CSE	-12	-26	-39	-36	-51
Consumer NAC	1.14	1.40	1.68	1.55	2.04
Other commodities					
TL mn	-1 809	-32 444	-631 317	-578 633	-1 173 308
Percentage CSE	-18	-31	-23	-26	-35
Consumer NAC	1.23	1.45	1.33	1.34	1.54
All commodities					
TL mn	-2 689	-54 165	-1 188 196	-1 139 958	-2 153 158
Percentage CSE	-18	-30	-24	-27	-33
Consumer NAC	1.22	1.44	1.33	1.36	1.50

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.
Source: OECD, PSE/CSE database.

Figure III.15. **Turkey: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 99.7 percentage points to the 110.2 percent change in PSE. See Part II.2 for detailed explanations.
Source: OECD Secretariat.

Table III.62. **United States: Estimates of support to agriculture**
(US$ mn)

	1986-88	1991-93	1996-98	1997p	1998p
Total value of production (at farm gate)	**139 537**	**166 869**	**196 686**	**197 060**	**193 567**
of which share of common commodities (%)	*69*	*68*	*66*	*66*	*65*
Total value of consumption (at farm gate)	**135 300**	**158 052**	**181 700**	**182 728**	**175 890**
Producer Support Estimate (PSE)	**41 428**	**34 981**	**35 838**	**30 616**	**46 960**
Market price support	19 706	19 318	17 915	14 839	23 547
of which common commodities	*13 524*	*13 080*	*11 808*	*9 751*	*15 329*
Payments based on output	2 919	319	1 055	372	2 736
Payments based on area planted/animal numbers	10 729	6 651	1 274	247	2 861
Payments based on historical entitlements	0	0	6 663	6 286	8 518
Payments based on input use	5 428	4 791	4 601	4 493	4 714
Payments based on input constraints	637	1 903	1 925	1 820	1 990
Payments based on overall farming income	912	661	890	1 026	1 061
Miscellaneous payments	1 098	1 340	1 514	1 533	1 533
Percentage PSE	**26**	**19**	**17**	**14**	**22**
Producer NAC	**1.35**	**1.24**	**1.20**	**1.17**	**1.28**
General Services Support Estimate (GSSE)	**35 470**	**37 021**	**28 317**	**28 233**	**29 282**
Research and development	1 457	1 916	2 065	2 031	2 177
Agricultural schools	0	0	0	0	0
Inspection services	384	495	592	596	618
Infrastructure	3 027	5 860	943	927	731
Marketing and promotion	29 503	27 410	23 203	23 145	24 222
Public stockholding	0	0	0	0	0
Miscellaneous	1 098	1 340	1 514	1 533	1 533
GSSE as a share of TSE (%)	**40.3**	**41.2**	**33.3**	**35.5**	**30.1**
Consumer Support Estimate (CSE)	**-9 322**	**-1 242**	**1 612**	**4 624**	**-4 042**
Transfers to producers from consumers	-19 211	-18 030	-17 871	-14 782	-23 525
Other transfers from consumers	-1 531	-1 408	-1 437	-1 272	-1 592
Transfers to consumers from taxpayers	11 131	17 853	20 918	20 679	21 069
Excess feed cost	289	344	2	0	7
Percentage CSE	**-8**	**-1**	**1**	**3**	**-3**
Consumer NAC	**1.09**	**1.01**	**0.99**	**0.97**	**1.03**
Total Support Estimate (TSE)	**88 029**	**89 855**	**85 073**	**79 528**	**97 311**
Transfers from consumers	20 742	19 438	19 308	16 055	25 118
Transfers from taxpayers	68 818	71 825	67 202	64 746	73 785
Budget revenues	-1 531	-1 408	-1 437	-1 272	-1 592
TSE as a share of GDP (%)	**1.9**	**1.4**	**1.1**	**1.0**	**1.1**

Notes: See Part II.2 for detailed explanations. p: provisional; NAC: Nominal Assistance Coefficient.
Market price support is net of producer levies and excess feed costs.
Source: OECD, PSE/CSE database.

Table III.63. **United States: Producer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
US$ mn	4 809	4 072	3 294	2 907	4 223
Percentage PSE	50	42	28	25	38
Producer NAC	2.06	1.75	1.41	1.34	1.61
Maize					
US$ mn	8 257	4 108	4 594	3 920	6 563
Percentage PSE	38	19	17	15	25
Producer NAC	1.64	1.23	1.21	1.17	1.33
Other grains					
US$ mn	1 320	777	800	689	996
Percentage PSE	41	29	27	23	38
Producer NAC	1.75	1.41	1.38	1.30	1.60
Rice					
US$ mn	869	891	215	200	283
Percentage PSE	52	44	11	10	14
Producer NAC	2.21	1.79	1.13	1.12	1.17
Oilseeds					
US$ mn	906	935	1 171	883	1 819
Percentage PSE	8	7	7	5	11
Producer NAC	1.09	1.08	1.07	1.05	1.12
Sugar (refined equivalent)					
US$ mn	1 155	1 117	940	942	997
Percentage PSE	59	53	41	40	41
Producer NAC	2.46	2.12	1.69	1.67	1.70
Milk					
US$ mn	11 699	10 245	11 752	9 696	15 320
Percentage PSE	60	52	50	45	61
Producer NAC	2.68	2.06	2.05	1.81	2.55
Beef and Veal					
US$ mn	1 514	1 422	916	871	1 080
Percentage PSE	6	5	3	3	4
Producer NAC	1.06	1.05	1.03	1.03	1.04
Pigmeat					
US$ mn	424	490	355	406	276
Percentage PSE	4	4	3	3	3
Producer NAC	1.04	1.05	1.03	1.04	1.03
Poultry					
US$ mn	1 014	410	440	441	433
Percentage PSE	12	3	2	3	2
Producer NAC	1.14	1.04	1.03	1.03	1.02
Sheepmeat					
US$ mn	26	19	17	19	14
Percentage PSE	6	5	4	4	4
Producer NAC	1.06	1.05	1.04	1.04	1.04
Wool					
US$ mn	87	143	7	7	7
Percentage PSE	52	77	13	12	14
Producer NAC	2.30	4.37	1.15	1.14	1.16
Eggs					
US$ mn	299	392	163	150	145
Percentage PSE	9	10	3	3	3
Producer NAC	1.10	1.11	1.04	1.03	1.03
Other commodities					
US$ mn	9 050	9 960	11 174	9 487	14 804
Percentage PSE	21	18	17	15	21
Producer NAC	1.27	1.23	1.21	1.17	1.26
All commodities					
US$ mn	41 428	34 981	35 838	30 616	46 960
Percentage PSE	26	19	17	14	22
Producer NAC	1.35	1.24	1.20	1.17	1.28

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for common commodities

Source: OECD, PSE/CSE database.

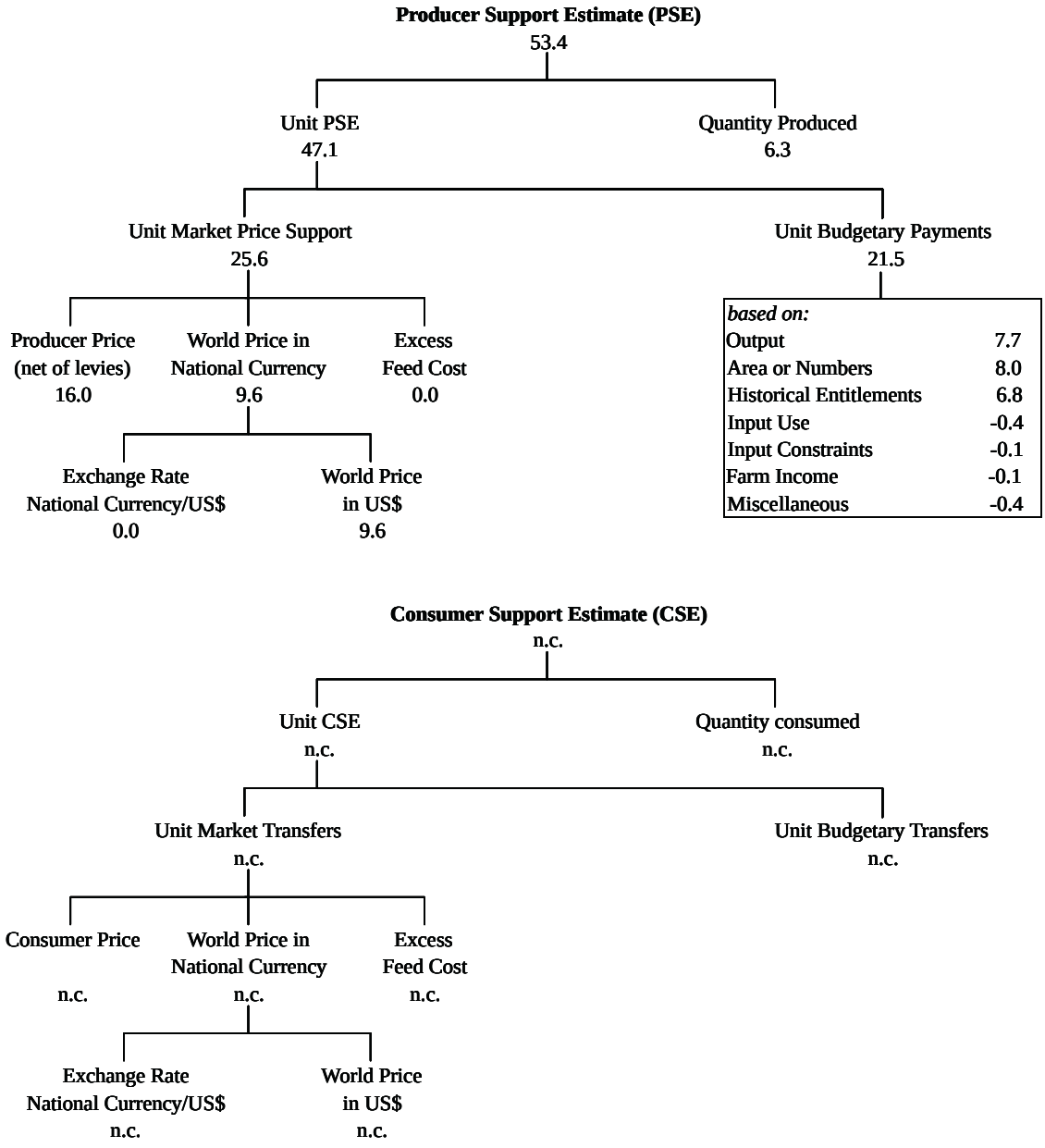
Table III.64. **United States: Consumer Support Estimate by commodity**

	1986-88	1991-93	1996-98	1997p	1998p
Wheat					
US$ mn	75	50	750	727	740
Percentage CSE	2	1	20	20	25
Consumer NAC	0.98	0.99	0.83	0.84	0.80
Maize					
US$ mn	989	1 677	2 057	2 058	2 097
Percentage CSE	10	13	13	13	16
Consumer NAC	0.91	0.89	0.88	0.89	0.86
Other grains					
US$ mn	45	54	215	200	198
Percentage CSE	3	4	14	13	18
Consumer NAC	0.98	0.97	0.88	0.89	0.85
Rice					
US$ mn	60	94	143	146	149
Percentage CSE	15	16	17	17	17
Consumer NAC	0.87	0.86	0.86	0.85	0.85
Oilseeds					
US$ mn	178	285	335	331	337
Percentage CSE	2	4	3	3	4
Consumer NAC	0.98	0.96	0.97	0.97	0.96
Sugar (refined equivalent)					
US$ mn	-1 813	-1 558	-1 300	-1 292	-1 296
Percentage CSE	-65	-57	-43	-43	-43
Consumer NAC	2.96	2.33	1.76	1.76	1.76
Milk					
US$ mn	-8 617	-6 694	-8 017	-5 977	-11 519
Percentage CSE	-54	-43	-40	-33	-54
Consumer NAC	2.40	1.74	1.71	1.50	2.15
Beef and Veal					
US$ mn	1 149	2 072	2 806	2 835	2 704
Percentage CSE	5	7	11	11	11
Consumer NAC	0.96	0.93	0.90	0.90	0.90
Pigmeat					
US$ mn	947	1 361	1 782	1 762	1 795
Percentage CSE	10	15	22	19	29
Consumer NAC	0.91	0.87	0.82	0.84	0.77
Poultry					
US$ mn	-13	1 034	1 353	1 352	1 377
Percentage CSE	-1	10	10	11	10
Consumer NAC	1.01	0.91	0.91	0.90	0.91
Sheepmeat					
US$ mn	-4	-4	-2	-4	0
Percentage CSE	-1	-1	0	-1	0
Consumer NAC	1.01	1.01	1.00	1.01	1.00
Wool					
US$ mn	-8	-9	-13	-14	-13
Percentage CSE	-6	-11	-10	-9	-11
Consumer NAC	1.07	1.12	1.11	1.10	1.13
Eggs					
US$ mn	31	35	309	318	324
Percentage CSE	1	1	9	9	10
Consumer NAC	0.99	0.99	0.92	0.92	0.91
Other commodities					
US$ mn	-2 340	363	1 195	2 181	-936
Percentage CSE	-6	1	2	4	-2
Consumer NAC	1.07	0.99	0.98	0.96	1.02
All commodities					
US$ mn	-9 322	-1 242	1 612	4 624	-4 042
Percentage CSE	-8	-1	1	3	-3
Consumer NAC	1.09	1.01	0.99	0.97	1.03

Notes: See Part II.2 for detailed explanations. p: provisional; n.c.: not calculated; NAC: Nominal Assistance Coefficient.
The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for common (PSE) commodities.

Source: OECD, PSE/CSE database.

Figure III.16. **United States: Decomposition of PSE and CSE changes, 1997 to 1998.**



Notes: The number under each PSE/CSE component shows its contribution to the overall change. For example, the change in Unit Market Price Support contributed 25.6 percentage points to the 53.4 per cent change in PSE. See Part II.2 for detailed explanations. n.c.: not calculated because the CSE changed from positive (+) to negative (-) between 1997 and 1998.
Source: OECD Secretariat.

GLOSSARY OF AGRICULTURAL POLICY TERMS

This glossary provides a concise list of major national policy measures and PSE/CSE terminology to enhance the reader's comprehension of policy developments by providing detailed definitions of terms. It is not an exhaustive list of all policy measures in all countries.

The terms defined here may be either generic or country-specific. The generic terms refer to general categories of policy measures (for example, area payments or supply control) that may be defined independently of any country-specific policy setting. In order to encompass the complexity of agricultural policies, as implemented in the different OECD Member countries, the definitions reflect the scope of the terms as they are used in the *Monitoring and Evaluation* report. Country-specific terms refer to measures that are specific to a nation or region (for example, "agri-monetary system" in the EU or "Conservation Reserve Program" in the United States). Country-specific terms are followed, in parentheses, by the name of the country to which they apply.

Terms that are defined elsewhere in the glossary appear in italics. Terms preceded by an asterisk are defined in the context of the PSE/CSE and total support methodology, explained in further detail in Part II of this report.

*
* *

Administered prices: prices fixed by policy makers in order to determine, directly or indirectly, domestic market or producer prices. All administered price schemes set a minimum guaranteed support price or a target price for the commodity, which is maintained by associated policy measures, such as quantitative restrictions on production and imports; taxes, levies and tariffs on imports; export subsidies; and public stockholding.

Advance Payments Programme, APP (Canada): this programme provides cash advances with an interest-free feature on the first C$ 50 000 to eligible producers to store eligible crops after harvest, allowing them to market the crops later in the season when the market conditions may result in better prices. Eligible crops are honey, maple syrup and field crops grown in Canada which are storable in their natural state.

Ad valorem tariff: a charge levied on imports, defined in terms of a fixed percentage of value (see also *Specific rate tariff*).

Agenda 2000 (EU): proposals put forward by the EU to reform its common policies, including the CAP, beyond the early years of the next century. The proposals for agriculture mainly deal with cereals, beef and dairy policies.

Aggregate Measurement of Support, AMS: the indicator on which the domestic support discipline for the *Uruguay Round Agreement on Agriculture* is based. It differs from the Producer Support Estimate (see *Producer Support Estimate*) in many respects, the most important of which is that price gaps in the AMS calculation are estimated by reference to domestic administered prices and not actual producer prices, and that external reference prices are fixed at the average levels of the 1986-1988 base period. In addition, many budgetary transfers which are included in PSEs are excluded from the AMS.

Agricultural Agreement (Norway): an annual agreement on agricultural producer prices and incomes. This agreement is required by the Basic Agreement for Agriculture, which was entered into by the Government and the producers'organisations in 1950. Market regulations required under the Agricultural Agreement is largely managed by product-specific organisations, including the *Norwegian Grain Corporation* and its successor, Statens Kornforretning, and various farmers'co-operatives, such as the National Association of Norwegian Milk Producers and the Norwegian Farmers'Meat Marketing Organisation. See also *Norwegian Grain Corporation.*

Agricultural Bank, T.C. Ziraat Bankasi (Turkey): a state-owned commercial bank. In addition to its normal business, the bank offers loans to the Turkish agricultural sector at concessional rates, collects taxes in rural areas and disburses various rebates and payments directly to farmers. The latter include rebates for pesticides and payments for cotton, tea and tobacco.

Agricultural Intervention Centre, AIC (Hungary): established in 1998, the AIC issues export licences for agro-food products, monitors agro-food trade flows, registers applications for export refunds, controls export documentation and issues certificates for the payment of the export refunds by the Tax and Financial Auditing Office.

Agricultural Basic Law (Japan): a constitutional law that has been part of Japan's agricultural legislation since 1961. In 1997, the government established the Investigate Council to review current policies and to establish a new basic law replacing current Agricultural Basic Law. The New Agricultural Basic Law is scheduled to be submitted to the Diet in 1999.

Agricultural Market Regime Office, AMRO (Hungary): AMRO is a state organisation responsible for market regulation, existing within the structure of the Ministry of Agriculture and Rural Development. Based on the Agricultural Market Regime Act, the Office sets guarantee and guidance prices and takes decisions on interventions on the market, the level of deficiency payments to specific products, and the level of export subsidies to be granted to specific products. Apart direct market interventions, the Office also finances programmes to enhance market information services and administrative inspection costs. In 1998, some 30 per cent of the budget expenditures of the Ministry of Agriculture and Rural Development were spent through AMRO activities.

Agricultural Sales Co-operative Unions, ASCUs (Turkey): the ASCUs are commercial organisations which can set prices for members'commodities and, on behalf of the state, undertake support purchases from producers. They are also authorised to set up facilities such as warehouses, primary processing and packaging plants and to market agricultural commodities.

Agriculture – Advancing Australia Initiative (Australia): an integrated rural package introduced in September 1997 which replaces the *Rural Adjustment Scheme* and includes new measures covering farm business improvement, rural development schemes, farm family welfare safety-net, and a business plan for Australian agriculture.

Agriculture and Livestock Industries Corporation, ALIC (Japan): a quasi-governmental institution which is assigned to *i)* buy, exchange and sell designated milk products (butter and skimmed milk powder among others) as well as beef and pigmeat; *ii)* store these products; *iii)* in periods of low prices, provide financial assistance for the holding back of supplies of designated milk products, meats and eggs in order to support their prices; *iv)* make deficiency payments to manufacturing milk producer associations, *v)* be the sole importing authority for designated milk products, *vi)* make compensation payments to beef calf producers when beef calf prices have fallen, *vii)* guarantee loans taken out by dairy industry organisations that have contributed capital, *viii)* provide grants for projects such as low cost milk for school lunches and technical advisory services for livestock producers, *ix)* stabilise the price for cocoon and raw silk through market intervention, and *x)* manage the prices of imported and domestically produced sugar and other sweeteners.

Agri-monetary system (EU): until the introduction of the single currency, on 1 January 1999, intervention support prices and payments under the CAP were set in ECUs and then converted into each country's currency using special conversion rates, called "green" rates. These rates were usually different from those established under the *European Monetary System* (EMS) and from those of EU member States which are not members of the EMS. (See also *Switchover, euro.*)

Agrochemicals: commercially produced, usually synthetic, chemical compounds used in farming – such as fertilisers, pesticides and soil conditioners.

Alliance for Agriculture (Mexico): a set of programmes initiated in 1996 aimed at improving the capital base of farms and diversifying into more competitive agricultural activities. Within the Alliance, it is proposed to transfer most of the operative functions concerning agriculture from the federal to the state governments.

Anti-dumping duty: a duty levied on imported commodities. Article VI of the *GATT* permits special anti-dumping duties that are equal to the difference between the import price and the normal value of the product in the exporting country (the "dumping margin").

Area payments: budgetary payments made to individual producers on the basis of area (acres or hectares) of eligible land. Under some programmes, payments are made per hectare of land planted to a specific crop, in order to supplement producer returns earned through market price. When used as part of a *supply control* measure, acreage payments are made per hectare of land fallowed or withdrawn from agricultural use, or for non-production of specific commodities. In some cases, there is an upper limit to the number of hectares or the percentage of total farm area eligible for acreage payments. In the EU, area payments are made to individual producers per hectare of eligible land planted to cereals, oilseeds and protein crops as compensation for decreases in administered prices. The number of hectares eligible is the base area. These payments are conditional on the implementation of a *set-aside* programme, referred to as mandatory set-aside.

ASEAN Free Trade Area, AFTA: a multilateral agreement on trade, including agricultural trade, between ASEAN Member countries, phasing out tariffs and revising other trade rules between the nine countries over the 15-year period of implementation of the Common Effective Preferential Tariff (CEPT) Scheme. The agreement was signed in January 1992.

Association of Southeast Asian Nations, ASEAN: an organisation established in 1967 by Indonesia, Malaysia, Philippines, Singapore, and Thailand to promote the economic, social and cultural development of the region through co-operative programmes, to safeguard the political and economic stability of the region, and to serve as a forum for the resolution of intra-regional differences. Brunei Darussalam (1984), Vietnam (1995), Laos (1997) and Myanmar (1997) have since joined the Association.

Australian Barley Board, ABB (Australia): a statutory marketing authority which is the sole exporting agency for Australian barley.

Australian Dairy Corporation, ADC (Australia): a statutory marketing authority formed in 1924 with responsibility for generic promotion of dairy products in domestic and export markets, export licensing, market intelligence and analysis and management of the industry's domestic market support scheme. The ADC also operates joint ventures in Asia and acts as a sales agent for specific products marketed in Japan and the European Union.

Australian Wheat Board, AWB (Australia): a statutory marketing authority which is the sole exporting agency for Australian wheat.

Baltic Free Trade Agreement, BFTA: a trilateral agreement on trade between Estonia, Latvia and Lithuania signed in 1994. In June 1996, the BFTA was extended to include agricultural trade, with effect from 1 January 1997. The agreement permits the removal of tariffs on all agricultural and food products of Baltic origin.

Base area (EU): national base areas are defined on the basis of the average of areas planted to cereals, oilseeds and protein crops between 1989 and 1991. The sum of individual areas claimed for payments – areas under set-aside and areas planted in cereals, oilseeds and protein crops – cannot exceed the national base area. If exceeded, there is a reduction in *area payments* and a penalty *set-aside* which increases the level of mandatory set-aside during the following year.

Border price: see *Reference price.*

Bovine Spongiform Encephalopathy, BSE: a fatal disease of the central nervous system of cattle, first identified in the United Kingdom in 1986. On 20 March 1996, the UK Spongiform Encephalopathy Advisory Committee (SEAC) announced the discovery of a new form of Creutzfeldt-Jacob Disease (CJD), a fatal

disease of the central nervous system in humans, which might be linked to consumption of beef affected by exposure to BSE.

Buying-in price (EU): the percentage of the *intervention price* at which purchases into intervention are actually accepted.

Buy-out schemes: supply control measures, in which participation is usually voluntary, under which producers receive compensatory payments for reducing output or productive capacity by a specified amount for a given period.

Canadian Dairy Commission, CDC (Canada): a Crown corporation established under the Canadian Dairy Commission Act (1966-1967) and accountable to Parliament through the Minister of Agriculture. The CDC has dual responsibilities: the dairy support programme operations financed by the Government through parliamentary appropriation; and marketing operations financed by milk producers under the provisions of the National Milk Marketing Plan. The CDC also chairs the Canadian Milk Supply Management Committee, which co-ordinates the management of industrial milk and cream supplies in Canada.

Canadian Wheat Board, CWB (Canada): a self-financing crown corporation which has the exclusive right to purchase wheat and barley produced in the provinces of Manitoba, Saskatchewan and Alberta and in the Peace River area of British Columbia that is exported or sold domestically for human consumption.

Central and Eastern European Countries, CEECs: an OECD term for the group of countries comprising Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia, and the three Baltic States: Estonia, Latvia and Lithuania.

Central European Free Trade Agreement, CEFTA: an agreement originally signed by the countries of the Visegrad group, the Czech Republic, Hungary, Poland and the Slovak Republic, on 21 December 1992 and in effect since 1 March 1993. Slovenia (1996) and Romania (1997) have since joined CEFTA, while Bulgaria has applied for membership and is negotiating its accession. Moreover, Lithuania, Latvia, Croatia, Macedonia and Ukraine have announced their intention to join. The agreement provides for the gradual establishment of a free trade area for industrial goods and a gradual reduction of certain, but not all, barriers to trade in agro-food products. See also *Visegrad countries*.

****Coarse grains:*** generally refers to cereal grains other than wheat and rice – *i.e.* those used primarily for animal feed or brewing in the OECD countries. When used as a collective term in the context of PSE and CSE estimates, the composition will vary by country and may include any or all of the following: barley, oats and sorghum. Rye and triticale, the production of which is minor in the OECD, are not included in PSE composites relating to coarse grains, except in a few cases where statistical difficulties prevent the separation of data on rye from those for other coarse grains. Maize (corn in the United States) is a coarse grain but is reported separately from all other coarse grains in the PSE/CSE tables. Most maize produced in Mexico is for food, not feed, consumption.

Committee on Surplus Disposal, CSD: a subcommittee of the *Food and Agriculture Organisation's* Committee on Commodity Problems that monitors food aid flows to ensure that surplus disposal does not interfere with normal production and trade patterns, in compliance with the FAO Principles of Surplus *Disposal (1954)*.

Commodity Credit Corporation, CCC (United States): a government corporation within the US Department of Agriculture which functions as the financial institution through which all money transactions are handled for agricultural price and income support measures (for example, through loans, purchases and budgetary payments). See also *Export credit guarantee*.

Common Agricultural Policy, CAP (EU): the EU's agricultural policy. Its objectives were set forth in Article 39 of the Treaty of Rome (1957). Financing of the CAP is provided through the Guarantee and Guidance sections of the European Agricultural Guarantee and Guidance Fund (EAGGF) (see *European Agricultural Guidance and Guarantee Fund, EAGGF*).

Common Market of the South, MERCOSUR: A multilateral agreement on trade, including agricultural trade between Argentina, Brazil, Paraguay and Uruguay. The agreement was signed in 1991 and came into effect on 1 January 1995. Its main goal is to create a customs union between the four countries by 2006.

Commonwealth of Independent States, CIS: a formal association of states comprising most of the republics formed out of the former Soviet Union, with the exception of Estonia, Georgia, Latvia and Lithuania.

Conservation Reserve Program, CRP (United States): a major provision of the Food Security Act of 1985, and extended under the Food, Agriculture, Conservation and Trade Act of 1990, designed to reduce erosion on 40 to 45 million acres (16 to 18 million hectares) of farm land. Under the programme, producers who sign contracts agree to convert erodible crop land to approved conservation uses for ten years. Participating producers receive annual rental payments and cash or payment in kind to share up to 50 per cent of the cost of establishing permanent vegetative cover. The CRP is part of the *Environmental Conservation Acreage Reserve Program*. The 1996 FAIR Act authorised a 36.4 million acre (15 million hectares) maximum under CRP, its 1995 level.

****Consumer support estimate, CSE:*** indicator of the annual monetary value of gross transfers to (from) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures which support agriculture, regardless of their nature, objectives or impact on consumption of farm products. The CSE includes explicit and implicit consumer transfers to producers of agricultural commodities, measured at the farm gate (first consumer) level and associated with: market price support on domestically produced consumption (transfers to producers from consumers); transfers to the budget and/or importers on the share of consumption that is imported (other transfers from consumers); and is net of any payment to consumers to compensate them for their contribution to market price support of a specific commodity (transfers to consumers from taxpayers); and the producer contribution (as consumers of domestically produced crops) to the market price support on crops used in animal feed (e*xcess feed cost*). When negative, transfers from consumers measure the implicit tax on consumption associated with policies to the agricultural sector. Although consumption expenditure is increased/reduced by the amount of the implicit tax/payments, this indicator is not in itself an estimate of the impacts on consumption expenditure. The percentage CSE is the ratio of the CSE to the total value of consumption expenditure on commodities domestically produced, measured by the value of total consumption (at farm gate prices) minus budgetary support to consumers. The nomenclature and definitions of this indicator replaced the former Consumer Subsidy Equivalent in 1999.

Contract crops (United States): crops eligible for *Production Flexibility Contract Payments*: wheat, maize, sorghum, barley, oats, rice and upland cotton.

Countervailing duty: An additional levy imposed on imported goods to offset subsidies provided to producers or exporters by the government of the exporting country. Countervailing duties are permitted under Article VI of the GATT.

Dairy Export Incentive Program (United States): a programme first authorised by the 1985 Farm Act under which the Commodity Credit Corporation subsidises exporters of US dairy products to help them compete with other subsidising nations. Eligible sales should be in addition to, and not displace, commercial export sales. The 1996 *FAIR Act* extended the programme to 2002.

Decoupled payments: budgetary payments made to eligible recipients which are not linked to production of specific commodities or the use of specific factors of production.

Deficiency payment: an output subsidy in which the rate per unit of output of a commodity is the difference between an *administered price* and the market price.

Department of Agriculture, Fisheries and Forestry – Australia, (AFFA) (Australia): the former Department of Primary Industries and Energy was renamed in 1998 and the responsibility for resources and energy was transferred to the Department of Industry, Science and Resources.

Differential duty system for pigmeat imports (Japan): a specific duty system for pigmeat imports, introduced in April 1995. A differential duty, calculated as equal to the difference between actual c.i.f. prices and a fixed threshold price (standard import price) will be levied on actual c.i.f. prices of up to a stated maximum (gate price). For pigmeat imports at prices beyond the gate price, an *ad valorem* duty will apply.

Environmental Conservation Acreage Reserve Program, ECARP (United States): a programme authorised by the Farm Act of 1990. It includes the *Conservation Reserve Program* (CRP) and the *Wetlands Reserve Program* (WRP). The ECARP extends the CRP by placing greater emphasis on water quality, identifying

environmentally sensitive areas for special conservation treatment, tree planting and wetlands conservation.

Environmentally sustainable: see *Sustainable agriculture*.

Environmental Quality Incentives Program, EQIP (United States): a programme created by the 1996 *FAIR Act* to provide technical, educational, and cost-sharing assistance programmes aimed at reducing soil, water, and related natural resource problems. The programme replaces the Agricultural Conservation Program, the Water Quality Incentives Program, the Great Plains Conservation Program, the Colorado Salinity Control Program, and the Rural Environmental Conservation Program.

European Agricultural Guidance and Guarantee Fund, EAGGF (EU): a fund within the overall budget of the EU budget for the financing of the CAP. Spending under the EAGGF Guarantee covers direct subsidies to farmers, market intervention measures, export refunds, as well as co-financing for agri-environment (Reg. 2078/92), afforestation and early retirement schemes. The EAGGF Guidance Section, which is one of the EU's four Structural Funds, co-finances measures to assist structural change in the agricultural sector and to promote rural development. Specific measures include investment aid, schemes to help young farmers set up for the first time, training activities, support for processing and marketing of agricultural and forestry products, compensatory allowances for areas with natural handicaps and rural infrastructure projects. The EAGGF Guarantee Section provides the financing for most of the CAP. The EAGGF fund is often referred to by its French abbreviation FEOGA.

European Currency Unit, ECU (EU): the unit of account used in the European Monetary System until 31 December 1998. The ECU is a weighted average of the national currencies in the EU member countries. See *Monetary compensatory amounts*. With the creation of the Euro on 1 January 1999, the ECU was abolished. See *euro*.

Euro: the single currency of the eleven EU countries participating in the European Economic and Monetary Union introduced on 1 January 1999. Euro-denominated bank notes and coins will come into circulation from 1 January 2002.

European Free Trade Association, EFTA: A free trade area established in 1958 with a view to eliminating tariffs on goods produced in and traded among member states. Most agricultural products are not subject to EFTA schedule tariff reductions. Current members: Iceland, Liechtenstein, Norway, Switzerland.

Excess feed cost: *MPS* for feed crops domestically produced and consumed by livestock producers. It is included as negative in the *PSE* for livestock and the *CSE* for crops. This avoids double-counting when aggregating the PSE/CSE for crops and livestock.

Export credit guarantee: generally, an assurance provided by a government to protect its exporters against loss due to non-payment by a foreign buyer.

Export Enhancement Program, EEP (United States): a programme initiated in May 1985 under a *Commodity Credit Corporation* charter to subsidise the export of certain products to specified countries. The programme was formally authorised by the Food Security Act of 1985 and has been extended since under the *Farm Act* of 1990 and the *FAIR Act* of 1996. Under the EEP, exporters were initially awarded generic commodity certificates which were redeemable for commodities held in CCC stores, thus enabling them to sell commodities to designated countries at prices below those on the US market. As from November 1991, cash bonuses are provided as financial payments.

Export restitutions (EU): a name for variable *export subsidies* given to traders to cover the difference between the internal EU price of a commodity and its world market price.

Export subsidies: subsidies given to traders to cover the difference between internal market prices and world market prices, for example the EU *export restitutions* and the US *Export Enhancement Program* (see above). Export subsidies are now subject to value and volume restrictions under the *Uruguay Round Agreement on Agriculture*.

FAIR Act of 1996 (United States): see Federal Agriculture Improvement and Reform Act of 1996.

Farm Act of 1990 (United States): also referred to as the Food, Agriculture, Conservation and Trade Act of 1990 (replaced by the FAIR Act of 1996).

Farmer-Owned Reserve Program (United States): contributes to grain producers' storage costs by offering storage payments when supplies are deemed abundant and/or market prices are below a specified minimum.

Farm gate price: see *producer price*.

Federal Agriculture Improvement and Reform Act of 1996 (United States): also referred to as the 1996 FAIR Act. The legislation replacing the 1990 Farm Act and governing almost all aspects of food and agriculture policy during the period 1996-2002.

FEOGA (EU): See *European Agricultural Guidance and Guarantee Fund*.

Food and Agriculture Organisation, FAO: a United Nations agency, founded in 1945, whose remit is to monitor and improve the distribution and production of food and agricultural products throughout the world.

General Agreement on Tariffs and Trade, GATT: a multilateral agreement, originally negotiated in 1947 in Geneva among 23 countries, to reduce *tariffs* and other trade barriers. It provides a framework for periodic multilateral negotiations on trade liberalisation. The most recent round of such negotiations was the Uruguay Round. Part of the final agreement of the Uruguay Round, concluded in December 1993, led to the establishment of the *World Trade Organisation* to replace the GATT; it commenced operation on 1 January 1995.

Generalised System of Preferences, GSP: an autonomous, country-specific policy that permits tariff reductions or possibly duty-free entry of certain imports from designated developing countries.

General Services Support Estimate, GSSE: indicator of the annual monetary value of gross transfers to general services provided to agriculture collectively, arising from policy measures which support agriculture, regardless of their nature, objectives and impacts on farm production, income, or consumption of farm products. It includes taxpayers transfers to: improve agricultural production (research and development); agricultural training and education (agricultural schools); control of quality and safety of food, agricultural inputs, and the environment (inspection services); improve off-farm collective infrastructures, including downstream and upstream industry (infrastructures); assist marketing and promotion (marketing and promotion); meet the costs of depreciation and disposal of public storage of agricultural products (public stockholding); other general services that cannot be disagreggated and allocated to the above categories due, for example, to a lack of information (miscellaneous). Unlike the *PSE* and *CSE* transfers, these transfers are not received by producers or consumers individually and do not affect farm receipts (revenue) or consumption expenditure by their amount, although they may affect production and consumption of agricultural commodities. The percentage GSSE is the ratio of the GSSE to the *TSE*.

Genetically Modified Organisms, GMO: organisms modified through the application of biotechnology.

Green ECU (EU): Unit of account used for the *CAP* between 1984 and February 1995. It was equal to the ECU, as determined in the context of the *European Monetary System*, adjusted by a correction factor reflecting the higher value of the green ECU relative to the ECU (the *switchover* coefficient). Its purpose was to avoid the emergence of monetary compensatory amounts for strong currencies and its value was modified following currency realignments as a function of changes in the strongest currency. Use of the green ECU and switchover coefficient ended in February 1995.

Greenhouse Gases, GHG: emissions of greenhouse gases (carbon dioxide, methane, etc.) affect the earth's atmosphere and contribute to global warming and climate change.

Green rates (EU): The exchange rates at which the ECU was converted to national currencies for agricultural policy purposes (see ECU). Green rates were set by the Council of Ministers.

Gross Revenue Insurance Plan, GRIP (Canada): a form of *direct payment* to farmers combining a yield protection (crop insurance) component and a revenue protection component, wherein farmers finance one-third of the premiums paid out under the latter. The GRIP makes payments when market revenue falls short of a producer's target revenue. Target revenue per acre for an individual crop is based on historical yields, a 15-year moving average of price and a level of insurance coverage chosen by the producer.

Guaranteed export credits (United States): measures to promote agricultural exports. Under the *Export Credit Guarantee* Program (GSM-102), in place since 1982, repayment of private, short-term credit is guar-

anteed for up to three years. The Intermediate Export Credit Guarantee Program (GSM-103), established in 1985, guarantees repayment of private credit for three to ten years.

Guaranteed quantities (Switzerland): aggregate production limits beyond which volumes produced are not eligible for price support. This measure is applied to bread grains.

Hazard Analysis and Critical Control Points, HACCP (United States): set of procedures intended to predict and prevent food safety risks. It entails identifying and checking those points where food quality can be altered during food processing and distribution (*e.g.* through improper temperature or handling).

Headage payments: budgetary payments made to individual producers on the basis of the number of head of a specific type of livestock to supplement producer returns earned through sales at market prices. Headage payments are sometimes combined with an upper limit on the number of livestock eligible per holding or constraints on stocking densities.

Import quota: a quantitative restriction on the level of imports imposed by a country. See also *Voluntary export restraint arrangements*.

Interest concession: a reduction, compared with commercial interest rates, in the interest rate charged on a loan taken out by a farmer, typically provided directly by a government agency or by a government grant to the lending bank (in the case of a commercial loan).

International Dairy Arrangement, IDA: an arrangement under the *GATT* (and later the *WTO*) between major dairy producing and exporting countries. Its objective is to expand and liberalise world trade in dairy products through international co-operation.

Intervention price (EU): a form of *administered price*; the price at which national intervention agencies are obliged to purchase any amount of a commodity offered to them regardless of the level of market prices (assuming that these commodities meet designated specifications and quality standards). Thus, the intervention price serves as a floor for market prices. In the EU, intervention purchases constitute one of the principal policy mechanisms regulating the markets in cereals, butter and skimmed milk powder, and beef. The Council of Ministers sets intervention prices every year on the basis of proposals by the Commission.

Intervention buying: the act of purchasing a commodity once its market price drops below a set administered price (the *intervention price*) so as to raise its market price to at least the level of the intervention price. See also *Intervention stocks*.

Intervention stocks (EU): stocks held by national intervention agencies as a result of *intervention buying* of commodities subject to market price support. Intervention stocks may be released onto internal markets if internal prices exceed *intervention prices*; otherwise, they may be sold on the world market with the aid of *export restitutions* under the regulation of commodity-specific Management Committees.

Land set-aside: a programme to remove land from production, either for supply control or environmental purposes; often required as a condition for receiving support programme benefits (budgetary payments, for example).

Law for Stabilisation of Supply, Demand and Price of Staple Food (Japan): enacted in 1995 to replace the Food Control Law, it regulates the distribution and prices of rice, wheat and barley. The Government purchases some amount of rice as a national reserve at administered prices from producers who participate in PAPP (See *Production Adjustment Promotion Programme*). The Government is legally obliged to buy at administered prices all wheat and barley produced and offered to it by producers. Imports of these commodities occur under the minimum access commitment (for rice) and current access commitment (for wheat and barley) of the *Uruguay Round Agreement on Agriculture*. These transactions are managed by the Food Agency, which is part of the Ministry of Agriculture, Forestry and Fisheries.

Less Favoured Areas, LFAs (EU, Czech Republic, Hungary): in the EU, areas with natural handicaps (lack of water, climate, short crop season and tendencies of depopulation) as well as mountainous and hilly areas, defined in terms of altitude and slope. These areas benefit from area and headage compensatory allowances, and from a number of payments for structural adjustment. National governments designate their respective LFAs. In the Czech Republic, areas with less favoured conditions for agricultural production, defined in terms of the "official" price of land which reflects the productive potential of the land. These areas benefit from specific area and headage payments and additional interest rate subsi-

dies to support investment. In Hungary, areas with less favoured conditions for agricultural production (low quality land), defined in terms of the "Golden Crown Standard", which reflects the productive potential of the land. These areas benefit from budgetary payments per hectare of agricultural land and additional interest rate subsidies within the generally applied support programmes. In 1998, additional criteria (economic, social and employment) were added to the criteria of land production potential.

Levies on output: taxes on farm output which reduce the price received by producers.

Loan deficiency payments (United States): this programme was introduced by the Food Security Act of 1985 to provide payments to wheat, feed grain, upland cotton, rice or oilseed producers. It continued to be available under the 1996 Fair Act for all loan commodities except ELS cotton (Extra-Long-Staple cotton). It is a variation of the *non-recourse* loan programme whereby, for commodities specified above, a producer may agree to forgo loan eligibility and receive an output subsidy, the rate of payment of which is the amount by which the applicable county's loan rate exceeds the *marketing loan* repayment rate. Producers may elect to apply for this payment during the loan availability period on a quantity of the programme crop not exceeding their loan-eligible production.

Loan rate (United States): the commodity price at which the *Commodity Credit Corporation* (CCC) offers *non-recourse loans* to participating farmers. The crops covered by the programme are used as collateral for these loans. The loan rate serves as a floor price for participating farmers in the sense that they can default on their loan and forfeit their crop to the CCC rather than sell it in the open market at a lower price.

Local-content scheme: a government policy that requires manufacturers of a particular product (e.g. cigarettes or fruit juice) to obtain domestically a specified minimum percentage of their basic agricultural input (e.g. tobacco or fruit from domestic producers).

Maastricht Treaty (EU): a treaty ratified by all member states in 1993 and implemented by means of extensive amendment to the Treaty of Rome, including the change from the name European Economic Community to European Union. The Maastricht Treaty includes sections on political union and on economic and monetary union, and a redefinition of the role of legislative and executive bodies. It establishes the principle of subsidiarity, by which any action by the Union shall not go beyond what is necessary to achieve the objectives of the treaty.

Manufacturing or industrial milk (Australia, Canada): milk used for producing products such as casein, butter, cheese and milk powder. Generally, the term excludes milk transformed into "fresh" products, such as yoghurt and cream.

Market Access: governed by provisions of the *Uruguay Round Agreement on Agriculture* which refer to concessions contained in the country schedules with respect to bindings and reduction of tariffs and to other market access commitments (*tariffication*) and the only allowable exceptions of the process as those described under the Special Safeguard Provisions and the Special Treatment.

Market Access Program, MAP (United States): an export promotion programme authorised by the 1996 *FAIR Act*, and formerly the Market Promotion Program (see below). Funding was limited to US$90 million annually for fiscal years 1996-2002.

Market price support, MPS: indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers arising from policy measures creating a gap between domestic market prices and *border prices* of a specific agricultural commodity measured at the farm gate level. Conditional on the production of a specific commodity, MPS includes the transfer to producers associated with both production for domestic use and exports and is measured by the price gap applied to current production. The MPS is **net** of financial contributions from individual producers through producer levies on sales of the specific commodity or penalities for not respecting regulations such as production quotas (*Price levies)* and in the case of livestock production is net of the market price support on domestically produced coarse grains and oilseeds used as animal feed (*Excess feed cost*).

Market Sharing Quota, MSQ (Canada): the national Market Sharing Quota for industrial milk is determined by estimating the domestic demand for dairy products on a butterfat basis, adding about 3 per cent to cover exports and subtracting the volume of approved imports. Provincial shares of the national quota are adjusted in line with changes in the total and each province allocates its share to its producers according to its own quota policies. The Canadian Dairy Commission sets a target price for

industrial milk based on production costs, including a return to labour, capital and management. Dairy farmers receive direct government payments (which are part of the target price) on in-quota deliveries of industrial milk and cream. Farmers who produce in excess of their quota do not receive direct government payments and face an over-quota levy. Each province maintains and administers its own quota scheme for fluid milk.

Market transfers: transfers to (when positive) or from (when negative) consumers due to *market price support* policies.

Marketing agency (or board): generally, a statutory body possessing certain legislated regulatory powers over prices, quality standards, foreign trade, etc.

Marketing loan (United States): a variation of the *non-recourse loan* whereby, for specified commodities, a producer may repay a loan at a lower rate than the loan rate, equivalent to the prevailing world market price. Under the 1985 Food Security Act, marketing loans were implemented for cotton, rice and honey; under the Farm Act of 1990, they were implemented for soya beans and other oilseeds, some cotton and rice, and are now mandatory for wheat and feed grains; the 1996 *FAIR Act* retained the provisions for some commodities.

Marketing orders (United States): measures intended to stabilise markets, standardise quality and packaging, regulate flows to the market and authorise research and development for certain farm commodities; especially used for fruits, vegetables and nuts. There is no direct control of pricing or production, but orders are binding on the entire industry in the area regulated. The marketing order is requested by a group of producers and must be approved by the Secretary of Agriculture and a required number of the commodity's producers (usually two-thirds) in the area regulated. Orders are financed by production levies.

Market Promotion Program, MPP (United States): export programme authorised by the 1990 Farm Act, replacing the Targeted Export Assistance (TEA) Program. The MPP is designed to encourage the development and maintenance of commercial farm export markets and gives highest priority to groups whose exports have been adversely affected by a foreign government's policies. Under the MPP, participants receive generic commodity certificates in payment for approved promotional activities. The programme was renamed *Market Access Program* under the 1996 FAIR Act.

Mark-up (Japan): an import mark-up is maintained at the border on a given commodity to be imported, as defined in the *GATT* (1994). It is a price margin incurred by a state trading enterprise through its purchasing and selling operation.

MERCOSUR: see *Common Market of the South.*

Milk quota scheme: a supply control measure to limit the volume of milk produced or supplied. Quantities up to a specified quota amount benefit from full *market price support.* Over-quota volumes may be penalised by a levy (as in the EU where the "superlevy" is 115 per cent of the target price) or may receive a lower price. Allocations are usually fixed at individual producer level. Other features, including arrangements for quota reallocation, differ according to scheme. See also *Supply quotas.*

Monetary compensatory amounts, MCAs (EU): taxes and subsidies formerly applicable to intra-EC trade in agricultural and food products for which *intervention prices* were set. These border measures were made necessary by the fact that *intervention prices* were set in ECUs and converted into national currency terms at green rates, set at levels different from commercial market rates. This gave rise to price differentials between member States (in market ECUs) which would influence intra-EC trade if not offset by the MCAs. The system worked by subsidising exports (and taxing imports) from strong-currency countries and taxing exports (subsidising imports) from weak-currency countries. MCAs were abolished in 1993, when border controls were removed with the advent of the Single Market.

National Competition Policy, NCP (Australia): the NCP, agreed between the Commonwealth and State/Territory governments, is the set of laws, principles, processes and institutions which have the aim of maintaining or enhancing competition. The six elements of the NCP are: the extension of competitive conduct rules to all forms of business activity; review and reform of anti-competitive legislation; principles to apply to the reform of public sector monopolies; a generalised regime for access to nationally sig-

nificant infrastructure facilities; reforms to price oversight arrangements for government business enterprises; and, ensuring competitive neutrality between government and private business activities.

National Landcare Program, NLP (Australia): a multi-objective programme aimed at conserving land, water and vegetation in rural areas. Government support for the programme is focused on education, extension, research and demonstration projects. The programme also encourages farmers to address their land management problems collectively through formally constituted Landcare Groups. See also *Natural Heritage Trust*.

Natural Heritage Trust, NHT (Australia): the NHT, established in 1996, provides an integrated approach to address *sustainable agriculture*, natural resource and environmental management issues. It focuses on five key environmental themes: land, vegetation, rivers, coasts and marine, and biodiversity. There are a range of programmes under the NHT addressing these issues, with the *National Landcare Programme* having a particular focus on integrated natural resource management at the farm catchment and regional level.

Net Income Stabilization Account, NISA (Canada): a voluntary farm income safety-net programme, under which farmers set aside money in individual interest bearing accounts; this is matched by federal and provincial treasuries. Farmers can make withdrawals from the account when their income falls below their five-year average returns after costs, or when their taxable income falls below a fixed level.

New Independent States of the former Soviet Union, NIS: an OECD term denoting the group of states that formerly made up the Soviet Union, with the exception of Estonia, Latvia and Lithuania.

****Nominal assistance coefficient, NAC:*** the producer NAC is the ratio of the *PSE* and the value of total gross farm receipts valued at world market prices and excluding any budgetary support. It expresses the transfers to agriculture in relation to border prices. The consumer NAC is the ratio of the *CSE* and the total value of consumption expenditure on commodities domestically produced valued at world market prices and excluding any budgetary support to consumers.

Non-recourse loan (United States): the major instrument used by the *Commodity Credit Corporation* to support the price of a number of crop products. The loan is "non-recourse" because the Government has no option but to accept forfeiture of the crop in full satisfaction of the loan obligation, even when the market price of the commodity is below the *loan rate*.

North American Free Trade Agreement, NAFTA: a trilateral agreement on trade, including agricultural trade, between Canada, Mexico and the United States phasing out tariffs and revising other trade rules between the three countries over a 15-year period. The agreement was signed in December 1992 and came into effect on 1 January 1994.

Norwegian Grain Corporation, NGC (Norway): the body that until 1995 held monopoly control on all cereal and concentrate feed imports to Norway. It collected variable levies on imported concentrate feed and transferred the receipts (net of operating charges) to the Treasury. The NGC was obliged to purchase all Norwegian cereals and feed concentrates from domestic producers and to maintain cereal inventories. With the implementation of the Uruguay Round agreement, the NGC was replaced by two joint-stock companies owned by the state: Statkorn Holding Ltd., acting as a commercial agent, and Statens Kornforretning (effectively the new NGC), which is an administrative unit under the Ministry of Agriculture. The new body, like the old one, is responsible for the first time sale of domestic grain, the market regime for grain and oilseeds and the maintenance of cereal inventories. In addition, it is in charge of the new import regime for agricultural products, including auctioning of quotas.

Objectives 1, 5a, 5b and 6 (EU): priority objectives for allocating structural funds for rural development and agricultural adjustment for the 1994-99 period. Objective 1, structural adjustment of regions whose development is lagging behind (defined as those areas with a GDP of less than 75 per cent of the EU average) including all of Greece, Ireland and Portugal. Objective 5*a*, structural adaptation of agriculture and fisheries. Objective 5*b*, economic diversification of vulnerable rural areas (defined as those rural areas with a low level of socio-economic development, a high dependency on agricultural employment, low agricultural incomes, low population density and declining population). Objective 6 (Finland and Sweden), structural adjustment of sparsely populated regions (defined as the regions north of the 62nd parallel with population density less than 8 inhabitants per km^2. Objectives 1, 5*b* and 6 are limited to

designated areas (nearly three-quarters of the EU area and about 35 per cent of the EU population), while objective 5*a* may be implemented throughout the EU. Appropriations for objective 1 account for almost 70 per cent of all appropriations under the structural funds.

Oilseeds: generally, seeds grown primarily for the production of edible (*i.e.* cooking) oils. When used as a collective term in the context of *PSE* and *CSE* estimates, the composition varies by country and may include any or all of the following: rape seed (colza), soya beans and sunflower seed. Linseed and safflower seed are not included in the definition of oilseeds used for PSE/CSE purposes, except in a few cases where statistical difficulties prevent the separating out of data on these crops from those for other oilseeds. Cotton seed, grape seed, olives and groundnuts (peanuts), from which edible oils are produced as by-products, are excluded from the PSE and CSE composites.

Organic farming: a variously defined term generally describing agricultural production methods that avoid the use of synthetic agrochemicals and plant and animal protection products. The fertility and biological activity of the soil can be maintained by cultivation techniques and crop rotation or by incorporating organic material into the soil. Pests, diseases and weeds can be controlled by (among other methods) encouraging natural enemies to flourish and using disease-resistant crop varieties and mechanical weeding.

Phytosanitary regulations: government regulations that restrict or prohibit the importation and marketing of certain plant species, or products of these plants, to prevent the introduction or spread of plant pests or pathogens that these plants may be carrying. See also *Sanitary regulations*.

Producer price: the average price or unit value received by farmers in a country for a specific agricultural commodity produced within a specified 12-month period. This price is measured at the farm gate -- that is, at the point that the commodity leaves the farm – and therefore does not incorporate cost of transport and processing.

Producer support estimate, PSE: indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at farm gate level, arising from policy measures, regardless of their nature, objectives or impacts on farm production or income. The PSE measures support arising from policies targeted to agriculture relative to a situation without such policies, i.e. when producers are subject only to general policies (including economic, social, environmental and tax policies) of the country. The PSE is a gross notion implying that any costs associated with those policies and incurred by individual producers are not deducted. It is also a nominal assistance notion meaning that increased costs associated with import duties on inputs are not deducted. But it is an indicator net of producer contributions to help finance the policy measure (*e.g.* producer levies) providing a given transfer to producers. The PSE includes implicit and explicit payments. The percentage PSE is the ratio of the PSE to the value of total gross farm receipts, measured by the value of total production (at farm gate prices), plus budgetary support. The nomenclature and definitions of this indicator replaced the former Producer Subsidy Equivalent in 1999.

Production Adjustment Promotion Programme, PAPP (Japan): a land diversion scheme introduced in 1998, whose main objectives are to match domestic production to demand and stabilise farmers'income. The payment is calculated based on the area of paddy field where other uses than rice production were implemented. The producers must use the paddy field complying with environmental programme fixed by the government. Participation to this programme is required as a condition for receiving JRIS payments (See *Rice Farming Income Stabilisation Programme*).

Production Flexibility Contract Payments (United States): also referred to as PFC payments. Under the 1996 *FAIR Act*, the payments to be made in the period 1996 to 2002 to participating farmers in the former *programme crops*. The overall, annual budget for these payments based on projected total *payments* for 1996-2002, from a 1995 baseline. Allocation to former *programme crops* is based on crop-specific percentages defined in the Act. The total commodity amount is allocated among farmers by historical production of land eligible to be enrolled in the former *programme crops*.

Programme crop (United States): a crop covered by federal support programmes. These crops are wheat, corn (maize), barley, grain sorghum, oats, rye, extra-long staple and upland cotton, rice, soya beans, tobacco, peanuts (groundnuts) and sugar.

Programme of Direct Support to the Countryside, PROCAMPO (Mexico): a programme of budgetary payments to producers on a per-hectare basis. Payments are made to farmers – owners or renters, individuals or corporations – on the basis of areas that were planted in the three years prior to the spring/summer 1993 growing season with maize, beans, wheat, sorghum, rice, soya beans, safflower, cotton or barley. All eligible producers receive the same per-hectare payment. Once in PROCAMPO, a producer can devote land to any agricultural or forestry activity, or place it in an approved environmental programme. PROCAMPO payments started in 1994.

Quantitative restriction: a limit on the quantity or value of a product permitted to enter or leave a country. Examples are *import quotas* and *voluntary export restraint arrangements*.

Queensland Sugar Corporation (Australia): a statutory body constituted under Queensland's Sugar Industry Act 1991. It is responsible for the management of, receipt and storage, and marketing of all raw sugar produced in Queensland, and for the management of the State's production regulations.

Quota: see *Import quota, Milk quota scheme, Supply quota, Tariff quota*.

****Reference (border) price:*** the import (c.i.f.) or export (f.o.b.) price of a commodity. An implicit border price may be calculated as the *producer price* in the foreign country less the *unit MPS* and may differ slightly from the explicit reference (border) price.

Resource Management Act (New Zealand): a 1991 law providing for regional management of policies affecting land, air and water resources. It enshrines the principle that any environmental standards set under the Act must apply equally to all economic activities, including farming. Agriculture bears the cost of meeting any environmental standards established under the Act, with little or no government assistance.

Rice Farming Income Stabilisation Programme, JRIS (Japan): a new direct payment, introduced since 1998, to compensate part of the loss of income caused by a fall in the market price. This programme is addressing only those producers who participate PAPP (See *Production Adjustment Promotion Programme*) and have completely fulfilled the required diversion target in that year. An eligible producer who wants to participate in the scheme should enter into a contract with an agricultural co-operative and deposit certain amount of money as "limited withdrawal deposit" in the co-operative. The government also transfers money to the producer's account. When the market price of the voluntarily marketed rice falls below the standard price (the average price of the voluntarily marketed rice in the preceding three year period), the limit of withdrawal is going to be lifted for certain amount of money, equivalent to 80 per cent of the price fall.

Rural Adjustment Scheme, RAS (Australia): seeks to promote an efficient and competitive rural sector by providing assistance and services to help farmers adjust to technical, economic and institutional changes. Assistance is provided mainly by way of concessional loans and interest subsidies on commercial debt. Other payments are for retraining and for withdrawal of key assets (such as environmentally sensitive land). See also *Agriculture – Advancing Australia Initiative.*

Rural Development Administration, RDA (United States): a body established by the 1990 Farm Act amending the Consolidated Farm and Rural Development Act to administer Farmers'Home Administration (FmHA) Community and Business Programs and other such US Department of Agriculture rural development programmes as the US Secretary for Agriculture deems necessary. These programmes help fund the establishment of new businesses and industries and the construction of water and waste disposal systems and other infrastructure in rural communities.

Sanitary regulations: government regulations that restrict or prohibit the importation and marketing of certain animal species, or products thereof, to prevent the introduction or spread of pests or diseases that these animals may be carrying. See also *Phytosanitary regulations.*

Specific rate tariff: A charge levied on imports, defined in terms of a specific amount per unit.

Stabilisation funds (Canada): commodity-specific or multi-commodity funds into which producers and federal and, for some programmes, provincial governments pay premiums for the various Canadian stabilisation programmes and from which payments are made. If one of these funds runs a deficit, the Ministry of Finance may lend money at market interest rates to cover the deficit.

Stabilisation payments: budgetary payments made to compensate farmers for falling farm prices and/or incomes. Stabilisation programmes include insurance or safety nets or *underwriting schemes* intended to compensate farmers for decreases in price, income or cash flow due to disturbances to yields (from drought, for example) or instability in factor and commodity markets.

State Fund for Market Regulation, SFMR (Czech Republic): created in 1992, the main function of the SFMR is the regulation of domestic market prices through the use of intervention purchases and export subsidies. The price-regulating function of the SFMR is complemented by border tariffs. The Council of the SFMR, which is headed by the Minister of Agriculture, decides which products should be subject to regulation and for how long, sets targets for minimum prices, decides on the amount of subsidised exports, and advises on import and export licensing.

State Hydraulics Works, DSI (Turkey): a General Directorate under the Ministry of Energy and Natural Resources DSI is responsible for large-scale irrigation works, hydropower development, flood control, swamp reclamation and water supply to cities over 100 000 inhabitants.

Structural funds (EU): funds intended to facilitate structural adjustment of some sectors and/or some specific regions in the EU. They include the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Guidance Section of *European Agricultural Guidance and Guarantee Fund (EAGGF)* and the Financial Instrument for Fisheries Guidance (FIFG). Assistance is concentrated on six priority objectives (see *Objectives 1, 5a, 5b and 6*). These objectives are implemented through programmes proposed by the appropriate authorities of the member states (National Initiative programmes). The EC also co-finances other programmes on subjects proposed by the EC (Community Initiatives). In 1996, 53 per cent of the structural fund commitments was accounted for by the ERDF, 30 per cent by the ESF, 15 per cent by the EAGGF and 2 per cent by the FIFG. Rural areas mainly benefit from the EAGGF Guidance Section.

Supply control: a wide range of measures designed to affect the level of production or supply, including measures which restrict output directly (such as milk quotas) and those which restrict the use of an input. See also *Acreage Reduction Programs, buy-out schemes, set-aside*.

Supply quotas: limits on acreage, production or marketed quantities of a particular commodity in the context of a supply control programme.

Support and Guarantee Fund for Farmers and Forestry, SGFF (Czech Republic): established in 1994, the main function of the SGFFF is to facilitate access to credits for farmers. The SGFFF provides interest subsidies and acts as a guarantor for loans. All credit projects submitted to the SGFFF are subject to economic evaluation by commercial banks before they are approved. The SGFFF is funded by the state budget but has also another source of funding in the form of a portfolio of shares of food enterprises, which were sold to the Fund at a notional price in the first wave of privatisation.

Support price: see *Administered price*.

Sustainable agriculture: agricultural production that is economically viable and does not degrade the environment over the long run. Definitions differ as to the period over which sustainability is intended to be achieved; whether sustainability should relate only to localised effects on the environment or also to effects on the environment caused by the production of farm inputs; and whether the environment in this context should be defined only to include the physical environment (soil, water, plants and animals), or also the environment created by agriculture, such as landscape amenities.

Switchover (EU): a mechanism in the EU agri-monetary system whereby central rates of the *European Monetary System* currencies were multiplied by a coefficient known as the switchover correction factor, to obtain agricultural central rates following an EMS realignment. This avoided the revaluation of the green rates for the strongest currencies and the reduction in support prices and payments that would otherwise occur, but resulted in increased support prices and payments in all member states. The switchover mechanism was abolished with respect to support prices in February 1995. For a brief period a comparable mechanism applied to CAP-reform related payments (sometimes referred to as "mini-switchover"), but this mechanism was abolished in June 1995.

Target price (EU, Switzerland, United States): in the EU, a price fixed annually by the Council of Ministers for products of standard quality. It is not a guaranteed price but rather serves as a policy guideline. In Switzerland, an administered price from which a price range is derived for most livestock prod-

ucts. Domestic prices are determined by the internal supply/demand situation, within the limits of the range. If prices reach the upper or the lower limit of the range, the Government intervenes by importing or stocking livestock products. In the United States, *target prices* for wheat, corn (maize), sorghum, barley, oats, rice and cotton were abolished with the introduction of the 1996 *FAIR Act*.

Tariff: a tax imposed on imports. A tariff may be either a *specific tariff* (fixed charge per unit of product imported) or an *ad valorem* tariff (a fixed percentage of value). See also *Variable Import Levy*.

Tariffication: the conversion of non-tariff barriers to tariffs that took place in the *Uruguay Round Agreement on Agriculture*.

Tariff quota: a trade restriction involving a lower (in-quota) tariff rate for a specified volume of imports and a higher (over-quota) tariff rate for imports above the concessionary access level. Under the *Uruguay Round Agreement on Agriculture,* most countries have agreed to progressive reductions in the over-quota tariff rates. Some countries have also agreed to lower the in-quota tariff rates and/or raise the concessionary access level.

Tariff-rate quota: a term used interchangeably with the term tariff quota.

Total Support Estimate, TSE: indicator of the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures which support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products. The TSE is the sum of the explicit and implicit gross transfers from consumers of agricultural commodities to agricultural producers net of producer financial contributions (in *MPS* and *CSE*); the gross transfers from taxpayers to agricultural producers (in *PSE*); the gross transfers from taxpayers to general services provided to agriculture (*GSSE*); and the gross transfers from taxpayers to consumers of agricultural commodities (in *CSE*). As the transfers from consumers to producers are included in the *MPS*, the TSE is also the sum of the *PSE*, the *GSSE*, and the transfers from taxpayers to consumers (in *CSE*). The TSE measures the overall cost of agricultural support financed by consumers (transfers from consumers) and taxpayers (transfers from taxpayers) net of import receipts (budget revenues). The percentage TSE is the ratio of the TSE to the GDP. The nomenclature and definitions of this indicator replaced the former Total Transfers in 1999.

Turkish Grain Board, TMO (Turkey): a state-owned enterprise established in 1938 and affiliated with the Ministry of Agriculture and Rural Affairs. The TMO is responsible for support purchases for wheat, coarse grains, poppy seeds and some pulses, to sell these products on domestic markets and, when authorised by the Cabinet, to augment domestic supplies with imports or to export surpluses. It controls the bulk of Turkey's grain storage and handling capacity.

Turkish Sugar Factories Incorporated, TSFAS (Turkey): a state-owned enterprise affiliated with the Ministry of Finance and Customs. The TSFAS is the dominant processor of sugar beet in Turkey and operates as a vertically integrated company contracting with farmers for sugar beet and providing them with most of their inputs, including seed, fertiliser and cultivation services.

Underwriting (Australia): refers to the Commonwealth Government's guarantee of borrowings by the *Australian Wheat Board* (to finance advance payments to wheat producers) and, up to mid-1991, by the Australian Wool Corporation (to finance the reserve price for wool at which the corporation purchases wool for storage and subsequent sale).

Uruguay Round: the eighth round of multilateral trade negotiations conducted within the framework of the *GATT*. Launched in Punta del Este, Uruguay, in 1986 and concluded in December 1993, the final Uruguay Round agreement, signed in Marrakech in April 1994, embraces 110 participating countries ("contracting partners") and came into effect in 1995. It is being implemented over the period to 2000 (2004 for developing countries).

Uruguay Round Agreement on Agriculture, URAA: the terms of the URAA are contained in the section entitled the "Agreement on Agriculture" of the Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. This text contains commitments in the areas of *market access*, domestic support (see *AMS*), *export subsidies*, and general provisions concerning monitoring and continuation. In addition, each country's schedule is an integral part of its contractual commitment under the URAA. There is a separate agreement entitled the Agreement on the Application of Sanitary and Phytosanitary Mea-

sures. This agreement seeks to establish a multilateral framework of rules and disciplines to guide the adoption, development and enforcement of sanitary and phytosanitary measures in order to minimise their negative effects on trade. See also *Phytosanitary regulations* and *Sanitary regulations.*

Variable import levy: a charge levied on imports that raises their price to a level at least as high as the domestic price. Such levies are adjusted frequently (hence "variable") in response to changes in world prices and are imposed to defend *administered prices* that are set above world market prices. The *Uruguay Round* agreement, resulted in the replacement of variable levies by tariffs.

Visegrad countries: the countries that entered into an agreement to co-ordinate their policies with a view to apply for EU membership. The Visegrad countries are Poland, Hungary, the Czech Republic and the Slovak Republic.

Voluntary export restraint arrangement, VER: an arrangement in which suppliers undertake to limit to predetermined levels their exports of a particular product to an importing country. A VER is usually *negotiated bilaterally between the importing country and its supplier.*

Voluntarily marketed rice (Japan): a private system of rice marketing established in 1969. Under the system, producers sell their production to wholesalers registered by the Government without involving public buying and selling operations. Although privately operated, the voluntary marketing system receives government subsidies for its operations. A new tendering procedure for rice marketed under this system was introduced in 1990, and reinforced in 1995 and in 1998, to improve transmission of price signals to producers.

Western Grain Transportation Act, WGTA (Canada): legislation under which a transport subsidy, informally called the “Crow” benefit or “Crow” subsidy, was provided by the Federal Government to assist the rail transportation of specified grains and grain products to specified destinations within Canada for export. Since the producer paid only a portion of the freight rate, the WGTA had the effect of increasing the prices received by grain producers and paid by livestock producers on the prairies. The Act was abolished as a result of the 1995 federal budget.

Wetlands Reserve Program, WRP (United States): a programme authorised by the Food, Agriculture, Conservation and Trade Act of 1990 under which participants implement an approved wetland restoration and protection plan in return for direct payment. Payment is received annually over five to twenty years or as a lump sum when land is enrolled on a permanent basis. The 1996 *FAIR Act* the maximum WRP area at 975 000 acres (127 550 hectares).

****World price:*** see *Reference price*.

World Trade Organisation, WTO: see *GATT.*

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