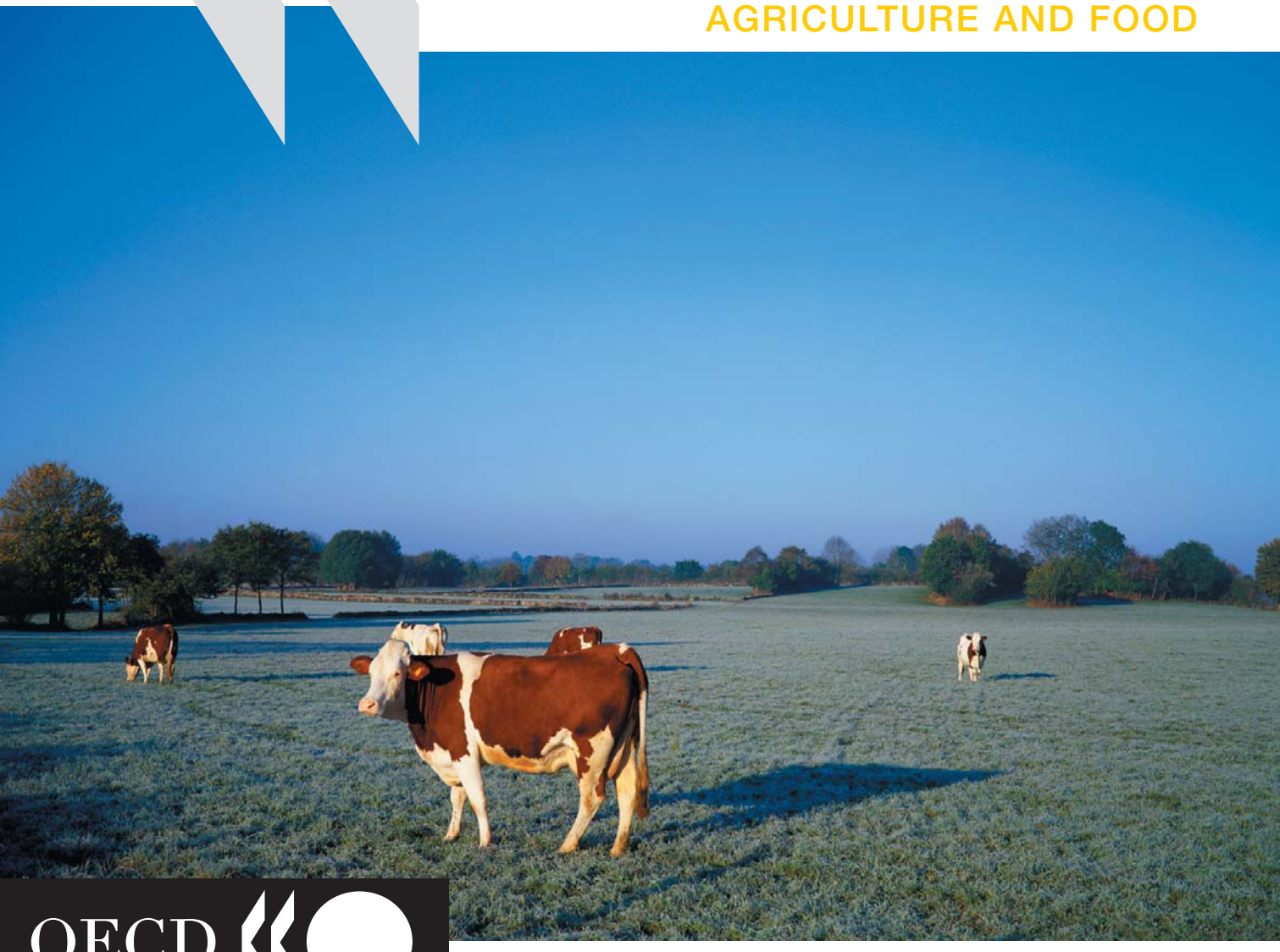
Agricultural Policies in OECD Countries

MONITORING AND EVALUATION

AGRICULTURE AND FOOD



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- 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.

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FOREWORD

This is the 14th publication in a series on agricultural and related trade policies in OECD countries, following the request by the OECD Council at Ministerial level to monitor annually the implementation of the principles for agricultural policy reform adopted in 1987. In 1998, OECD Agriculture Ministers agreed to a set of shared goals for the agro-food sector and operational criteria for policy instruments, which also serve as a reference for this evaluation. The Secretariat has used a comprehensive system for classifying support to agriculture in order to measure and provide insight into the nature of increasingly complex policy measures.

This year's report consists of two parts. Part I provides a description and an assessment of policy developments and agricultural support in Member countries against a background of the main macroeconomic and agricultural market developments. It also describes developments in selected policy areas affecting the agro-food sector. Part II presents detailed information on policy developments in individual Member countries (and for the member States of the European Union), and describes the method used to estimate support to agriculture. It also contains the support estimates and other background information referred to in Part I.

The OECD's Committee for Agriculture and its Trade Committee approved the publication of Part I of the report; Part II is published under the responsibility of the Secretary-General of the OECD.

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EXECUTIVE SUMMARY

Following two years of increase, support to OECD agricultural producers decreased in 2000 to the 1998 level. The decrease in support and protection in 2000 was a positive development but, like changes in previous years, reflected international price and exchange rate movements rather than major agricultural policy changes. There were no major policy reform initiatives and differences in the level of support among OECD countries widened. Despite some shift away from market price support and output payments, these continue to be the dominant forms of support in most countries, insulating farmers from world market signals and distorting global production and trade. In some countries, *ad hoc* measures were again applied to support farm incomes. Food safety issues dominated the policy agenda in many countries. Overall, progress towards further policy reform agreed to by OECD Ministers has been insufficient and remains fragile.

Support to producers decreased for the* OECD *as a whole. Support to producers as a share of total farm receipts (%PSE) decreased to 34% from 37% in 1999 and compares with 39% in 1986-88, and accounted for about three-quarters of total support to agriculture (TSE), with the remainder going to general services (*e.g.* inspection, research and marketing). Total support to agriculture amounted to USD 327 billion (euro 354 billion), or 1.3% of GDP, in 2000.

Reduction in support was mainly due to a narrowing of the domestic and world price gap. The decline in support was mainly due to a reduction in market price support as a result of world market prices increasing more (11%) than domestic support prices (5%). No major reform programmes were introduced in 2000, but previously announced reform programmes continued to be implemented. However, some countries again granted payments specifically to compensate producers for low market prices.

Most producer support continues to be provided through market price support and output payments. The share of market price support and output payments decreased from 82% of support to producers in 1986-88 to 72% in 2000. These forms of support continue to insulate farmers from world markets and to impose a burden on consumers. They also have the greatest impact on production and trade, both for OECD and non-OECD countries.

Border protection was reduced. The import tax or export subsidy, as measured by prices received by producers relative to world market prices, decreased. In 2000, prices received by OECD farmers were on average 38% above world prices, compared with 51% in 1999 and 61% in 1968-88.

Input subsidies decreased and payments based on income increased. Input subsidies, which account for 8% of support to producers and include water subsidies, interest concessions and tax rebates, decreased in 2000. Payments based on income, such as income safety net programmes, showed the largest relative increase but remain minor, accounting for only 1% of support. Although small, these changes move in the direction of the reform objectives to reduce production and trade distortions.

More receipts earned from the market. Gross farm receipts were still on average 52% higher in 2000 than they would have been without any support, compared with 63% in 1986-88. Although this average indicates that agricultural production is moving in the direction of greater market orientation it nevertheless hides significant variations between countries and commodities.

Increasing divergence in support and protection levels across* OECD *countries. Support and protection levels remain very low in New Zealand (below 1% PSE) and Australia (6% PSE), and very high in Iceland, Japan, Norway, Switzerland and Korea (over 60% PSE). Among these latter countries, there has been

some shift away from market price and output-linked support in Iceland, Norway and Switzerland. The PSEs in the European Union accession countries, Czech Republic, Hungary, Poland, Slovak Republic and Turkey, are under 20%, compared with 38% in the European Union. The PSE for Mexico, Canada and the United States is around 20%. Since 1986-88, the gap between countries with the highest and lowest levels of support has increased.

Wide variation in support levels across commodities. OECD support decreased for almost all commodities and the average support levels for most commodities are below the 1986-88 averages, but support across commodities varies widely. The average %PSE was greater than 80% for rice, between 40% and 50% for sugar, milk, coarse grains, wheat and sheepmeat, between 15% and 35% for poultry, pigmeat, oilseeds, beef and maize, and less than 10% for eggs and wool. Support to sugar, milk and rice continue to be provided almost entirely through market price support measures.

Continuing attention to environmental issues. OECD countries have increasingly made support payments on condition that farmers meet certain environment conditions and have been introducing a wide range of measures to reduce environmental damage or enhance environmental benefits from agriculture. In some countries, these measures involve incentives for research, training and co-operative actions and market-based approaches. In other countries, payments are made to farmers who limit the use of inputs, including for environmental purposes. These payments accounted for less than 3% of support to producers in 2000. However, as long as environmental payments are in addition to production-linked measures that are a source of environmental damage, the costs for improving environmental quality are higher.

Food safety was a priority for policy. Many OECD countries responded to food safety concerns with tougher regulations and/or stricter enforcement procedures. A number of emergency measures were introduced within the European Union to contain the spread of Bovine Spongiform Encephalopathy (BSE). Institutional structures and regulatory frameworks are being re-oriented towards increased traceability and transparency. At the international level, consultation and co-ordination on a number of food safety issues has increased.

Greater emphasis on consumer choice and information. Many OECD countries responded to consumer demands for more information on production methods, origin and content of foods. In this regard, new labelling regulations and guidelines were introduced in a number of countries.

More regulation of biotechnology. In most OECD countries, GM foods and feed are approved on a case-by-case basis. Many countries have introduced GM labelling regulations with a continued debate over the appropriate use of mandatory versus voluntary approaches. Increased consultation and co-ordination at the international level would help to increase consumer confidence and facilitate trade.

Greater efforts to reform policy reform are needed. OECD Ministers have agreed to a progressive and concerted reduction of agricultural support. Support across many countries and commodities remains high, and the most distortive forms of support continue to dominate. The Uruguay Round Agreement on Agriculture has been a major driving force for policy reform and OECD countries will continue to abide by their commitments after 2000. As no further reduction commitments are scheduled for most OECD countries, the current agricultural negotiations in the WTO should provide the impetus for further reform to address a wide range of domestic and international goals. Mutually supportive trade and domestic policies to address these goals through innovative market-based and better targeted measures, and greater coherence among policies, would help to achieve desired outcomes with less distortions to agricultural production, consumption and trade.

Part 1

MONITORING AND EVALUATION

MONITORING AND EVALUATION

1. ECONOMIC AND AGRICULTURAL MARKET BACKGROUND

The macroeconomic environment

Economic growth averaged over 4% in the OECD area in 2000. This was the fastest rate of growth in more than a decade and was up by more than one percentage point compared to an already strong pace of economic activity in 1999 (Table I.1). Nearly every OECD country posted higher growth rates, with growth particularly strong in all three North American Free Trade Agreement (NAFTA) countries – **Canada**, **Mexico** and the **United States**. Economic expansion in **European Union** countries was buoyed by strong domestic demand, reinforced by continued strength in exports due, in part, to a significant reduction in the euro/USD exchange rate. The **Japanese** economy recovered, but remained sluggish with output growing by less than 2%. **Korea** registered a GDP increase of nearly 9%, following an 11% increase the previous year.

Table I.1. **Macro-economic indicators for OECD countries**

	Real GDP % change		Inflation[1] % change		Unemployment Percentage of labour force		Interest rates[2] Percentage	
	1999	2000	1999	2000	1999	2000	1999	2000
United States	4.2	5.2	1.5	2.1	4.2	4.0	5.4	6.5
Canada	4.5	4.8	1.6	3.3	7.6	6.7	4.9	5.7
Mexico	3.7	7.0	15.9	10.1	2.6	2.4	22.4	16.0
European Union	2.4	3.4	1.5	1.4	9.1	8.2	3.1	4.4
Japan	0.2	1.9	–0.9	–1.5	4.7	4.7	0.2	0.2
Korea	10.7	8.9	–1.6	–0.9	6.3	4.0	6.8	7.2
Australia	4.7	4.2	1.0	3.4	7.2	6.6	5.0	6.2
New Zealand	3.7	3.6	0.1	2.2	6.8	6.1	4.8	6.5
OECD	3.0	4.3	2.5	2.6	6.7	6.2		

1. GDP deflator.
2. United States: 3-month eurodollars; Japan: 3-month CDs; euro area: 3-month interbank rates.
Source: OECD *Economic Outlook*, December 2000.

Economic growth in the non-OECD area was even higher than in the OECD area (Table I.2). China, along with many other emerging economies in Asia, recorded sharp rises in output and the economies of South America also grew strongly despite some problems in Argentina, Venezuela and Peru. In Russia, the growth rate doubled to 6.5%.

In many countries around the world, growth peaked in the first half of 2000 and during the second half a combination of higher oil prices and higher interest rates resulted in a dramatic reduction in the rate of economic expansion. This was especially so for the **United States**. This slowdown was at first heralded as a welcome development in easing inflationary pressures, but by the end of the year was leading many observers to predict an economic recession in the United States in 2001.

Table I.2. **Macro-economic indicators for selected non-OECD countries**

	Real GDP % change		Inflation[1] % change	
	1999	2000	1999	2000
Brazil	0.8	3.5	4.3	7.9
China	7.1	8.0	–1.3	0.4
Indonesia	0.0	3.7	20.0	2.6
Russia	3.2	6.5	36.7	22.0
Non-OECD area	3.8	5.4		
World	3.3	4.7		

1. Annual percentage change in the consumer price index.
Source: OECD *Economic Outlook*, December 2000.

Crude oil import prices rose by over 60% in 2000 and have more than doubled since 1998 to levels not witnessed since the oil crisis of the early 1980's. The recent price rise is seen as less of a problem than previously because the oil intensity of economic activity in the OECD region has decreased. Indeed, despite higher oil prices, the rate of inflation in consumer prices across OECD countries rose only fractionally, mainly due to a 0.5 percentage point increase in the **United States**. Although higher energy prices did not have dramatic effects for the economy as a whole, they did trigger increases in farm costs for fuel, nitrogen fertilisers and electricity at a time when farm revenues were under pressure in many countries.

The unemployment rate for the OECD region as whole fell by 0.5 percentage points in 2000, reflecting decreases in all but two countries (**Poland** and the **Czech Republic**). Although unemployment rates in **European Union** countries are, on average, significantly above those in many other OECD countries, they fell in 2000 by nearly a full percentage point, continuing a downward trend underway since 1996. Economy-wide trends in employment are important to agriculture because of the growing contribution of off-farm employment to farm household earnings and its influence on structural adjustment in agriculture.

International agricultural markets

Although the level of international trade in agricultural products is growing, with trade in processed products increasing relative to basic commodities, the importance of agriculture in total trade has decreased since the mid-1980s (Annex Table I.1). Exports of primary and processed agricultural commodities account for less than 7% of total OECD merchandise exports today compared to over 9% in 1986-88. Agricultural exports remain very important for some OECD countries, notably **Australia**, **Hungary**, **New Zealand** and **Turkey**, but are less significant for others. In **Iceland**, **Japan** and **Norway**, less than 1% of total exports are derived from the agro-food sector. The share of agricultural products in total imports has also declined but is relatively more important for **Japan** and many countries in Europe than for other OECD countries.

In response to the stronger global economy and lower stock levels, international market prices for agricultural commodities, expressed in USD, increased during 2000.[1] For many products, this was the first price rise since the mid-1990s and reversed a steady downward trend. For example, world cereal and butter prices remain 50% and 40% lower respectively than in 1995. Per capita food consumption levels in most OECD economies are already near saturation levels. With relatively slow population growth in OECD countries, changes in international commodity prices are mainly determined by demand in non-OECD countries and by global supply. The economic slowdown in Far East Asia and Russia and an increase in world production of major agricultural commodities have been the main factors responsible for lower world prices in recent years.

International agricultural markets continue to be affected by changes in agricultural policies over both the short and long term. In the short term, support provided to farmers in some OECD countries, such as **Canada** and the **United States,** in response to falling prices have retained more resources, and encouraged more investment in production than might have been expected during a period of low market prices. For example, in the United States, where emergency payments have been provided to cereal and oilseed farmers over the past three years, soyabean output has increased by almost 20% over that period despite a one-third reduction in world prices. As a consequence of these and other policies in many OECD countries that insulate producers from the market, supply does not fully adjust to the changes signalled by falling prices, thus contributing to market imbalances. Over the longer term, markets are slowly changing as a result of agricultural trade liberalisation. For example, the historical division between the Pacific and Atlantic beef markets created by trade barriers is diminishing as a result of World Trade Organisation (WTO) requirements, with both the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) Agreement and the Uruguay Round Agreement on Agriculture (URAA) commitments contributing to this development.

Structural developments

Total economic output has grown faster than agricultural output throughout the OECD. As a result, the contribution of agriculture and the food-processing industry to GDP has declined (Annex Table I.1). Agriculture's contribution to GDP is under 4% for most OECD countries, but ranges from 14% in **Turkey** to 1% in **Switzerland**. Employment has followed a similar pattern. The share of agricultural employment in total civilian employment is now less than 7% in most OECD countries, although agriculture remains a very significant employer in **Korea, Mexico, Poland** and **Turkey**.

Since the mid-1980s, the real value of agricultural output has varied among OECD countries, rising significantly in some but falling in others, mainly in European and Asian countries (Annex Table I.2). However, since the early 1970s most OECD countries have experienced a decline in the real value of agricultural output. Developments in real net farm incomes since the mid-1980s also reveal differences between OECD countries, with changes in farm incomes in general being less than changes in production. While lower world prices since 1995 have reduced farm revenue derived from the market, changes in farm incomes also reflect changes in macro-economic conditions (in particular, interest and exchange rates), farm costs and support levels. In general, farm incomes are expected to have risen in 2000 compared to 1999, but with wide differences across countries and sectors.

In contrast to its relatively low share in GDP or employment, the agricultural sector is important in terms of the use of some resources, accounting for nearly 40% of the OECD total land area and over 40% of water usage. For the majority of OECD countries, agriculture occupies more than half the total land area. Over the past ten years, the total OECD area of agricultural land use has fallen by only 1%. This largely reflects an increase in the agricultural land base in **Mexico** and **Turkey** which has been offset by a decrease in the **European Union, Japan, Korea, Switzerland** and the **United States**.

The number of farms has fallen over the last decade in all OECD countries, with decreases ranging from 10% to 30%. This has lead to a corresponding increase in farm size through the amalgamation of farm holdings. Farmers are leaving at a faster rate than new farmers are entering the sector, and there are very few countries where the majority of new farmers are less than 35 years old. However, higher levels of agricultural production in the OECD are being achieved on less land and with less labour. This increase in labour productivity is the result of larger farming operations, technological developments and greater or more efficient use of capital equipment (including information technology) and inputs such as fertilisers and pesticides.

Changes have also occurred in the pattern of agricultural land use (Annex Table I.3). While the quantity and proportion of agricultural land in pasture production has remained fairly static over the past 15 years, there has been considerable variation between countries. Some countries, including **Ireland** and **Korea**, have seen a significant reduction in pasture area while others, notably **Denmark**, have seen a marked increase.

Within OECD countries, the share of primary production in consumer food expenditure continues to decline. At the same time, consumption patterns are changing, with consumers purchasing a greater variety of processed and prepared products. Agricultural markets are also being increasingly influenced by consumer concerns over issues such as the environment, biotechnology, and human and animal health. Demand for organic agricultural products has grown strongly during the 1990s but remains a small proportion of total consumption. The launch in Tokyo in May 2000 of a futures market in non-genetically modified (GM) soyabeans has provided some indication of the strength of consumer preference for non-GM products. Between May and August 2000, non-GM soyabeans obtained a price premium of about 7%, or USD 15 per tonne. The latest BSE crisis has seen beef consumption fall in some **European Union** member states by 50% or more. It is too early to tell whether measures taken by the European Commission and Member states will reassure consumers and limit the longer term impact on the beef market.

It is clear that the structure of the agricultural sector in many OECD countries has changed significantly since the mid-1980s. Consumption has diversified, production has intensified and the agro-food industry is more integrated. These changes are likely to have important implications for the effectiveness and appropriateness of existing and proposed policy measures as governments confront a wider range of agricultural related issues.

2. MAIN POLICY DEVELOPMENTS IN 2000

This section highlights the major changes or new initiatives that occurred in agricultural policy during 2000 in OECD countries. No major policy reform programmes were announced, although it was the first year of implementation for **European Union** Agenda 2000 measures. Food safety issues occupied the attention of policy-makers in many countries and other new measures were often introduced in response to emergency situations or one-off events that affected the agricultural sector. Not all the policy developments described here provide support to agricultural producers. Some, for example, relate to the administration of policies, while others refer to new laws and regulations that can increase producers' costs. Many countries are examining which policy measures, institutions and approaches can best address public concerns relating to food safety, environmental protection and animal welfare in the context of ongoing structural changes in the agro-food sector and multilateral agricultural trade commitments.

Developments in domestic policy

New multi-year policy programmes introduced

In 2000, a number of OECD countries, including several **European Union** member states (within the EU 2000-06 Community Support Framework) and **Japan**, established multi-year plans covering the whole agricultural sector and a range of support measures. These plans varied in detail from setting out policy objectives to providing annual budgetary expenditure. However, none of these plans propose long-term reductions in support measures. Rather, they focus on issues such as structural change, rural development, environmental quality or increasing production. Of particular note is the Japanese programme developed to achieve a number of goals, including the higher food self-sufficiency target level of 45% by 2010, compared with 40% in 1998, announced by the Japanese Government in early 2000. This programme covers the five-year period JFY 2000-2004 and brings together all existing and new policy measures into one work programme. **Australia** expanded its Agriculture-Advancing Australia package of support measures and set out budgetary expenditure levels for the next four years.

Support prices rose for commodities in some OECD *countries but fell in others*

No new policies were introduced to lower or phase out support prices over a planned period. However, there were a number of policy decisions made on support prices, with changes varying between countries rather than between commodities. For instance, in nominal terms support prices increased for almost all supported products in **Hungary**, **Iceland**, **Korea**, **Mexico**, **Poland** and **Turkey**. Support prices in **Hungary** and **Poland** were extended to cover several new commodities and were also increased for dairy products in **Canada**, for sugar in **Japan**, and for oats and barley in the **United States**. Decisions were made to lower support prices for most commodities in **Japan** and **Norway** for 2000, with greater reductions in the latter. As part of the EU Agenda 2000 and Swiss AP2002 programmes, support prices were reduced for cereals and beef in the **European Union** and for the few cereal crops still supported by guaranteed prices in **Switzerland**. **European Union** cereal and beef producers were compensated to some extent for lower support prices by increased area and headage payments.

Modifications to programmes to achieve structural change

Changes were made to various support programmes with the intention of facilitating some structural change in the agricultural industry. Payments for extensive livestock breeding on permanent

pastures increased in the **Czech Republic**, while **Norway** changed area and headage payment rates to reduce the bias in favour of small farms in more remote regions. The new rural development policy introduced in the **European Union** as part of Agenda 2000 includes funding for training, early-retirement, investment in agricultural buildings and assistance to young farmers. Measures to encourage the early retirement of farmers and/or assist the entry of new farmers were introduced in **Iceland** where the government will purchase sheep production entitlements from farmers who wish to retire and reissue them to active farmers.

More changes in the dairy sector

Among commodities, the most important new policy developments took place in the dairy sector This is not surprising given the greater level of support that already exists in this sector. Of most significance was the removal of regulations governing the marketing and pricing of milk in **Australia** (Box II.1 provides further details). Changes were also made to **Canadian** milk marketing regulations in response to a WTO ruling rather than as part of a domestic reform programme. Trading in milk quotas was deregulated in **Sweden** and improvements were made to improve the efficiency of the quota transfer system in **Portugal**. However, the dairy reform programme in the **United States** was postponed for another year and agreement could not be reached among industry participants on changes to the structure of the **New Zealand** Dairy Board. As part of Agenda 2000, reform of the **European Union** dairy sector is delayed until a mid-term review is completed.

New tax and interest concessions granted

During 2000, a number of countries introduced new taxation or interest concessions or changed existing provisions to assist agricultural producers. Taxation concessions were introduced in **Norway** and **Germany** to offset reductions in other support measures, in **Spain** to offset fuel price rises and in **France** to reduce farmer's expenses. New interest subsidies have been provided to **United States'** apple and seed producers and for storage facilities. Changes were made to modify the procedures for allocating concessional credit facilities available to producers in **Switzerland**.

Some significant measures in response to falling farmer incomes…

Several countries introduced, or extended, programmes to support farmers whose incomes fell as a result of lower market returns. The most notable was the decision to provide, for a third year in a row, assistance to **United States** farmers. In 2000, United States farmers will receive over USD 5.5 billion to compensate for market losses, with assistance extended to cover a wider variety of crops than in the two previous years. **Canada** introduced a new three-year safety-net programme to complement existing farm income support measures. Using existing support structures, the **United Kingdom** has implemented a new two-year programme to compensate farmers for income losses resulting from GBP/euro exchange rate movements.

… and in response to emergencies

A large number of policy measures were introduced in 2000 in response to natural disasters or emergency animal, plant and human health concerns. The most significant of these related to the increased incidence of BSE in some **European Union** countries. The European Union has responded by introducing labelling and traceability requirements and new regulations governing ingredients in animal feed. It has withdrawn specified risk material from the market and will pay compensation for the destruction of animals to stabilise the beef market. Some non-EU OECD countries have responded with either the introduction of similar animal feed regulations and/or import restrictions on cattle and beef from the European Union. Following the outbreak of foot-and-mouth disease in a number of European Union countries in early 2001, emergency measures were implemented both at the EU and Member state levels. In addition, many OECD countries temporarily banned the import of animal and animal products from the EU. Other countries implementing measures in response to emergencies included

Australia (plant disease, pest and floods), the **Czech Republic** (drought), **Ireland** (fire in processing facilities), **Italy** (avian flu and floods), **Korea** (foot and mouth), **New Zealand** (pests of honeybees), **Portugal** (drought) and **Sweden** (wet conditions). Governments used a variety of measures to support farmers in response to such emergencies. These ranged from direct payments, insurance subsidies, and interest and tax concessions to counselling advice, surveillance and eradication programmes.

New agri-environmental policies introduced

Following a trend observed in recent years, OECD countries introduced a number of new agri-environmental policy measures in 2000. As part of the Agenda 2000 rural development policy, **European Union** farmers must now meet environmental standards set by each member state in order to receive funding under certain programmes. In general, other new policies focused on either improving water quality (including those to reduce fertiliser and pesticide use) or promoting organic agriculture. Major long-term programmes to improve water quality, incorporating a variety of policy instruments, were introduced in **Australia**, **Denmark** and the **Netherlands**. New policy initiatives to promote organic agriculture were introduced in the **Czech Republic**, **Italy**, **Korea**, the **Netherlands**, the **United Kingdom** and the **United States**. Measures to support organic agriculture include subsidies on organic fertiliser, tax incentives, direct payments and marketing promotion, with several countries introducing comprehensive labelling requirements for organic produce. Other new measures include a programme to support the environmental benefits of farming in hilly and mountainous regions in **Japan**. **Germany** introduced a subsidy on alternative fuels produced using agricultural production and the **United States** decided to continue providing such support. As an indication of the emphasis being placed on the link between agriculture and the environment, the **Austrian** Ministries of Agriculture and Environment were merged to form the Federal Ministry of Agriculture, Forestry, Environment and Water Management.

Attempts to streamline the provision of support

A few OECD countries introduced administrative changes to improve the efficiency of the programmes and support measures they provide to agricultural producers. The **European Union** simplified its system for managing the distribution of structural funds and adopted a regulation to harmonise the promotion of agricultural products in the European Union market. **Norway** has amalgamated various agencies into a single organisation to streamline the delivery of agricultural policy and support measures.

High priority to food safety issues

Many food safety policy measures, which affect farmers, processors, retailers and consumers, have been introduced in recent years. This trend continued with food safety issues prominent on the policy agenda in 2000. The **European Union** agreed to establish a European Food Authority to oversee food safety issues. Both **Canada** and **New Zealand** have taken steps to introduce risk management strategies in the processing sector, with Canada providing funding to assist the industry develop such strategies and New Zealand making this a mandatory requirement for all processors of meat, fish and other animal products. **Hungary** has increased aid to assist the food industry to meet European Union quality and food safety requirements. As a sign of changing policy priorities within the agricultural sector, the **German** agricultural ministry was renamed the Ministry of Consumer Protection, Food and Agriculture. Part I.4 contains a detailed discussion of recent trends in food safety issues and policy responses.

Increase in food labelling requirements

A number of OECD countries, including the **European Union**, **Japan**, **Korea** and **Switzerland**, have introduced GM labelling requirements. The **European Union** has also agreed to new labelling requirements for beef and beef products, with mandatory implementation in 2002. **Switzerland** introduced new labelling requirements for imported fresh meat and eggs produced using methods not permitted for domestic products.

Few changes in competition policy

There were few developments in the area of competition policy. Following separate reviews of the structure of their wool industries, both **Australia** and **New Zealand** growers voted for further deregulation measures in 2000. A review of the Australian Wheat Board was also carried out but policy decisions will be made in 2001. Attempts to improve competition post-farm-gate were introduced in **Canada** and **Korea**, with reforms in the grain handling and transportation sector and the wholesale marketing systems respectively.

Developments in trade policy

The most significant agricultural trade policy development in 2000 was the resumption of negotiations in the WTO. There were few other major developments, however, with countries continuing to adjust trade measures in line with their URAA commitments. For most OECD countries, this was the final year of implementation of their URAA reduction commitments. This means that further multilateral reductions in tariffs, export subsidies and domestic support will be limited until the agricultural negotiations are completed. Nevertheless, some agricultural trade was liberalised in the context of bilateral or regional trade agreements, or through unilateral decisions. In this regard, there were initiatives to lower tariff barriers for least developed countries in recognition of the need to provide better market access for these countries. **New Zealand** announced that duty free-access will apply to all products from least developed countries from July 2001. In early 2001, the **European Union** adopted a proposal to provide across-the-board duty-free access for all non-military products from least developed countries.

Expansion of import access

Reductions in tariffs, and expansions in tariff-rate quota (TRQ) access, continued in line with countries' URAA commitments, although **Poland** and **Turkey** increased tariffs on processed grains and milk respectively within their commitment levels. The most significant URAA implementation development occurred in **Korea**, where the quantitative restriction on beef imports was removed on 1 January 2001 and replaced by a tariff-only regime, with a tariff rate of around 40%. **Japan** is the only OECD country to have notified the use of the URAA special agricultural safeguard in 2000. This led to higher tariffs on imports of peas, wheat flour, evaporated milk and inulin. The pattern of TRQ fill that has developed since URAA implementation began in 1995, which has seen a simple average fill rate of only 65% and considerable variation between countries and commodities, is expected to have continued. **Poland** is the only OECD country to have adjusted TRQ administration procedures during 2000. In response to a WTO dispute ruling, the **European Union** has amended its banana import regime. Following a period of expanding tariff-quotas, a tariff-only system will enter into force on 1 January 2006. The common customs tariff rate to be applied will be determined by negotiations between the European Union and banana suppliers.

Decrease in export subsidies

The total value of export subsidies on agricultural products decreased in 2000, mainly due to a fall in the value of **European Union** export subsidies, and are expected to be below the annual URAA commitment levels. European Union export subsidies are estimated at USD 4.2 billion, a decline of 6% compared with 1999 expenditure. This decrease resulted from lower intervention prices and a lower value of the euro against the USD. In the **United States,** export subsidies under the Export Enhancement Program (EEP) increased by 17% to USD 1.6 million, but export subsidies under the Dairy Export Incentive Program (DEIP) decreased by 46% to USD 79 million. **Hungarian** export subsidies remained at the same level as in 1999. There were no policy changes or new initiatives in the area of export credits.

Some new bilateral trade agreements

A number of bilateral trade agreements either came into force or negotiations were completed with implementation in the near future. Some agreements only covered agricultural trade while others were much broader. The **European Union** was a partner in a number of these agreements which generally excluded "sensitive" agricultural products. The free trade agreement between the **European Union** and **Mexico,** and between Israel and **Mexico** came into force in 2000. Negotiations continued between the European Union and a number of Central and Eastern European countries in the context of European Union enlargement. Seven bilateral agreements between **Switzerland** and the **European Union**, one of which concerns agriculture, were scheduled to come into effect in January 2001 but implementation has been delayed. A preferential trade agreement between **Poland** and **Turkey** came into force. A comprehensive economic partnership agreement between **New Zealand** and Singapore was signed and came into force in January 2001. The **United States** and Jordan completed negotiation of a free trade agreement in October 2000, although it has not yet come into force. Developments in WTO and NAFTA trade disputes involving agricultural products are described in the background report.

3. EVALUATION OF POLICY DEVELOPMENTS

Since 1987 agricultural policy developments have been monitored and evaluated by the OECD. This chapter evaluates policy developments in 2000 in the light of the principles for agricultural policy reform (Box I.1) adopted by OECD Agriculture Ministers. In order to place these policy developments in

Box I.1. **Policy principles**

OECD Agriculture Ministers in 1998 adopted a set of policy principles, building on the agricultural policy reform principles agreed by OECD Ministers in 1987. These principles stress the need to:*

- pursue agricultural policy reform in accordance with 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;
- address the problem of additional trade barriers, emerging trade issues and discipline on export restrictions and export credits;
- strengthen world food security;
- promote innovative policies that facilitate responsiveness to market conditions by agricultural producers;
- facilitate improvement in the structures of the agriculture and agro-food sectors;
- enhance the contribution of the agro-food sector to the viability of the rural economy;
- take actions to ensure the protection of the environment and sustainable management of natural resources in agriculture;
- take account of consumer concerns;
- encourage increased innovation, economic efficiency, and sustainability of agro-food systems;
- preserve and strengthen the multifunctional role of agriculture.

* *The full text from the relevant Ministerial Communiqués can be found in Part II.3.*

Box I.2. **Operational criteria**

OECD Agriculture Ministers in 1998 agreed that policy measures should seek to meet a number of operational criteria, to apply in both the domestic and the international contexts, which 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.

* *The relevant text from Ministerial Communiqués can be found in Part II.3.*

perspective, they are also evaluated within the longer-term context from 1986-88. Agricultural policies must often respond to a wider set of goals, against a background of a more integrated global economy and in ways that are compatible with commitments under the URAA. Ministers stressed the need for a progressive reduction of agricultural support and recognised 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 OECD countries. The operational criteria that should apply in designing and implementing policy measures are given in Box I.2.

The Producer Support Estimate (PSE) and related indicators (Box I.3) are the principal tools to monitor and evaluate agricultural policy developments in the light of the agricultural policy reform principles. The levels and trends of three main indicators are used to evaluate the progress of policy reform towards the market orientation of agriculture. These are: the %PSE which measures **support to**

Box I.3. **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 that support agriculture, regardless of their nature, objectives or impacts on farm production or income. The overall PSE monetary value depends on the size and structure of a country's agricultural sector, as well as on the monetary unit used. Support (PSE) expressed in relation to the number of farmers or area of farmland is influenced by differences among countries in factor endowment and the number, type, and size of farm holdings. By contrast, support expressed as a percentage of gross farm receipts (%PSE) shows the amount of support to farmers, irrespective of the sectoral structure of a given country. For this reason, the %PSE is the most widely used indicator for comparisons of support across countries, commodities and time.

***Producer* Nominal Protection Coefficient (NPC*p*):** an indicator of the nominal rate of protection for producers measuring the ratio between the average price received by producers (at farm gate), including payments per tonne of current output, and the border price (measured at farm gate level).

***Producer* Nominal Assistance Coefficient (NAC*p*):** an indicator of the nominal rate of assistance to producers measuring the ratio between the value of gross farm receipts including support and gross farm receipts valued at world market prices without support.

***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 instruments that support agriculture, regardless of their nature, objectives or impacts on consumption of farm products. If negative, the CSE measures the implicit burden placed on consumers by agricultural policies, from higher prices and consumer charges or subsidies that lower prices to consumers. The %CSE measures the implicit tax (or subsidy, if CSE is positive) on consumers due to agricultural policy as a share of expenditure at the farm gate.

***Consumer* Nominal Protection Coefficient (NPC*c*):** an indicator of the nominal rate of protection for consumers measuring the ratio between the average price paid by consumers (at farm gate) and the border price (measured at farm gate level).

***Consumer* Nominal Assistance Coefficient (NAC*c*):** an indicator of the nominal rate of assistance to consumers measuring the ratio between the value of consumption expenditure on agricultural commodities domestically produced including support to producers and that valued at world market prices without support to consumers.

***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. When expressed as a percentage of TSE (the %GSSE), it gives an indication of the importance of support to general services provided to agriculture, such as research, marketing and promotion, and infrastructure, in the total support to agriculture (TSE).

Box I.3. **Definitions of the OECD indicators of support** (*cont.*)

***Total Support Estimate* (TSE):** an indicator of the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products. When expressed as a percentage of GDP (the %TSE), it gives an indication of the burden this overall support represents for the economy.

* A *detailed description of the methodology for calculating the indicators of support and on their interpretation is contained in* Part II.4.

producers as a share of farm receipts and provides data on the policy mix or **composition of support**; the Nominal Protection Coefficients which measures **market protection** as the ratio between the average price received by producers and the border price; and the Nominal Assistance Coefficients which measures **market orientation** in terms of the ratio between actual farm receipts and farm receipts that would be generated at world prices. Part 2 contains the statistical tables on which the evaluation is based and a full explanation of these concepts and elaborates on the methodology, interpretation and use of these indicators in policy evaluation.

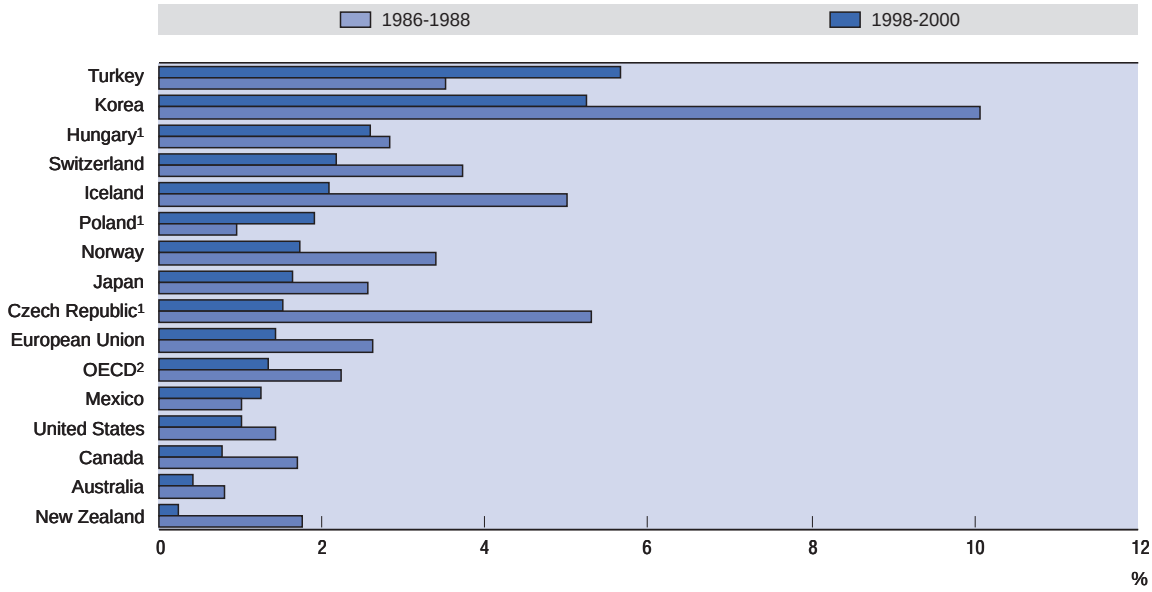
Overview

Policy developments in OECD countries play an important role in the evolution of world markets. There has been some progress in agricultural policy reform since the mid-1980s (as previous editions of this report have noted). To some extent this has been underpinned since 1995 by the implementation of the URAA. That trend was reversed in 1998 and 1999 and further domestic and trade policy reform is a necessary step to better integrate domestic and world agricultural markets, with prices determined more by market forces and less by government intervention. Agricultural policies in 2000 were implemented in the context of low world prices, although these prices for cereals, meats and some dairy products increased slightly.

The main policy developments in 2000 can be evaluated as follows:

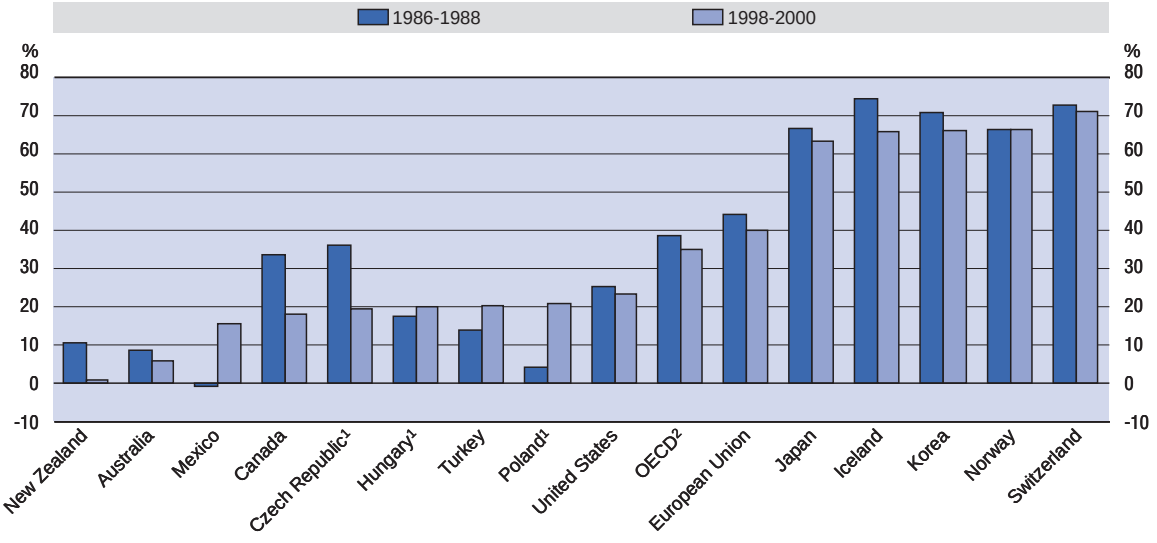
- There were no major changes in the main policy instruments used by OECD countries, but total support to *agriculture* (TSE) amounted to USD 327 billion (euro 354 billion), accounting for 1.3% of GDP (%TSE), compared with USD 356 billion (euro 344 billion) in 1999 and an average of 2.2% in the 1986-88 period. However, the %TSE varied across countries from 0.2% in **New Zealand** to over 5.3% in **Korea** and **Turkey** (Graph I.1).
- Support to *producers* (%PSE) decreased in most countries and for most commodities due to a narrowing of the gap between domestic and world prices, as world prices increased more than domestic prices and budgetary payments decreased. For the OECD as a whole, the %PSE decreased from 39% on average in 1986-88 to 35% in 1998-2000. The %PSE varied from 1% in **New Zealand** to 73% in **Korea**, a wider gap than recorded between the country with the highest %PSE (Switzerland) and lowest (New Zealand) in 1986-88 (Graph I.2).
- Costs for both *consumers* and *taxpayers* were reduced in line with the decrease in support to producers. Consumers were implicitly taxed at 26% (%CSE) in 2000, compared with 33% in 1986-88. In 2000, the %CSE varied, however, from a subsidy of 2% in the **United States** to a tax of 69% in **Korea** (Graph I.4).
- Although the *rate of protection*, as measured by the NPC decreased, the prices received by farmers were on average 43% above those in world markets, compared to 61% in 1986-88. This reflects a reduction in both import barriers and export subsidies (Graph I.5).

Graph I.1. **Total support estimate by country**
% of GDP



Notes: Countries are ranked according to 1998-2000 levels. For more detail, see Table III.12.
1. For the Czech Republic, Hungary 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, 2001.

Graph I.2. **Producer support estimate by country**
Per cent of value of gross farm receipts



Notes: Countries are ranked according to 1998-2000 levels. For more detail, see Table III.3.
1. For the Czech Republic, Hungary 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, 2001.

- Although there was a wide variation across countries, 72% of support to producers was provided through market price support and payments per tonne of output, which is a decrease from 82% in 1986-88. These are the categories of support which have the greatest impact on production and trade. However, whereas in **Japan** and **Korea** market price support remained above 90% over the period since 1986-88, in **Switzerland** it decreased by 20 percentage points to 63% in 1998-2000 (Graph I.3).
- Among the other forms of support, input subsidies (such as interest and tax rebates, and water subsidies) decreased the most, but their share in total support to producers remained stable and relatively small. Income based payments, which are among the least production and trade distorting measures, increased the most. However, the share of the latter payments in total support to producers (PSE) remained minor.
- Payments for the withdrawal of inputs to offset conditions placed on their use (such as land for environmental objectives) also decreased. The share of these payments in total support to producers remained low, although at almost double the level in 1986-88.
- The *nominal rate of assistance* to producers, as measured by the producer NAC, indicates that current gross farm receipts were 52% higher in 2000 than if they had been generated at world prices without government intervention. This is a decrease of 11 points below the 1986-88 average, which shows some progress towards greater *market orientation*.
- Expenditure on sector-wide policies and institutional services such as research, education, inspection and control and marketing accounted for 17% of total support to agriculture, as measured by the %GSSE. This was only 3 percentage points above the 1986-88 average.

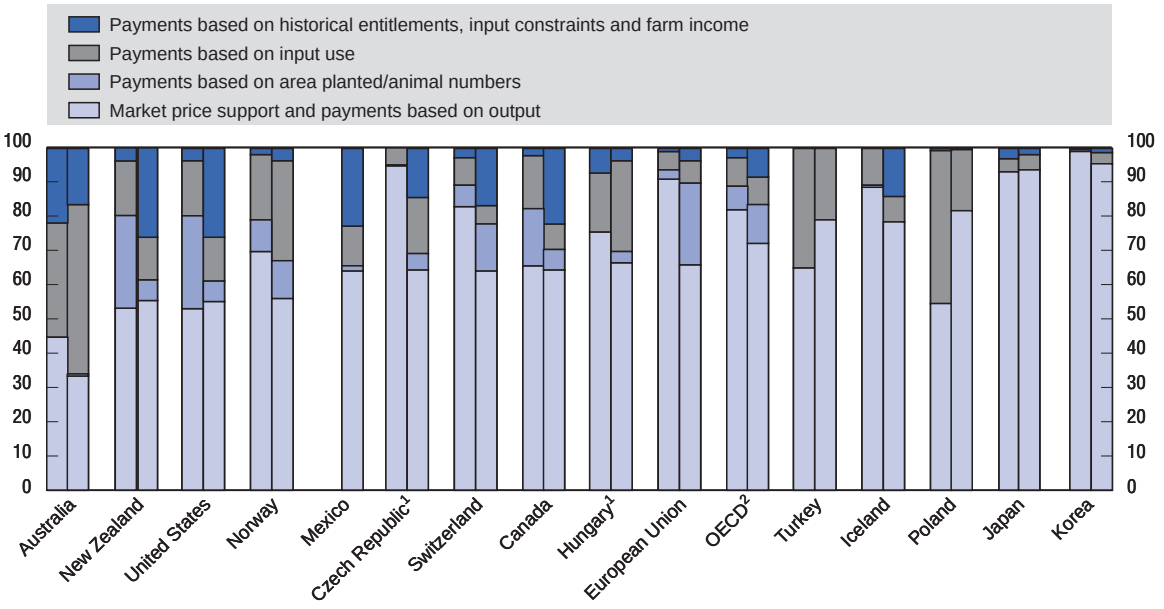
Overall, there was some movement towards greater market orientation. The support and protection indicators declined to the 1998 levels, a positive development especially if it marks a reversal in the upward trends evident in recent years. The shift away from market price support and output payments continued, but there are wide – and sometimes growing – differences in trends across countries and commodities. Moreover, the year-on-year fluctuations in all these indicators in recent years confirm the view expressed in previous editions of this report of the fragility of the process of policy reform. Depressed world prices once again triggered a number of *ad hoc* emergency measures, which in turn may have limited producers' response to those low prices and contributed to the continuation of the world price depression over the last three years. Lasting progress in reform will depend on breaking this cycle through the implementation of innovative market-based solutions, better targeted measures and greater coherence among policies so as to achieve a wide range of policy objectives with no or minimal distortions on production, consumption and trade.

Support and protection decreased on average,...

Support to producers for the OECD as a whole, as measured by the %PSE, decreased from 37% in 1999 to 34% in 2000, some 5 percentage points below the average level of the 1986-88 period (Graph I.2). Market price support (MPS) and payments based on output decreased but continued to represent 72% of overall support to OECD producers. The combination of an MPS reduction and an increase in budgetary support to food consumption resulted in a reduction in the implicit tax on consumption, as measured by a CSE 26% in 2000. This is some 7 percentage points below the average level for the 1986-88 period (Graph I.4).

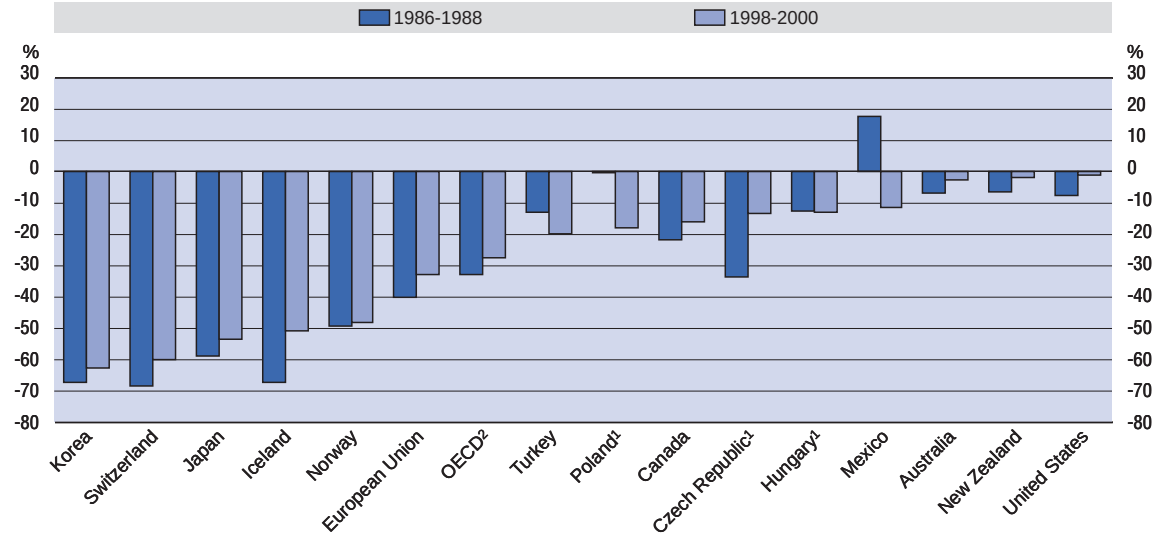
Although both market price support and output-based payments for current production were reduced, they continued to limit the ability of world market prices to affect production decisions, as they reduce the transmission of world price changes to producers. The **nominal rate of protection**, as measured by both the producer and consumer NPC, decreased from an average of 1.61 in the 1986-1988 period to an average of 1.46 in 1998-2000 (Graph I.5). This indicates that the prices received by farmers and those paid by consumers in the latter period were still 46% higher than those on the world market. While the producer NPC indicates the average rate of the implicit export subsidy necessary to export

Graph I.3. **Composition of producer support estimate by country, 1986-1988 and 1998-2000**
Percentage share in PSE



Notes: Countries are ranked according to 1998-2000 levels of market price support and payments based on output. For more detail, see Table III.7.
1. For the Czech Republic, Hungary 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, 2001.

Graph I.4. **Consumer support estimate by country**
Percentage of consumption expenditure at farm gate



Notes: Countries are ranked according to 1998-2000 levels. For more detail, see Table III.10. A negative percentage CSE is an implicit tax on consumption.
1. For the Czech Republic, Hungary 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, 2001.

agricultural commodities, the consumer NPC indicates the implicit rate of protection for the quantities imported.

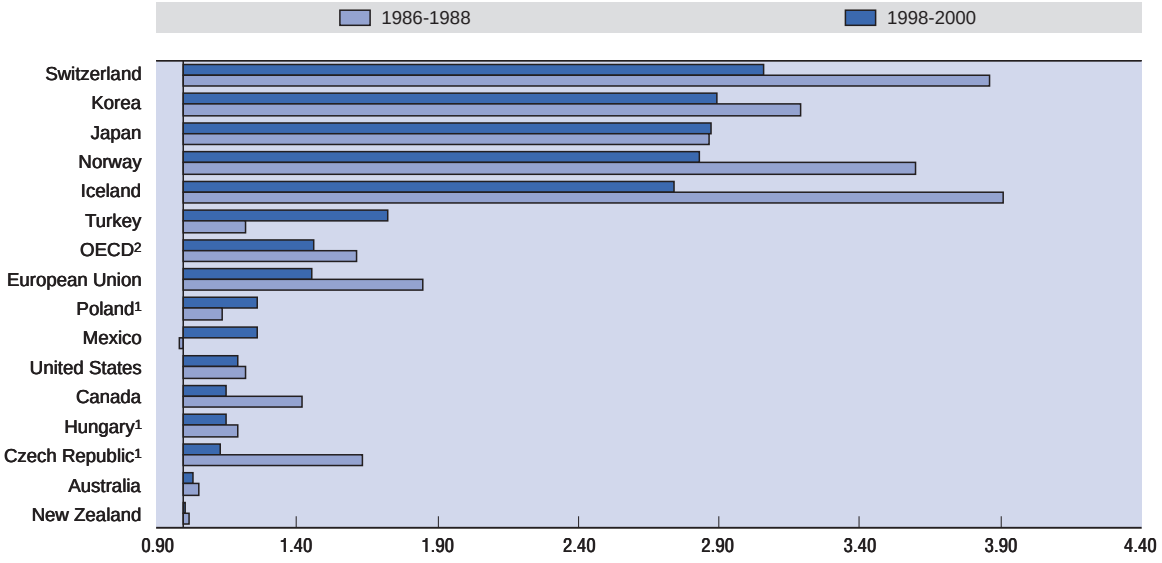
The overall reduction in market protection in the OECD area may partly reflect the process of achieving WTO commitments. However, the current levels of protection are still an important factor in encouraging production, distorting trade and depressing world prices of agricultural commodities. Moreover, such protection continues to be regressive as it mainly benefits large farms and impacts most strongly on low-income consumers for whom food constitutes a larger share of their total household expenditure.

but with wider variations among countries, ...

There are large and increasing differences in the levels of support and protection among OECD countries (Graphs I.2, I.6 and I.7).[2] This reflects not only the wide variations in farm structures, natural environments, socio-economic conditions and trade positions, but also different traditions or preferences on the use of certain policy instruments. Support to producers in 2000, as measured by the %PSE, increased in **Australia** (from 5% to 6%), **Canada** (17 to 19%), **Korea** (69 to 73%) and **Mexico** (15 to 18%); in **Japan** it remained stable at 64%. Although the %PSE decreased for all the other countries, it remained above the OECD average (34%) in the European Union (38%), Iceland (63%), Norway (66%) and Switzerland (71%). The average level of %PSE in the 1998-2000 period is lower than the 1986-1988 average for all countries, except **Mexico**, **Norway** and **Turkey** (Graph I.2).

For the 1998-2000 period, **Australia** and **New Zealand** had an ***average* %PSE** below 10%, while the %PSE was 25% or below in **Canada, Czech Republic, Hungary, Mexico, Poland, Turkey**, and the **United States**. It was 40% in the **European Union**, and above 60% in **Iceland, Japan, Korea, Norway**, and **Switzerland**. Those countries with the highest %PSE also have the highest **nominal rate of**

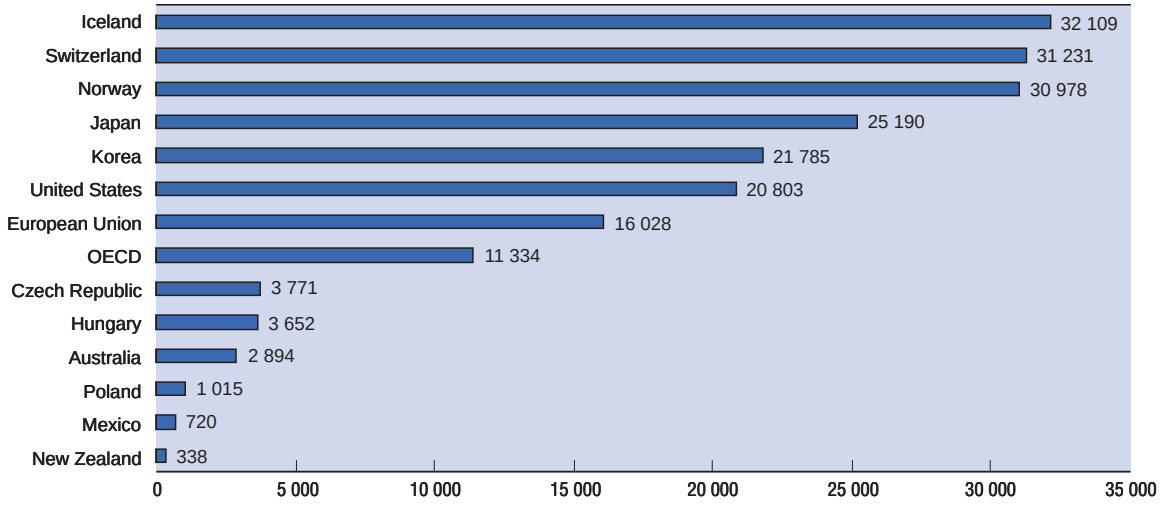
Graph I.5. **Producer nominal protection coefficient by country**



Notes: Countries are ranked according to 1998-2000 levels. For more detail, see Table III.3.
1. For the Czech Republic, Hungary 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, 2001.

Graph I.6. **Producer support estimate per farmer, 1998-2000**

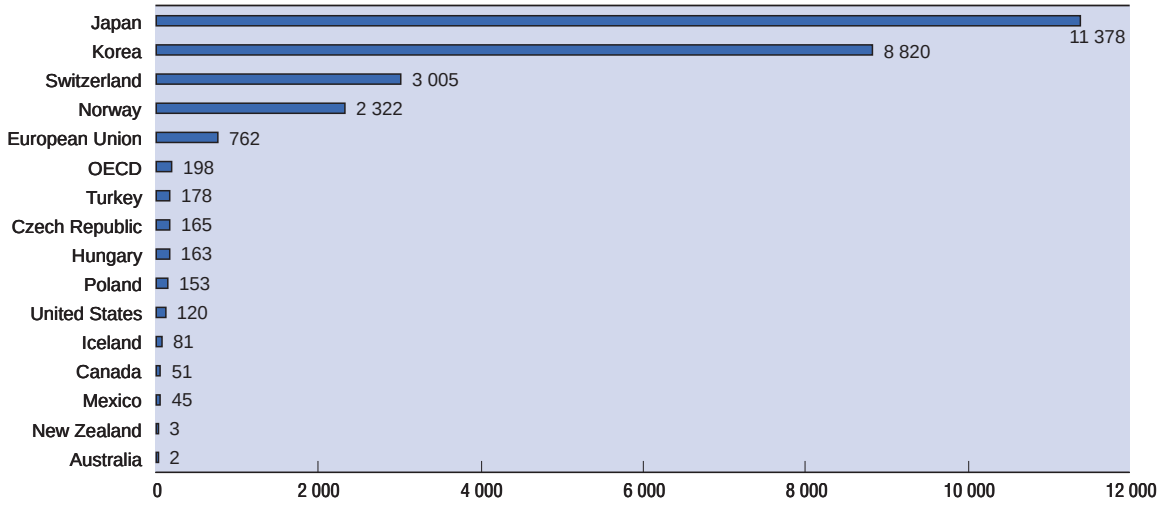
USD



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.4.
Not calculated for Canada and Turkey. For more detail, see Table III.5.
Source: OECD, PSE/CSE database, 2001.

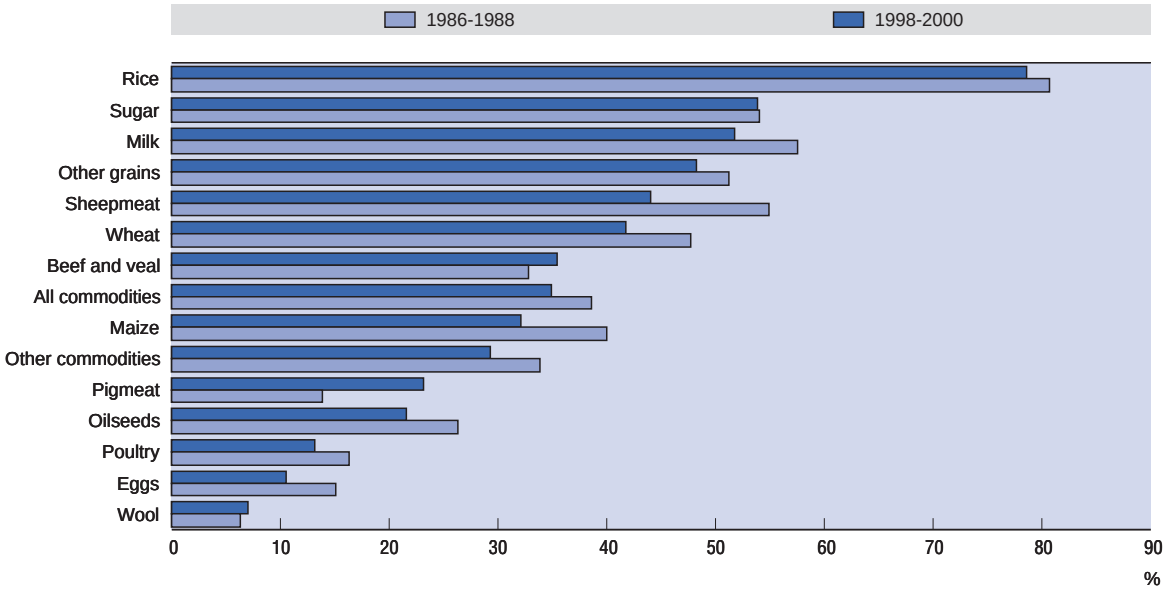
Graph I.7. **Producer support estimate per hectare, 1998-2000**

USD



Notes: PSE per hectare of agricultural land (arable land, permanent crops and permanent meadows and pastures).
For more detail, see Table III.6.
Source: OECD, PSE/CSE database, 2001.

Graph I.8. **Producer support estimate by commodity**
OECD average as % of value of gross farm receipts



Notes: Products are ranked according to 1998-2000 levels. For more detail, see Table III.4.
Source: OECD, PSE/CSE database, 2001.

protection, as measured by the NPC – the prices received by producers and those paid by consumers are both on average about three times world prices (Graph I.5). However, while the combined share of market price support and output payments continued to represent more than 90% of support in **Korea** and **Japan**, this share decreased to about 60% in **Norway** and **Switzerland** due to a shift towards less distorting forms of support (Graph I.3).

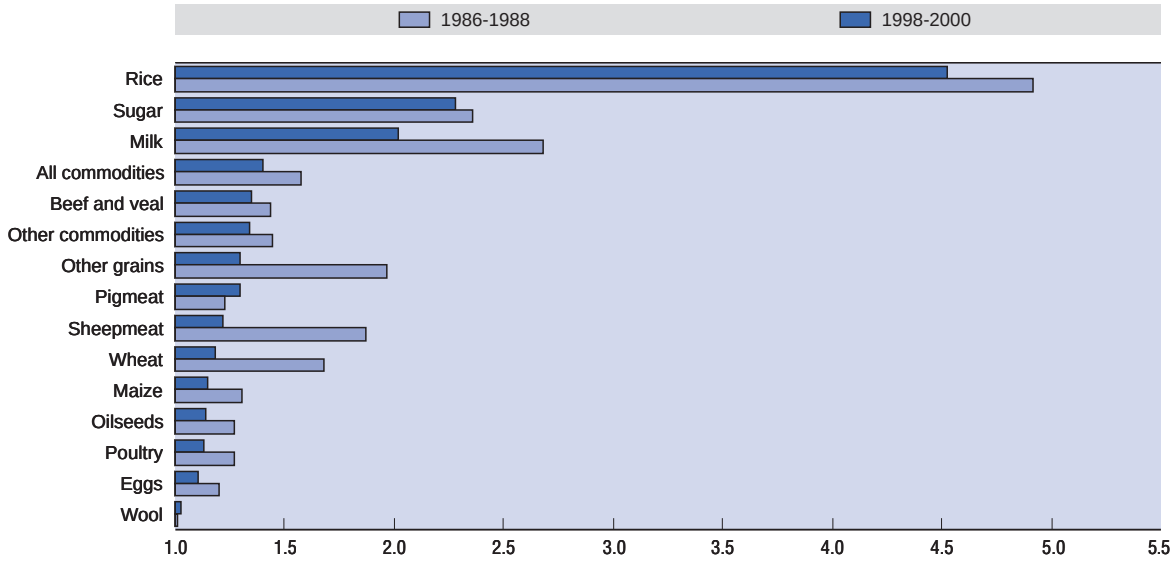
... and across commodities

There is also wide variation in levels of support and protection across commodities for which the PSE is calculated. Average levels in 1998-2000 were nevertheless below those for 1986-1988 for all commodities except **sugar**, **beef**, **wool** and **pigmeat** (Graph I.8). Support to producers in 2000, as measured by the %PSE, decreased for all commodities, except **rice** and **oilseeds**. For 1998-2000 the average %PSE was less than 15% for **eggs**, **poultry** and **wool**, between 40 and 50% for **wheat**, **coarse grains** and **sheepmeat**, and more than 50% for **rice, sugar** and **milk**. While sugar and milk benefit from the highest levels of support in each country where they are produced, rice is highly supported only by Japan and Korea. As the high rates of support for these three commodities are mainly provided through price support, the associated levels of market protection (NPC) are also the highest. Prices received by producers and those paid by consumers were, on average, in 1998-2000 over twice the level of world market prices for sugar and milk and about five times higher than the world market price for rice (Graph I.9). Such variation on the rates of support and protection across commodities are an important source of distortion in the allocation of resources among industries.

While payments based on past entitlements and overall income increased...

In the second half of the 1990's, the introduction of **payments based on past entitlements** is the most significant change in the average composition of support in an increasing number of OECD countries. Accounting for about half a billion USD on average in 1986-1988, these payments have

Graph I.9. **Producer nominal protection coefficient by commodity**



Notes: Products are ranked according to 1998-2000 levels. For more detail, see Table III.4.
Source: OECD, PSE/CSE database, 2001.

increased, particularly in the last three years, to reach over USD 13 billion in 2000. Introduced to compensate for a reduction of other forms of support, especially output related payments, the share of these payments in the PSE in 2000 ranged between 15% and 18% in **Czech Republic**, **Iceland**, **Switzerland** and **Mexico** to 22% in the **United States** (Graph I.3). The share of these payments in the United States includes the significant *ad hoc* and *ex-post* increases to compensate for "market losses" in each year of the 1998-2000 period. These *ad hoc* payments will have affected production decisions as they have now been paid for the third consecutive year. This gives a strong signal to farmers that they can expect to receive extra support at times of low world prices and may, as a result, contribute to world price depression. To compensate for lower market returns, **Canada** provided for the first time payments based on past entitlements (11% of PSE in 2000), but income compensation through payments based on overall farm income had been granted in the previous two years.

Payments based on overall income have been increasing, but since 1986 their importance has remained consistently at around 1% of overall support to OECD producers. However, in 2000 these payments represented 16% of the PSE in **Australia** and **Canada**, 11% in **New Zealand** and 5% in **Norway**.

Payments based on past entitlements and on overall farm income are made without obligation to plant or produce any specific commodity, are not linked to current production and therefore are potentially less production and trade-distorting than other major forms of support to producers. Payments based on overall farming income that act as income safety nets are potentially much more equitable, and better targeted and tailored to farmers' income needs than payments based on past entitlements. All these payments when granted annually have a direct impact on farmers' current income and wealth and can influence future expectations of support and the retention of resources in the sector. Although direct income support may have social objectives, any equitable scheme to deal with farmers' poverty should be implemented in the context of the overall social policy framework.

… area/headage payments and support for using inputs declined,…

Area and headage payments have decreased since 1998, but in general they are still nearly double the 1986-1988 average. These payments are used in a number of countries, but they are

especially important in the **European Union** (25% of PSE) where they represented a quarter of the PSE in 2000. These payments were introduced in the European Union and **Switzerland** (11% of PSE) to compensate for a reduction of other forms of support, namely MPS and output related payments. Although farmers do not have to plant, own animals or produce any specific commodity to receive payments based on historical entitlements and overall farming income, they are required to plant specific crops or own specific animals to receive area or headage payments . Therefore, the latter form of support has potentially a greater impact on production and trade of the eligible commodities. Given the importance of these payments, especially in the European Union, they may well be one of the important factors contributing to supply/demand imbalance and depressed prices in world markets. In **Canada** (8% of PSE) and the **United States** (7% of PSE), these payments are mainly provided as crop insurance and disaster payments to specific commodities (Graph I.3).

Payments based on input use also declined in 2000, although their level in 1998-2000 was higher than the 1986-1988 average, and their share of support remained relatively stable at 8% (Graph I.3). To receive these payments farmers must use farm-specific inputs or factors of production which directly affect current production decisions. In 2000, about half the input payments were based on use of variable inputs (fertilisers, animal feed, fuel, irrigation water), a quarter on use of on-farm services (extension, pest and disease control) and another quarter on use of fixed inputs, including investments.

The more a payment is specific to the variable inputs necessary to produce particular commodities, the greater the incentive to increase production and the greater the impact on production and trade of these commodities. Moreover, as with area/headage payments, although ceilings may be applied, it is generally the case that the larger the farm, the larger will be the eligible area, the number of animals or the volume of inputs or factors of production which benefit from the payments. This may accentuate income disparities and can be of concern especially in countries such as **Mexico, Poland** and **Turkey** where input payments are relatively important and where the number of small and poor farmers is also relatively large. Although these payments represent half of the support provided to producers in **Australia,** and 80% in **New Zealand**, their impact on production and trade should be low. This is not only because of the low level of support, but also because payments in these countries are essentially based on on-farm services and fixed inputs rather than on variable inputs.

... and policies increasingly address environmental concerns

Concerns over environmental performance of agriculture continued to be high on the policy agenda in OECD countries (long-term developments are dealt with in more detail in section 4.2). To improve that performance, OECD countries have increasingly made support payments subject to environmental conditions and a wide range of agri-environmental measures has been introduced. In some countries, these measures involve incentives for collective actions and market-based approaches. In other countries, they take the form of payments to farmers. When targeted to environmental goals, these payments are conditional on the application of certain constraints (reduction, replacement or withdrawal) on the on-farm use of specific inputs, on the choice of production techniques to reduce negative externalities or on remunerating the production of non-market goods and services.

Payments based on input constraints decreased in 2000. Although their level in 1998-2000 was, on average, over double that of the 1986-1988 period, this was still only 3% of the PSE. These payments were used in **Japan**, **Norway**, the **European Union**, **Switzerland** and the **United States**. Due to the constraints attached to these payments, they may actually reduce production or be among the categories of support having fewer impacts on the production and trade of specific marketed commodities. However, some payments are granted to provide environmental services and others to reduce environmental damage. As the latter payments offset damaging environmental effects of some production-linked agricultural policies, the costs of improving environmental quality are higher when such policies are in place. The costs of policies could be reduced if they are consistent with the Polluter Pays Principle. Moreover, community-led actions and market-based approaches may also be lower cost solutions.

Market orientation improved, but remained very low in a number of countries

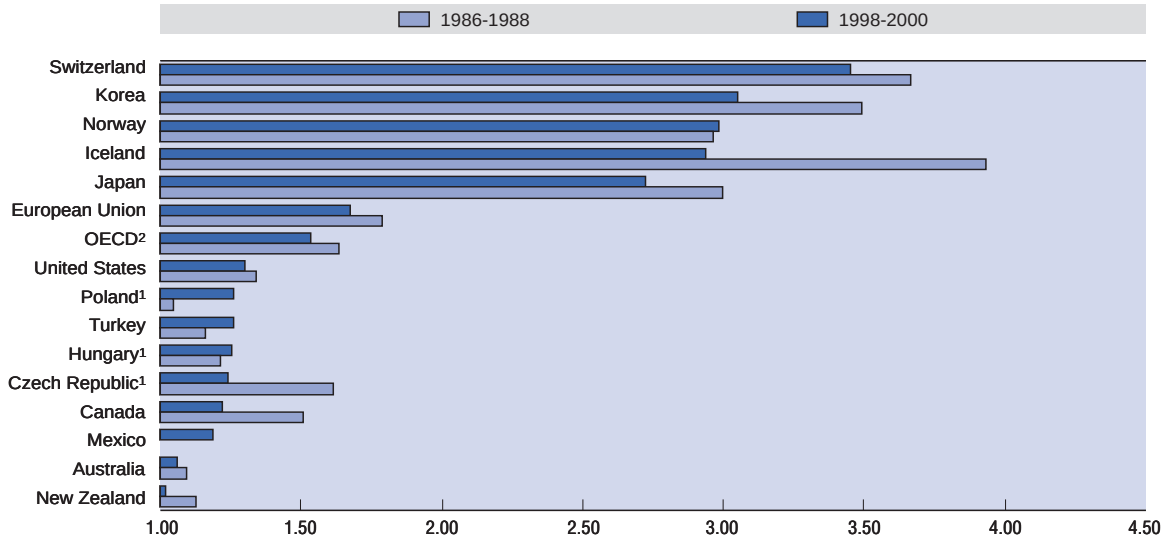
The developments described above constitute an improvement in market orientation with an increased share of farm receipts generated at world prices compared with that created by government intervention. For the OECD as a whole, the **nominal rate of assistance** to producers, as measured by the producer NAC, decreased to 1.52 in 2000, 11 points below the 1986-1988 average (Graph I.10). This indicates progress towards greater market orientation but it also shows that gross farm receipts are still 52% higher than they would be if entirely generated at world prices. The consumer NAC followed the same trend but is lower due to subsidies to domestic consumption. Government intervention of this magnitude continues to be significant and may still play an important role in the current oversupply and depressed prices in the world markets for agricultural commodities.

There is a wide variation in the degrees of market orientation between countries and across commodities, however. With a producer NAC of about 1, agriculture in **Australia** and **New Zealand** can be seen as fully market oriented. On the other hand, with a NAC of about 3, agriculture in **Iceland, Japan, Korea**, **Norway** and **Switzerland** has a very low degree of market orientation. In these latter countries, current farm receipts are three times higher than they would be if entirely generated at world prices, while they are higher by 60% in the **European Union**, 30% in the **United States**, and around 20%-25% for all other countries. Across commodities, the least market oriented is **rice,** with a producer NAC of about 5, and **sugar** and **milk** with a producer NACs of over 2.

Support for general services to agriculture remains low relative to support to producers

For the OECD as a whole, support for general services provided to agriculture, as measured by the %GSSE, remained stable at around 17% of the total support to agriculture (TSE), but above the 1986-88 average. Only support for **public stockholding** decreased dramatically between these two periods, showing a movement towards limiting public stockholding. Over 40% of the support to general services is provided for **marketing and promotion** services which are often used to implement price support

Graph I.10. **Producer nominal assistance coefficient by country**
OECD average as % of value of gross farm receipts



Notes: Countries are ranked according to 1998-2000 levels. For more detail, see Table III.3.
1. For the Czech Republic, Hungary 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, 2001.

policies. The latter have the potentially highest costs for consumers and the greatest impact on production and trade. Although some countries continue to restructure their trading agencies and their systems to improve competition post-farm-gate, the importance of support for marketing and promotional services in the OECD as a whole tended to increase. Support for these services, in addition to market price support to producers, gives the total cost of the market price support policies. This still represented 56% of the total cost of support to agriculture as measured by the TSE in 2000.

About a third of the support to general services is provided for collective actions in favour of basic **infrastructure**, including environmental voluntary co-operative actions. Support to **research** and **inspection services** remained constant at around 9% and 3% of the GSSE respectively, but these services are evolving in the light of increasing public concerns for the environment and food safety and quality. Support to general services provided to agriculture has in general the same objectives of support to producers, but does not depend on any individual farmer's decisions or actions to produce goods or services, or use factors of production, and does not affect farm receipts directly. Therefore, although support to general services can in the long run contribute to improvement or expansion of sectoral production capacity, their production and trade impacts are potentially lower.

Overall support to OECD *agriculture decreased, but remained significant*

For the OECD as whole, total support to agriculture, as measured by the TSE, amounted to USD 327 billion (euro 354 billion) or 1.3% of the GDP (%TSE) in 2000, compared to an average of 2.2% in the 1986-88 period. In 1998-2000, the %TSE ranged from 0.2% in **New Zealand** to over 5% in **Korea** and **Turkey** (Graph I.1). Despite the changes in the composition of support, about three-quarters of the total support to agriculture goes to individual producers and consumers paid for more than half of this through higher food prices. This is particularly inequitable for low-income consumers, for whom food constitutes a large share of their total household expenditure. As most of the support provided to producers is still output- or input-linked, the larger the farms, the greater the payments and the greater the potential impact on production and income.

Although all support and protection indicators show progress in policy reform for the OECD as a whole, there are wide variations among countries. While these indicators were lower in 2000, they remained very high in **Korea**, **Japan**, **Norway** and **Switzerland**. There has been some positive change in the composition of support in the latter two countries, but not in the case of Korea and Japan. The indicators for the **Czech Republic, Hungary, Poland** and **Turkey,** all candidates for EU membership, remained low relative to the level in the European Union. Progress in reform in these countries should be seen as increasing market orientation, though not necessarily increasing alignment with EU support levels. Changes in the composition of support currently provided in the **European Union** towards less output-linked and input-linked measures would contribute to the improvement in efficiency and reduce inequities associated with current policies, while facilitating future EU enlargement. Improved market orientation in **Mexico**, **Canada** and the **United States** would also improve the efficiency of policies in NAFTA countries.

4. DEVELOPMENTS IN SELECTED POLICY AREAS

This section describes in greater detail policy developments in a number of areas that have received a high degree of public interest in recent years. The areas covered are food safety, environment and farm income risk management.

Food safety and related policy developments

Food safety continued to be a high profile policy issue. Many OECD countries responded with tougher food safety regulations and/or stricter enforcement procedures. In 2000, a number of emergency measures were introduced within the European Union to contain the spread of BSE and foot and mouth disease. Institutional structures and regulatory frameworks are being re-oriented towards increased transparency with greater emphasis on consumer information and choice. At the international level, consultation and co-ordination on a number of food safety issues has increased.

The regulation of modern biotechnolgy also received significant attention. The OECD held an international conference on the science, health and regulatory aspects of genetically modified foods in 2000 identifying areas of agreement and disagreement as well as issues subject to scientific analysis and those related to political factors, beliefs and values.[3] Follow-up conferences on the science and safety of modern biotechnology foods and crops are planned for 2001. There was a profusion of new labelling regulations (mandatory and voluntary) for genetically modified material in foods and feeds in response to consumer demands. Many non-member countries are also in the process of formulating labelling guidelines for GM products.

Food safety systems continue to evolve

Food safety systems in OECD countries continue to evolve due to new scientific information on food safety issues and emerging pathogens, new technology, improved regulatory approaches and the need to ensure a high level of public health protection. There are common elements in the focus and nature of food safety regulation across OECD countries (Box I.4).[4] For example, increased priority is being given to microbial pathogens, reflecting heightened consumer awareness about certain foodborne illnesses and the fact that, with developments in food science and technology, many of these illnesses can be prevented if the necessary controls are applied. In some countries, improved monitoring procedures and increased public awareness have resulted in increased reports of foodborne illnesses. It is difficult, however, to ascertain whether there is an actual increase in the number of cases or just an increase in the number of reports.

Focus on transparency and co-ordination

Institutional structures applied to the regulation of food safety have been subject to enhanced public scrutiny and in many cases their transparency and openness have been challenged. Concern has been expressed in some countries, for example, on the perceived inappropriate influence of commercial interests on regulatory decisions and on public access to information on the manner in which regulatory decisions are made. There are also concerns about the secondary impacts of food safety regulation on agricultural producers and food processors, including the cost of compliance and the effect on international competitiveness, the capacity to innovate and market responsiveness. As a

Box I.4. **Key messages on food safety**

(*Executive Summary of the ad hoc Group on Food Safety*)

"Overall, national food safety systems are doing an effective job of protecting public health. Advances in scientific understanding, a desire for more effective systems and greater public awareness of foodborne diseases are driving governments to strengthen their food safety institutions and regulations. Many countries are increasing attention to microbial contamination of foods to reduce foodborne illness; also, the regulation of food and agricultural products derived from modern biotechnology is an issue that all OECD countries are addressing. Under their existing food safety systems, countries are addressing these and other issues, though sometimes in different ways.

The fundamental principle underlying national food safety systems is human health protection. Public concerns go beyond food safety to include such issues as the quality of food, how it is produced, use of modern biotechnology and the environment. Domestic food safety regulations can have an impact on trade, although international trade agreements impose certain requirements upon national regulations.

Risk analysis, consisting of scientific risk assessment, risk management and risk communication, is the model used by OECD countries in making food safety decisions. These decisions increasingly take into account international standards, guidelines and recommendations. Differences across OECD countries as to decisions on individual products often reflect differences in the appropriate level of protection which has been established. There are also differences in the manner in which other legitimate factors relevant for the health protection of consumers and for the promotion of fair practices in food trade are taken into account in food safety risk management. How precaution should be applied to food safety in circumstances of scientific uncertainty is being discussed to promote understanding of the various viewpoints on the subject and to achieve greater global consensus on this issue, in particular in the Codex Alimentarius Commission.

International organisations play a major role in facilitating international dialogue, in building consensus towards a science-based, rules-based approach to assessment, and the harmonisation of food safety standards. It is important that these activities engage both developing and developed countries and are open and transparent. Further co-operation among scientists, regulatory authorities, and other interested organisations would contribute to improving health protection, facilitating trade and increasing consumer confidence. Communication and consultation with stakeholders on all aspects of food safety at all stages of the decision-making process are key to a credible, open, transparent and accountable food safety system."

Source: OECD (2000), *Overview of Food Safety Systems and Activities: Executive Summary*, Paris. An electronic version of this report is available at: *www.oecd.org/subject/biotech/overview_fssa_sum.pdf*.

consequence, there have been efforts to implement food safety controls providing flexibility on how to achieve the desired results whilst minimising regulatory costs.

There are a number of common trends in the reform of food safety frameworks across OECD countries. Attempts have been made to co-ordinate better the existing institutional structures established for the implementation and enforcement of food safety legislation. Examples include the new **European** Food Authority, the **United Kingdom** Food Standards Agency and the **Korean** National Food Safety Control Council. In some cases, this has involved the creation of new, generally more centralised, structures. Some OECD countries have established a clear separation between risk assessment and risk management bodies, in part to improve the independence of scientific advice. Efforts have been made to enhance the efficacy of control activities through, for example, the development of monitoring and rapid alert systems, and mechanisms of enforcement. Changes are occurring in food safety regulations and/or the way they are implemented. There have been attempts to consolidate and simplify legislation and to ensure consistency in the way that controls are applied to different foods and/or foodborne hazards.

A *broader food chain approach*

The scope of **food safety regulation** is increasing to encompass the entire food supply chain from primary production (including animal feed and pesticides) through to consumption. This is a recognition that multiple and co-ordinated interventions are required throughout the food supply chain to increase assurance of the final product's safety. There has been a progressive evolution in the focus of food safety regulation from detailed specification standards to include outcome-based requirements. Increasingly, regulation lays down the criteria that the product offered for sale must meet, but does not necessarily dictate the exact means that suppliers must adopt in order to comply, thereby allowing suppliers to take responsibility for producing safe food and gain flexibility for processing innovation.

Simultaneously, greater emphasis has been put on the process by which a product is manufactured, rather than end-point safety measures. Process controls usually require that suppliers maintain appropriate control of the production process and can demonstrate that this is the case through verified documentation. Further, food safety regulation increasingly requires that suppliers be proactive in adopting food safety self-controls. For example, food suppliers are being required to establish process control-based systems such as the Hazard Analysis and Critical Control Points (HACCP) system. Governments are encouraging the development and adoption of codes of good hygiene practice, working with stakeholders (*e.g.* trade organisations and professional bodies). **Canada**, the **Czech Republic**, **Mexico** and **New Zealand** all recently introduced HACCP-based food safety inspection systems.

I*ncreased international consultation and co-ordination*

OECD countries, like other WTO members, are permitted to determine their own appropriate level of protection (ALOP) or level of acceptable risk, to establish legislation and implement measures to address food safety on the condition that such measures are applied in a transparent manner, are consistent and least trade restrictive. Establishment of this level of protection is inherently a political choice made by countries. However, as stated above, food safety regulation across OECD countries is becoming increasingly harmonised. WTO Members are encouraged to adopt **international standards, guidelines and recommendations** established by the Codex Alimentarius Commission (Codex) under the Sanitary and Phytosanitary (SPS) Agreement and are required to base their food safety measures on risk assessment to justify regulatory decisions if higher standards are set. Further, there have been efforts to harmonise food safety regulation at the regional level (*e.g.* **European Union**) to facilitate trade between regional trading partners.

All OECD countries are actively involved in international efforts to improve understanding of, and to develop and implement standards for, risk analysis procedures. This is done in particular through Codex (Box I.5) and its parent bodies, the World Health Organisation (WHO) and the Food and Agriculture Organisation (FAO). Two key issues are the manner in which scientific uncertainty is factored into risk analysis and the manner and extent to which socio-economic factors are taken into consideration. These issues are the subject of international discussion in the Codex Alimentarius Committee on General Principles, while the safety of foods derived from modern biotechnology is being addressed in other Codex Committees. Increasingly, risk assessments provided by international or regional organisations assist and complement those of national institutions. Examples include WHO-FAO expert committees and expert consultations (*e.g.* Joint Expert Committee on Food Additives and Contaminants, Joint Expert Meeting of Pesticide Residues and the Expert Consultation on Biotechnology) and the International Committee on Microbiological Standards in Food (ICMSF).

D*ifferent approaches to regulation of* GM *foods and feeds*

In recent years, the effective regulation of the **products of modern biotechnology**, in particular GM foods, has been subject to intense debate in OECD countries. Results are highly variable by year, crop and region but some producers have benefited through higher yields, reduced herbicide/pesticide use

Box I.5. **Codex activities addressing food safety issues**

The Codex Alimentarius Commission manages the joint FAO/WHO food standards programme, which endeavours to protect consumer health, ensure fair practices in food trade and promotes the co-ordination of food standards. The Codex deals with both policy issues (*e.g.* food hygiene, quality assurance, export certification guidelines) and technical matters (*e.g.* additives and contaminants, pesticide residues, veterinary drugs in food). Some of the most difficult policy issues currently under review include:

***International standards for the products of modern biotechnology*:** An *ad hoc* Intergovernmental Task Force has been established by the Codex Alimentarius Commission to develop standards, guidelines or recommendations for foods derived from biotechnology and two meetings have already taken place. The Codex Committee on Food Labelling is developing labelling provisions for foods derived from biotechnology. International agreement has not been reached as to specific provisions in either case. FAO and/or WHO have held a number of consultations and workshops related to the safety of foods derived from biotechnology. There have been two joint expert consultations in support of the work of the Codex Task Force, the most recent dealing with the allergenicity of GM foods.

***Precautionary approaches and principles*:** Precaution is widely recognised by international organisations with food safety responsibilities as an essential element of risk analysis. Working principles for risk analysis are being developed by the Codex Committee on General Principles. Within the section on Risk Management, the draft Principles still under discussion in the Codex include provisions to allow risk managers to apply a precautionary approach/principle when the scientific evidence is insufficient and when there is evidence to suggest that negative effects will occur but difficult to evaluate their nature and extent. However, several members still have reservations that any reference to precautionary approach/principle is inappropriate.

***Addressing socio-economic concerns*:** Concerns over biotechnology as well as concerns in some countries over food safety go beyond the matter of human health and safety; there are economic, social, environmental and ethical issues. Effects on food quality, availability and costs, animal welfare and biodiversity are emerging issues for some countries. When elaborating standards, Codex has regard, where appropriate, to "other legitimate factors" (OLFs) relevant for the protection of the health of consumers and for the promotion of fair practices in food trade. As regards the general aspects of "other factors" in the decision process, the Codex Committee on General Principles has made some progress in developing a general orientation for Codex work in the framework of risk analysis, although there is still no consensus on what constitutes OLFs. Other Codex Committees responsible for risk analysis have been asked for guidance on what other factors are currently taken into account in their area of work.

Source: OECD (2000), *Overview and Compendium of International Organisations with Food Safety Activities*, Paris. An electronic version of this report is available at: *www.oecd.org/subject/biotech/overview_ciofsa_1.pdf*

and/or from the ease and flexibility these technologies provide.[5] There is recognition of the need to address consumer concerns by establishing controls that are transparent and that ensure the safety of the food supply, while not unduly restricting the development of a technology that may offer potential benefits to consumers and industry. The regulation of GM food products is evolving and there is diversity in the approaches adopted by individual OECD Member countries (Box I.6).

Emphasis on labelling and consumer choice

In some cases, existing food safety measures are applied to GM products, whilst in others specific new legislation has been, or is being, enacted. In **Italy**, for example, the use of GM material in baby foods is prohibited. The approach to safety assessment of GM foods and feeds in many countries is based on the concept of substantial equivalence and follows principles developed by an international committee of experts working through the OECD.[6] There are two elements to the regulation of GM food products, although both may not be present in all OECD countries. The first element is systems for risk assessment and **pre-market approval** of products, and the second element is **labelling** requirements

Box I.6. New approaches to the regulation of GM foods and feeds

European Union – In response to the intense public and political debate on food safety, environmental and biodiversity issues, the EC Directorate General on Health and Consumer Protection issued in November 2000 an advance copy of a working document on the traceability and labelling of GM material and products derived from GM material. Despite existing requirements for a comprehensive assessment of risks to human health and the environment prior to authorisation, public concerns over the long-term effects of GM material made it increasingly difficult to approve the placing of new GM material and derived products on the market. This has led to a *de facto* moratorium on GM products in Europe. The working paper proposes a strategy to relaunch the authorisation process on the basis of a reinforced framework for approval of GM material and products derived from GM material. It includes a comprehensive set of labelling provisions, an initiative on a traceability system and further harmonisation of current GM labelling regulations (*e.g.* DNA/protein criterion, threshold levels for accidental contamination, GMO additives and flavourings).

United States – The Food and Drug Administration (FDA) issued in January 2001 a proposed rule which, if finalised, would make pre-market consultation mandatory for bioengineered foods and feeds. Although a voluntary consultation process has been in place since 1994, public meetings and written submissions indicated considerable support for a mandatory and more transparent process. A draft guidance document on labelling has also been issued; this would provide direction to manufacturers to ensure labelling was truthful and not misleading. The Environmental Protection Agency (EPA) is considering requiring companies producing GM crops to test for harmful effects on wildlife. An EPA scientific advisory panel is developing new rules in response to concerns over non-target effects. In particular, the EPA would like more analysis on risks of cross-pollination and on how quickly GM plants degrade in the soil.

Norway – Framework legislation seeks to ensure GM technology is introduced in an ethically and socially justifiable way. No GM foods have been approved for sale in Norway, but several processed products and plants are under consideration. In principle, risk assessment procedures will not differ from those for non-GM products. GM food labelling is mandatory and additional regulations are under development. Public opinion on GM foods is sceptical, with some 20 NGOs requesting a moratorium on the marketing of all GM products. The Government established in 2000 a scientific committee to examine the potential health risks posed by GM foods (environmental issues were not addressed). With the exception of one member, the Committee did not recommend a ban on GM products.

associated with food safety and/or consumer information and choice. In all countries, products are evaluated on a case-by-case basis with products prohibited unless specifically sanctioned.

Many OECD countries are in the process of implementing mandatory labelling regulations for products which contain genetically modified DNA or resulting new proteins. In some countries, products are only subject to mandatory labelling in those instances where significant nutritional or compositional changes have been made, or where certain consumers at risk need to be alerted to potential health or safety risks, such as allergens. Other countries regard reliable labelling of all products derived from or containing GM material as a prerequisite to ensure consumer choice, information and confidence. There is continued debate, however, over the appropriate use of mandatory versus voluntary labelling.

A key issue is the establishment of thresholds in the case of accidental presence of genetically modified material for the purpose of labelling, and the appropriate analytical and/or identification methods. At present, there is considerable variation in the threshold levels set or proposed by different countries. As of April 2000, labelling is not required in the **European Union** when GM material is present as a result of adventitious contamination and not higher than 1%. In **Norway**, products with more than 2% GM material must be labelled, while in **Korea**, the level is 3%. The lack of harmonisation can affect consumer confidence and create barriers to trade. A similar situation threatens to disrupt international trade in seed. The OECD Schemes for Seed Certification is working with the international seed industry to develop standards for the accidental presence of GM material in non-GM seed varieties.

Dealing with scientific uncertainty is an issue

Precaution is regarded as an integral part of science-based risk analysis in all OECD countries. Approaches to precaution vary where scientific information on a risk is incomplete and there is sufficient evidence of potentially unacceptable health effects. There is agreement that the adoption of a precautionary approach does not remove the need for risk assessment to be undertaken and progressively refined as further scientific information becomes available, and that any precautionary measures should be applied on a provisional basis

Precaution has been cited as the underlying concept behind new legislation to control outbreaks of Bovine Spongiform Encephalopathy (BSE) and foot and month disease. BSE was identified in cattle in some **European Union** member states for the first time in 2000 while the number of reported cases increased in others (Table 1.3); with confirmed and suspected cases of a new variant Creutzfeldt-Jakob Disease (nvCJD) in humans outside the United Kingdom. The FAO advised countries to adopt a precautionary approach and supported the European Union's action to control the disease, including the slaughter of hundreds of thousands of animals (see section on European Union policy developments for details). Similar pecautionary measures were implemented following the outbreak of foot and month disease in a number of European countries in early 2001. In response to outbreaks of BSE and/or foot and mouth disease, many third countries introduced temporary import bans on products at risk from Europe until the situation could be reviewed and procedures put in place for lifting the bans could be established.[7] Although there have been no reported incidences of BSE or nvCJD within the **United States**, a US General Accounting Office report on food safety, released in September 2000, recommended stricter controls for ensuring the safety of animal feeds.

The extent to which **socio-economic concerns** influence risk decisions varies across OECD countries, but many consider economic cost, technical feasibility and risk perception to be legitimate factors in risk management decisions. The question of whether socio-economic concerns such as animal welfare, environment and biodiversity should be addressed within or separately from the food safety regulatory system is more controversial. Some countries emphasise the importance of taking into account such factors in their food safety regulations. In those countries, such factors are included in the

Table I.3. **Number of reported BSE cases by country**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
OECD Countries												
Belgium	0	0	0	0	0	0	0	1	6	3	9	4[4]
Canada	0	0	0	1[1]	0	0	0	0	0	0	0	0
Denmark	0	0	1[1]	0	0	0	0	0	0	0	1	1[4]
France	0	5	0	1	4	3	12	6	18	31[2]	161	14[4]
Germany	0	0	1[1]	0	3[1]	0	0	2[1]	0	0	7	40[4]
Ireland	14[2]	17[2]	18[2]	16	19[2]	16[2]	73	80	83	91	145	
Italy	0	0	0	0	1[1]	0	0	0	0	0	0	1[4]
Luxembourg	0	0	0	0	0	0	0	1	0	0	0	0[4]
Netherlands	0	0	0	0	0	0	0	2	2	2	2	1
Portugal	1[1]	1[1]	1[1]	3[1]	12	14	29	30	106	170	142[2]	
Spain	0	0	0	0	0	0	0	0	0	0	2	32[4]
Switzerland	2	8	15	29	64	68	45	38	14	50	33	1
United Kingdom	14 407	25 359	37 280	35 090	24 436	14 562	8 149	4 393	3 235	2 301	1 101	
Non-OECD countries	0	0	0	0	0	0	0	0	2[3]	0	0	0

1. Imported cases
2. Includes imported cases: France: 1 in 2000; Portugal: 1 in 2000. Ireland: 1 in 1990, 2 in 1991 and 1992, 1 in 1994 and 1995;
3. Liechtenstein: 2 cases reported 30 September 1998.
4. Belgium: data as of 21 February 2001; Denmark: data as of 15 January 2001; France: data as of 2 March 2001 – clinical cases = 10; cases detected within the framework of the research programme = 3 ; cases detected as result of systematic screening at the abattoir = 1; Germany: data as of 15 March 2001; Italy: case confirmed on 16 January 2001; Luxembourg: data as of 28 February 2001; Netherlands: data as of 19 January 2001; Spain; data as of 21 March 2001.

Source: Office International des Epizooties (OIE) [http://www.oie.int/eng/info/en_esb.htm]

basis for selecting risk management measures but not in the assessment of health risks. Other countries express concern that such factors may be used to unjustifiably impede trade in agricultural and food products. Still others stress that the integrity and credibility of their science-based food regulatory systems could be undermined by the introduction of other factors.

Risk communication and consultation are seen as a means of enhancing consumer confidence in food safety regulation and controls, and in addressing consumer concerns about food safety. They are increasingly regarded as essential elements of food safety strategy. Mechanisms generally exist in OECD countries for consulting interested parties in the development of food safety regulation, including consumer organisations, the food industry, trade organisations and other interest groups. These mechanisms differ, however, in their level of formality and in the specific measures employed to elicit and reflect the views of stakeholders. In particular, there are differences in the degree to which regulators are proactive in consulting interest groups, rather than simply making information available and inviting views on regulatory proposals.

Policies to improve environmental performance

Continuing concern with environmental issues in agriculture…

All OECD countries are paying more attention to reduce harmful and enhance beneficial environmental effects of agriculture, and to ensure the sustainability of resource use. The key agri-environmental issues being addressed include the reduction of water and air pollution, moving towards full-cost recovery for the supply of water; reducing risks of soil erosion, limiting greenhouse gas emissions and enhancing the sinks, and the conservation of biodiversity, wildlife habitats and landscape related to agricultural activities. It is, however, difficult to measure the environmental impacts of these policies (Box I.7).

Box I.7. **What have been the impacts of policies on the environment?**

From the available evidence, policy measures appear to have contributed to altering farm management practices and changing agricultural land use patterns. The conservation of certain "high nature value" habitats on agricultural land and the reduction of diffuse pollution are examples, but there is at present insufficient information in many cases to be sure about the extent and permanence of these changes within or across OECD countries. While in some cases improvements have been made, they have been more costly than would have been the case in the absence of production enhancing policies. Overall, the environmental performance of agriculture in OECD countries over the past 15 years has been mixed as shown in the OECD report, *Environmental Indicators for Agriculture Volume 3: Methods and Results* (OECD, 2001).* Water pollution levels from nitrogen and pesticides remain at relatively high and damaging levels in some OECD countries, but the decrease in nitrogen and pesticide use in many countries has helped improve water quality. Environmental risks also persist, such as soil erosion and water resource depletion, and agriculture's impact on biodiversity, habitats and landscape has been harmful in some cases. For some countries, agricultural greenhouse gas emissions have been reduced and improvements in farm management practices, such as conservation tillage and input use efficiency, have been made. Some agricultural systems provide various benefits, such as conserving wildlife habitat, acting as a sink for greenhouse gases and providing landscape amenity. Some estimates of the possible long-term effects of OECD agriculture on the environment to 2020 have also recently been examined in OECD *Agricultural Outlook* 2001-2006 (2001).

* *For further information on the* OECD *agri-environmental indicators work, see the* OECD *website at: www.oecd.org/agr/env/indicators.htm*

... policies aim to improve environmental quality

Many OECD countries began to introduce measures to address environmental issues in agriculture in the late 1980s, but their scope and importance vary widely across OECD countries. Many policy measures focus on **reducing pollution** from agriculture by providing incentives or disincentives to alter farm management practices. In some countries, policy measures also provide incentives for the **provision of environmental goods and services** by agriculture. The range of measures intended to improve environmental performance in agriculture is large: economic instruments (payments, charges/taxes, tradable permits), regulations and community and business-led based approaches. The provision of general services to farmers through research, information, training, advice and support to marketing is focusing more on dealing with environmental problems on farms, as well as developing niche markets for goods and services produced in ways that protect the environment and natural resources. Overall, public agri-environmental expenditure has increased significantly since the early 1980s.

While more policy measures targeted at improving environmental performance are being implemented in OECD countries, agricultural policy measures themselves have had both harmful and beneficial effects on the environment. Some agri-environmental measures have incurred higher budgetary cost to the extent that they have offset environmental damage resulting from other agricultural policies. In addition, payments for the provision of environmental services may over-compensate farmers to the extent that some of the costs are incurred in the production of agricultural output that is remunerated in the market.

Agri-environmental measures are not the only instruments used to improve the environmental performance of agriculture. Increasingly, environmental regulations, such as the Nitrate Directive in the European Union, set limits to pollution from agricultural activities by controlling nitrates, phosphates, pesticides and water. Reforms of water policies seek to improve the environmental efficiency of water use. For instance, zoning (land use) policies circumscribe certain agricultural enterprises, particularly those adjacent to urban areas, and the implementation of international agreements (*e.g.* the Kyoto Protocol on Climate Change and the Convention on Biological Diversity) have implications for particular environmental effects linked to agriculture.

Economic instruments becoming more widespread...

Economic incentives are, in most cases, provided in the form of **payments to farmers**. Some of these pay farmers for the provision of environmental services and some to reduce environmental harm. Some programmes provide payments to farms if certain practices are adopted. These include area payments for the adoption of low-input or organic farming systems. Both the targeting and implementation of these payments vary across OECD countries, as does their share in the overall support to agriculture. Significant payments (around 30% of budgetary-financed payments to farmers) are provided in **Norway** and **Switzerland**, mainly for landscape maintenance (area payments). In the **European Union** most of the agri-environmental payments are provided, under management agreements based on individual agreements between farmers and regional/national authorities, as compensation for restrictions on certain farming practices and the maintenance of key landscape features, for support to organic farming and for farming in regions with identified environmental risks. Some agri-environmental payments are targeted to specific areas in **European Union** member-countries (*Environmentally Sensitive Areas*) and to agricultural land located in *National parks and reserve*, or water catchment areas. These payments are co-financed by the European Agriculture Guarantee and Guidance Fund (EAGGF) and member state budgets. However, these measures account for only a small share (around 5%) of total budgetary expenditure to support agriculture.

Payments applied to specific areas to address specific environmental problems represent the most important part of agri-environmental payments in **Australia** (expenditures to promote sustainable agriculture, natural resource management and conservation from the *National Heritage Trust*), the **United States** (prevention of soil erosion in the *Conservation Reserve Programme*) and **Canada** (payments to help the agriculture and agro-food sectors address priority environmental sustainability issues within

the N*ational Soil and Water Conservation Programme*). Increasing payments are provided to farmers in **Japan** in order to support sustainable farming practices and reduction in the use of fertilisers and pesticides (E*nvironmental Conservation*). While payments to farmers adopting *organic farming* are widespread across Europe, when compared to other agri-environmental payments, the share for organic farming is relatively small. In some countries, the support to organic farming is provided mainly through support to research, the dissemination of information and the marketing of organic food (**United States**).

In some countries, agricultural support payments to farmers are provided only if farmers comply with a set of environmental standards and farm-management practice requirements (*cross-compliance payments*). In **Switzerland,** all payments to farms will be subject to such *environmental cross-compliance* in 2002. In the **United States,** the P*roduction Flexibility Contract* (PFC) payments (around 20% of payments to farms) include a *cross-compliance* element. The **European Union** Agenda 2000 introduces the concept of environmental cross-compliance and countries will be able to withhold direct payments from farmers who do not comply with minimum environmental standards being established by European Union member states. Land diversion schemes, although in most cases originally introduced to achieve supply control objectives, are increasingly include environmental conditions such as diverting land to develop semi-natural habitats, which helps to reduce soil erosion and encourages wildlife.

A very few countries have been using *economic disincentives*, such as taxes and charges on inputs or effluents, to limit the negative impacts of agriculture on environment. A *tax on fertilisers* was applied in **Finland**, **Norway** and **Sweden** (but has recently been abolished) as well as in the **United States**. In **Denmark,** fines are applied where excess fertilisers are applied. A *tax on pesticides* is applied in **Denmark**, **Finland**, **Norway** and **Sweden**. In the **Czech Republic**, *charges* are levied per head of ruminant animals to reduce ammonia emissions.

… use of regulations increases

The role of ***regulatory measures*** dealing with environmental quality in agriculture has been increasing. Some of these regulations have set certain minimum standards on the whole agricultural area (*e.g.* **EU** N*itrate Regulation*) or defined specific farm management practices requirements (*e.g. organic farming*). Other regulations can designate, and set specific rules and impose restrictions on certain management practices for farmers, for certain areas of "high' landscape value (national parks or reserves), or high utility value (water catchment areas and areas surrounding water reservoirs). Regulations are also set to protect specific landscape features (*e.g.* the H*edgerow Regulations* in the **United Kingdom**).

Some countries have enforced restrictions on farmers to meet certain minimum environmental standards, such as the disposal of animal waste into watercourses. Stricter regulations have also been set to control the use of agricultural inputs, such as fertilisers and pesticides, which are potentially damaging to the environment. In the **Netherlands**, farmers are obliged to provide mineral accounts to enable the reduction in manure run-off into water courses to be monitored.

Market-led co-operative approaches gaining momentum…

Community, voluntary and business-led approaches support the role of voluntary, collective action in finding local solutions to local environmental problems in agriculture. Within these schemes, the main responsibility for management of natural resources, the environment and landscapes is vested in farmers, rural communities and local governments. The budgetary support finances mainly research, training and, information and knowledge dissemination. Historically, these approaches are more developed through the landcare groups in **Australia** (L*andcare programme*) and farmers' groups for sustainable management in **New Zealand** (R*esource Management Act*).

In some countries, where the demand of environmental services provided by agriculture may be identified and quantified, markets are being created. The remuneration of environmental services is effected by charging all the industries that benefit (*e.g.* recreational and tourism industry) through, for example, a tax on their revenues to make the necessary funds available. Such markets are developing

in many areas of high scenic and nature value in Europe. In addition, environmental charitable trusts and NGOs are also acquiring agricultural land so that it can be farmed in ways that preserve habitats for wildlife, notably birds. Similarly, organic farming is producing specific products to meet demand and is often remunerated through higher prices. The user pays principle is applied in practice in some countries where the firms providing (drinking) water compensate farmers in the water catchment areas, where stricter rules for farming are imposed.

Managing income risk in agriculture

All businesses face and manage risk. The agricultural sector is prone to certain types of risks because of its dependence on climate and biological processes, which contributes to the variability of market prices. When variations in production and prices cause income variability, risk-averse farmers may produce below the level of output that would maximise profit (a case of market imperfection). Moreover, excessive risk can threaten the survival of the farm. However, agricultural support measures and border protection measures mitigate the effects of those risks on farm incomes in many countries. On the other hand, farmers may also become subject to "policy risk" when governments themselves create uncertainties through frequent or unplanned changes in policies or parameters. Management strategies adopted by farmers to deal with income risk depend on the nature and characteristics of the particular risks they face and on the range of instruments available. The range of instruments used in OECD countries is outlined below and Box I.8 assesses the role of government in risk management.

Wide range of income risk management tools and programmes in OECD *countries*

Facilitating access to market mechanisms: In some instances, governments have tried to encourage farmers to use futures markets to manage price risk. In **Canada**, the Cattle Option Pilot Program, which offered a customised option contract to cattle producers covering both price risk and exchange rate risk, was discontinued because of low participation rates. The Agricultural Products Option Program was introduced in 1994 for cotton in **Mexico** and was then extended to additional commodities. Part of the option premium is subsidised (50% under the basic coverage), which was not the case with the Canadian programme. Under the Dairy Option Pilot Program, introduced in 1996 in the **United States**, part of the option premium is also subsidised (80%) as well as brokers fees up to USD 30 per option. In addition to the subsidy element, training and information provided to farmers through local advisors complement the programme and contribute to adoption.

General fiscal and social security measures: Several general fiscal schemes to smooth income variations over time have been applied in **Sweden**. A programme to help farmers stabilise their annual income through tax-linked saving mechanisms is available in **Australia**. In addition, as in some other countries, farmers benefit from the general welfare system, which provides farmers, along with other groups in the economy, with an income safety net. The social security system in **Ireland** includes in its support schemes a specific scheme to support low-income farmers with very low incomes.

Income safety nets are important in Canada

Income safety nets: Canada has been a pioneer in adopting a comprehensive income safety-net approach to shelter farmers from high income losses. In addition to Crop insurance and province-based companion programmes, specific safety net programmes include the Net Income Stabilization Account (NISA), and the Canadian Farm Income Program (CFIP) and. While CFIP applies to all agricultural commodities NISA does not cover supply managed commodities. Under NISA, farmers set aside money in individual accounts matched by government contributions. They can make withdrawals from these accounts when the total gross margin of the farm (gross revenue less cash costs) for all commodities (except supply-managed commodities) falls below the average gross margin of the preceding five years or when taxable household income falls below a fixed level. The CFIP, based on whole farm income, was introduced in 2000 to replace the Agricultural Income Disaster Assistance operating in 1998 and 1999. It guarantees incomes at 70% of an applicant's reference period margin.

Box I.8. **Assessing the role of governments in risk management**

The role of the private sector and government in risk management is subject to much debate. A key role for government should be to provide a regulatory framework and taxation system that facilitates the development of private insurance. Governments often intervene on the grounds that the private sector cannot profitably cover large-scale risk (*e.g.* natural disasters) at a cost that farmers would be ready to pay. However, insurance subsidies, disaster or emergency payments and other support programmes may have undermined the development or the functioning of private insurance systems and, more generally, of market mechanisms to deal with income risk. In fact, specific instruments to deal with income risk are less developed in countries where there are significant levels of support, in particular market price support and output payments.

More generally, risk management is primarily the responsibility of farm managers. Farmers can manage risk at the farm household level through the diversification of income sources and the adoption of production and marketing techniques. In this context, a primary role for the government is to provide a sound business environment in which competitive markets can operate with clearly defined regulations. Governments can also establish a regulatory framework to allow the development of new tools (in the context of futures markets, for example). Governments can also play a role by encouraging technical, economic and financial research and disseminating the results of such research as well as information that can help farmers to choose the most appropriate management strategy.

As described in the text, governments provide risk management instruments to farmers or subsidise market mechanisms in many OECD countries. Such government intervention is often criticised because it encourages farmers to adopt riskier behaviour and, for instance, plant crops in areas where cultivation would otherwise be too risky. Such problem is not encountered with a safety-net programme like the Canadian NISA because accounts are individual. Moreover, its cost is relatively stable given it is based on contributions and not on actual payments. Nevertheless, questions about its effectiveness as a safety net were raised when farm incomes fell in 1998-99.

Insurance subsidies can be criticised because farmers, who have more information about their situation than governments, are prone to alter their behaviour to benefit from insurance payouts, to subscribe only when they incur larger risk than the average and because subsidies generate usually rent seeking behaviour. As a result, crop and revenue insurance programmes can become very costly when parameters are set too high. Moreover, administrative and monitoring costs are often high, and all the more so when efforts are made to prevent moral hazard, adverse selection and rent seeking.*

In most OECD countries, the bulk of support is provided through market price support measures or payments based on output, which in many cases have been designed to reduce farm income variability. More generally, agricultural policies influence the risk environment in which farmers operate, at least through wealth effects (Section I.5 explains how policies affect risk, production and trade). By increasing farm receipts, support policies reduce the adverse consequences of risk on farm households and may lead farmers to adopt more risky behaviour. This is particularly the case for support linked to inputs or outputs which encourages specialisation and production in marginal or unfavourable areas. When assessing the impact of any given measure on risk, the overall mix of policies and the level of producer support are an important part of the overall decision making process.

OECD (2000), *Income Risk Management in Agriculture*, Proceedings of an OECD Workshop, 15-16 May 2000, Paris.

* An evaluation of insurance programmes can be found in OECD (2000), Section C.3 of Part II.

Private-public insurance partnerships can be costly

Crop and revenue Insurance schemes: Government or privately run insurance schemes are common in several countries, but often operate with a substantial subsidy element. **Canada** and the **United States** have been operating crop insurance schemes for a long time as a response to relatively high yield variability. For similar reasons, a comprehensive insurance system is also found in **Spain**.

In **Canada**, crop insurance is provided by provincial governments as part of the overall safety net system. A revenue insurance programme, the Gross Revenue Insurance Plan (GRIP), was introduced in 1991 but was terminated in 1995 as large deficits had accumulated and was replaced by NISA. Similar programmes continue to operate in Ontario and Quebec. These programmes can become very costly when parameters are set too high, as was the case with GRIP.

The **United States** reformed its crop insurance scheme in 1994 and, in addition to subsidised crop insurance operated by the private sector, now offers revenue insurance schemes. Recent trends show that following the 1994 reform, the crop area insured has doubled. Not surprisingly, it was found that among crop insurance options, farmers usually buy the most subsidised insurance policy. With no major natural catastrophe, the system has been financially solvent since 1994 as indemnities have been lower than premiums. In addition to crop insurance, various revenue insurance products have been developed since 1996 on a pilot basis. Legislation was enacted in 2000 bringing permanent changes to the federal crop insurance programme, making premiums more affordable and coverage more attractive to farmers (see Part II, agricultural policy developments in the United States).

The **Spanish** insurance system, which aims at comprehensive coverage of both agricultural production and types of risk, is operated by private companies but subsidised by the government. It is characterised by a high level of integration and co-ordination between farmers, insurance companies and public services.

Governments generally compensate for natural disaster damage

Disaster payments: Catastrophic losses are covered in some countries by a general insurance scheme, while governments in other countries provide *ad hoc* payments when natural disaster strikes. Such payments can be implemented in various ways. In **Norway**, they are based on crop yield losses; in the United States, most disaster payments are for livestock producers based on feed losses; and, in **Hungary**, payments compensate for overall revenue losses.

5. DECOUPLING AGRICULTURAL SUPPORT: KEY FACTORS AFFECTING FARMERS' DECISIONS

Decoupling agricultural policies from production and trade should allow the achievement of some policy objectives while minimising spillover effects in other countries. The wide range of mechanisms through which policies may affect production and trade makes it difficult, however, to identify fully decoupled agricultural policies (OECD, 2001). Those mechanisms – relative prices, quantitative constraints, insurance effects, income effects and expectations – can be illustrated using data from the PSE database.

The relative prices and quantitative constraints impacts

Most kinds of support affect the price of either agricultural inputs or outputs. Market price support raises the domestic prices paid by consumers and received by producers above those on world markets. Output payments increase prices received by the farmer but not those paid by consumers. Area payments, and payments based on historical entitlements, may increase the returns from farming the land and other kinds of input subsidies lower the costs of agricultural production. Even the General Service Support measures may reduce the price paid by farmers for certain kinds of services. Policies that affect prices will affect decisions by producers and consumers and thus overall production, consumption and trade. These are *the relative price impacts* of policy measures. Some support is conditional on farmers respecting constraints on output or input use, which may reduce overall production and trade. These constitute *the quantitative constraint impacts* of policy measures.

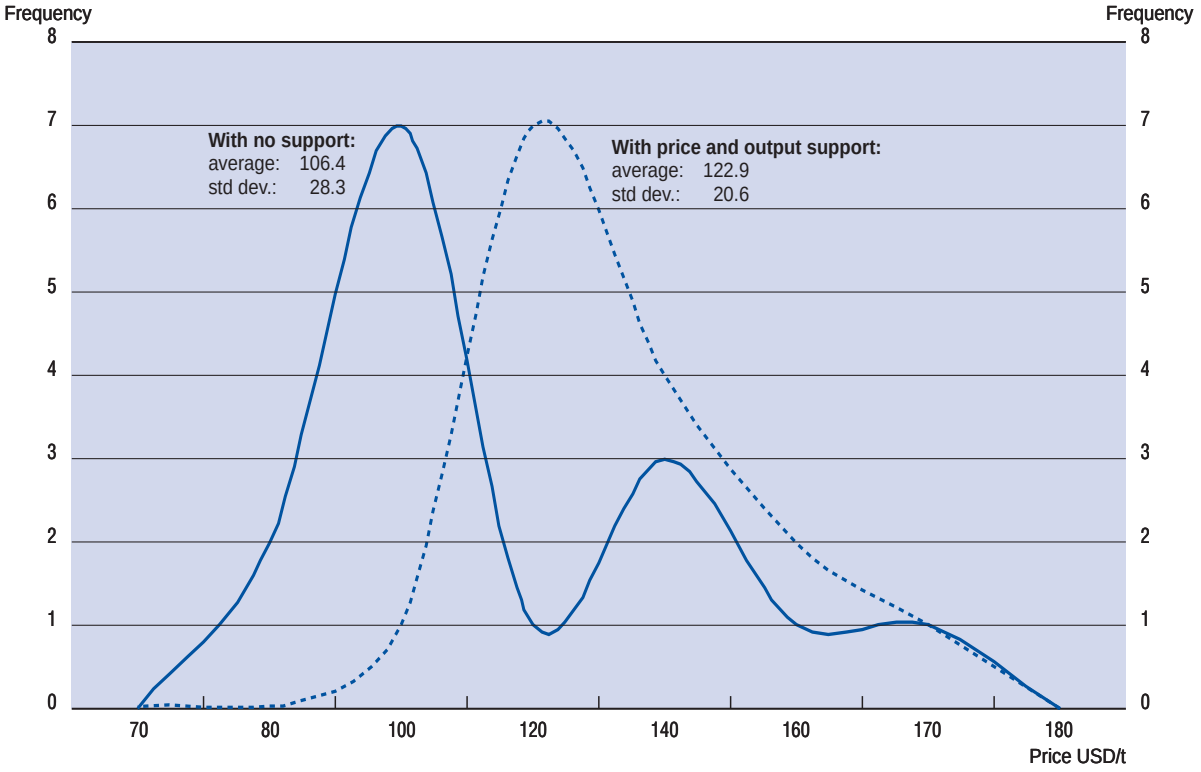
In principle, relative price impacts, and their net impacts in the context of quantitative constraints, can be measured with an equilibrium model representing demand and supply in an appropriate number of input and output markets. The Policy Evaluation Matrix (PEM) model was specifically developed at OECD with the purpose of measuring the impact of policies as classified in the PSEs. In this context, we can define a *degree of decoupling* (DD) varying between zero and one. If a policy measure has a DD value of one, then it has zero impact on production and trade and is "effectively fully decoupled". A value of zero means that the policy measure has an impact equal to that of market price support and is "effectively fully coupled".

The insurance effect

Farmers' decisions are taken in increasingly complex circumstances. There are often uncertainties about what will happen to prices, production and farm income. If farmers are risk averse, policy measures affecting those uncertainties will have an impact on their decisions and on overall production and trade; these are the **insurance effects** of policies.

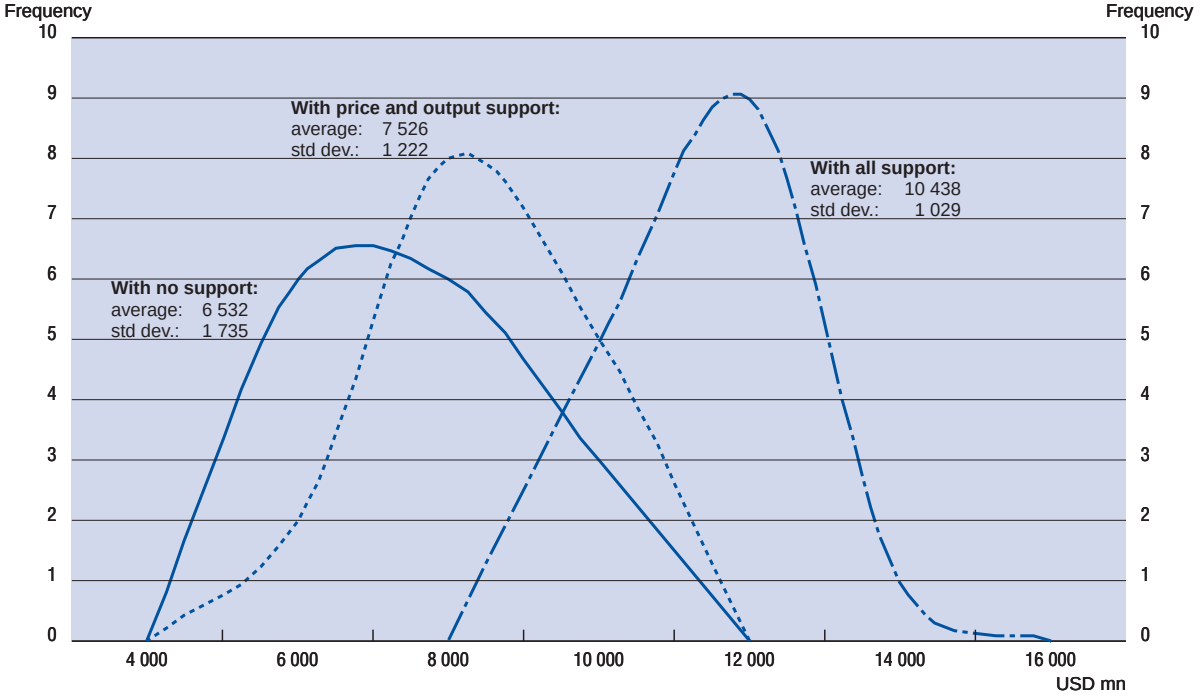
Graph I.11 illustrates the reduction of producer price variability due to market price support and output payments with an example of wheat prices in the United States. For the period 1986-2000, the distribution of world prices differs substantially from that of producer prices, including output (deficiency) payments. Deficiency payments increase the producer price above the world price but they also reduce price variability. In this example, the variability (measured by the standard deviation) of producer prices is only ⅔ that of world prices. In general, the less variable (more stable) producer prices are, the less market risk farmers will perceive. This reduction in the price risk resulting from policy is the insurance effect.

Graph I.11. **US wheat producer's price distribution, 1986-2000**



Source: Secretariat calculations based on the PSE database, 2001.

Graph I.12. **US wheat producers' revenue distribution, 1986-2000**



Source: Secretariat calculations based on the PSE database, 2001.

Table I.4. **Variability of wheat prices and revenues in OECD countries 1986-2000**

	% PSE (average)	Correlation between Producer NPC and the Reference Price	Coefficient of variation of wheat producers' revenues		
			with no support	with price and output support	with all support
Australia	7.4	–0.54	0.34	0.32	0.32
Canada	26.5	–0.52	0.29	0.25	0.26
Czech Republic	–12.4	–0.81	0.39	0.22	0.25
European Union	45.7	–0.59	0.29	0.17	0.16
Hungary	–8.0	–0.68	0.37	0.27	0.28
Japan	84.7	–0.60	0.22	0.20	0.22
Mexico	18.5	–0.33	0.20	0.21	0.20
New Zealand	1.7	–0.19	0.29	0.30	0.29
Norway	73.5	–0.52	0.40	0.29	0.23
Poland	12.1	–0.38	0.23	0.26	0.25
Switzerland	68.2	–0.37	0.25	0.22	0.20
Turkey	30.4	–0.61	0.30	0.25	0.23
USA	37.9	–0.83	0.27	0.16	0.10

Source: OECD, PSE database 2001. All monetary variables were converted into current USD before calculating any indicator.

Table I.4 contains the results of an analysis of PSE data for wheat in the OECD countries for the period 1986-2000. The correlation between border protection (as measured by the producer Nominal Protection Coefficient) and the world price is negative for all the countries, and high in absolute terms for most of them. This means that market price support and output payments increase in years of low world prices thereby reducing the variability of producer prices. This is not surprising given that some measures such as the deficiency payments in the **United States** and the **European Union**'s border measures are specifically designed to have such an impact. The lower domestic price variability in a "large-enough" country results in higher world price variability, the extent of which is an empirical question. This will have a direct impact on the decisions of domestic farmers facing lower levels of risk and on those of third country farmers who face higher levels of risk. Evaluating the impact of the policies in a given year requires analysing both the size of the price gap and its correlation with the world price in order to capture relative price and insurance effects.

The income and wealth effect

Farmers may face imperfections in credit markets that constrain the amount of money they can borrow or, alternatively, increase the interest rates they must pay on borrowings. A policy that increases support and farm income could lead to an easing of credit limits and/or a reduction in interest rates. In either case there would be an impact on production decisions. In addition, if farmers are risk averse, a higher income may reduce their degree of risk aversion thereby affecting their production decisions; such situations are referred to as **income effects under certainty and under risk**.

The PSE database includes estimates of producer receipts, which can be used as a rough proxy of income. The positive wheat PSE in most OECD countries (first column of Table I.4) implies an increase of wheat producers' receipts. This additional revenue may have an income effect on production and trade. Policy measures also have an impact on the variability of income that may affect production decisions. Graph I.12 shows the distribution of United States wheat producers' revenue in the period 1986-2000 with no support (receipts at world prices); with price and output support measures (receipts at domestic price plus output payments); and with all support (receipts including all support). Comparing the first two distributions, we find that price and output support increase the average revenue – having an income effect on production – and reduces the variability (standard deviation) – having an insurance effect on production. Comparing the second and third distributions, we find the same sign for the impact of other payments on revenue level and variability. These latter payments have a larger impact on levels and a smaller impact on variability.

In virtually all OECD countries, price and output support reduce the revenue variability of wheat producers (compare columns three and four in Table 1.4). In the **European Union** and the **United States**, market price support and output payments reduced the coefficient of variation of revenues by half. On the other hand, the other PSE categories of payments have a significant effect in reducing wheat receipts variability, notably in **Norway**, **Switzerland**, **Turkey** and the **United States**.

The expectations effect

Past policies have increased effective producer prices and revenues and reduced income variability. Policy developments thus directly affect the context in which the decision is made and will create expectations on how future policies will affect prices and revenues: the *expectation effect*.

Are there policies with no impact on production and trade? Given all the impact mechanisms described above, it seems unlikely. There is little empirical evidence of the relative importance of the insurance risk, income and expectation effects of support measures. What little there is, shows that those effects are in general smaller than those that affect relative prices and quantities directly. The relevant empirical issue is to investigate which policy measures allow various legitimate objectives to be achieved while having the smallest overall impacts on production and trade.

6. THE MULTILATERAL TRADE NEGOTIATIONS IN AGRICULTURE

Agricultural trade negotiations now underway

In accordance with Article 20 of the URAA, multilateral trade negotiations on agriculture resumed in March 2000 in Special Sessions of the WTO Committee on Agriculture.[8] The negotiations during the first phase, March 2000-March 2001, have focused primarily on the submission of initial position proposals. Some proposals, particularly those from the **European Union**, **Japan**, **Korea**, **Norway**, **Poland**, **Switzerland**, the **United States** and **India** cover a wide range of subjects for negotiation. A full description of the proposals by country is available on the WTO web site: *www.wto.org*.

As agreed in March 2000, WTO members took stock at the end of March 2001 of the progress made so far and agreed on a programme of work for the second phase of the negotiations for continuing the reform process under Article 20 of the URAA. In the course of the stock-taking exercise undertaken at that meeting, a number of general statements were made in which participants outlined, *inter alia*, their respective views regarding the negotiating proposals and other submissions which had been presented and examined in the course of the first phase of the negotiations, as well as with respect to the organisation of the further work of the negotiations. It was generally agreed that the first phase of the negotiations for continuing the reform process had been satisfactorily completed.

The following statement by the Chairman of the Special Session of the WTO Committee on Agriculture on the first phase of the negotiations on agriculture was made:

> "This meeting is the seventh Special Session and marks the end of the first phase of the negotiations. As was agreed in March last year at the first Special Session, we must now take stock of the progress made so far in the negotiations.
>
> The Uruguay Round Agreement on Agriculture and the related commitments in each Member's WTO Schedule of commitments were the first steps in a longer term reform process in agricultural trade as recognised in the Preamble and Article 20 of the Agreement. Article 20 required that the negotiations on continuing the reform programme be initiated one year before the end of the implementation period.
>
> For the past twelve months the Committee on Agriculture meeting in Special Session has been negotiating the continuation of the reform process as required by Article 20 of the Agreement on Agriculture and in accordance with the decision of the General Council in February 2000.
>
> In my view a great deal of progress has been achieved under the work programme established in March last year for the first phase of the negotiations. It is important, of course, that this momentum is sustained into and throughout the next phase of the negotiations.
>
> In all, 44 negotiating proposals and three technical papers have been submitted by a total of 125 WTO Member countries covering the different issues related to agriculture trade that are of major and fundamental interest and importance to the participating countries concerned. In addition, the Secretariat has made available 27 background papers at the request of Members in order to facilitate the negotiating process.
>
> The examination of these proposals and submissions has been both detailed and intensive. This I am sure has contributed to heightening our appreciation of the wide range of interests involved, as well as the complexity of many of the issues which will have to be addressed in more detail in the next phase of the Article 20 negotiations.

In a sense, the first phase of the negotiations, although it has involved a great deal of work in capitals and in the Special Session meetings, has been relatively straight forward. Its importance lies in the fact that the basic positions of participants are now on the table. The next phase will represent the beginning of a more challenging process.

At your request, I have conducted extensive informal consultations on how the second phase of the Article 20 negotiations should be structured and organised. I would like to thank all delegations for their contributions and assistance in this regard. I am encouraged to believe that the draft work programme under consideration constitutes a finely balanced basis for the next phase of the negotiations."

Agricultural trade negotiations move to the second phase

The Committee adopted the following work programme for the second phase of the negotiations for continuing the reform process under Article 20 of the Agreement on Agriculture:

- "Nature and scope of Work Programme: work in depth on all issues and options for policy reform set out in Members' proposals, with further elaboration as appropriate.
- Basis of work: Article 20, negotiating proposals submitted by Members and their additional elaborated proposals.
- Special and differential treatment is an integral part of all elements of the negotiations.
- Organisation of Work Programme: work to be conducted in informal and formal meetings of the Special Sessions; Chair to prepare reports on the informal meetings and prepare annotated agendas ahead of the meetings.
- Sequencing of Work Programme and Timetable: three Special Session meetings to be held back-to-back with the regular meetings of the Committee on Agriculture in September and December 2001 and in March 2002 (each of these Special Sessions would convene informally and conclude with short formal meetings), plus three informal Special Session meetings in May and July 2001 and in February 2002. Any additional meetings would be scheduled by the Chair after consultations with Members.
- Review of progress of the negotiations shall take place in the formal March 2002 meeting.

Without prejudice to Article 20, which details the objective of the negotiations and the factors to be taken into account, the Chair recommends the following list of trade and non-trade issues drawn from Members' proposals for the first two/three meetings:

– Tariff quota administration

– Tariffs

– Amber Box

– Export subsidies

– Export credits

– State trading enterprises

– Export restrictions

– Food security

– Food safety

– Rural development

The foregoing work programme is adopted without prejudice to the decisions that may be taken at the fourth Ministerial Conference." Proposals, however, vary widely.

NOTES

1. See *The* OECD *Agricultural Outlook*, OECD 2001.
2. In comparing 1986-88 and 1998-2000 periods, the difference between the highest and lowest country %PSEs increased, and the reduction in the %PSE was greater in countries with a level of support below the OECD average.
3. For a summary of the OECD conference on Genetically Modified Foods see OECD (2000), *Genetically Modified Foods: Widening the Debate on Health and Safety*, Paris. An electronic version of this report is available at: *www.oecd.org/subject/biotech/edinburgh.htm*.
4. An OECD *ad hoc* Group on Food Safety examined the evolving institutional structures and regulatory frameworks, as well as the on-going activities addressing food safety issues at the national and international level. The report was based on submissions from 28 Member countries and the European Commission, and on close consultations with other international organisations with foods safety responsibilities (*e.g.* FAO, WHO, Codex, WTO).
5. For a synthesis of the main economic issues arising from the use of modern biotechnology in agriculture see, OECD (2000), Modern Biotechnology and Agricultural Markets, Paris. An electronic version of this report is at: *www.oecd.org/agr/Documents/apm005fe.pdf*.
6. The interpretation of substantial equivalence differs among regulatory authorities and stakeholders. For some, the concept incorporates an analysis of possible intended and unintended effects of genetic modification. For others, it focuses on the substantive quality and characteristics of the final product. Efforts are currently underway through the OECD and Codex to strengthen the existing common set of principles and information, which can be applied to the safety assessment of GM foods and feeds.
7. Import bans related to BSE and/or foot and month disease are not unique to OECD countries. WTO notifications for January and February 2001 indicate that, for example, Argentina, Indonesia, Malaysia and Singapore announced import bans on the entry of certain animals and by-products from selected European countries.
8. For a thorough analysis of the URAA implementation in OECD countries see OECD (2001), *The Uruguay Round Agreement on Agriculture: An Evaluation of its Implementation in* OECD *Countries*, Paris.

ANNEX

Annex Table I.1. **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 consumer expenditure[f]
Australia	1997-99[g]	3.1	. .	4.9	2.1	10.8	3.1	1.1	2.7	14.9[h]
	1992-94[g]	3.1	2.0	5.2	2.3	11.0	2.3	1.1	2.8	14.4
	1986-88[g]	4.3	2.2	5.9	2.4	18.4	2.0	1.2	2.7	15.2
Canada	1997-99	2.2	1.8	3.8	1.6	4.7	1.9	2.5	2.4	9.8
	1992-94	2.3	1.7	4.3	1.7	5.5	1.6	3.1	2.4	11.0
	1986-88	2.8	1.7	5.2	1.9	5.9	1.3	3.1	2.2	12.1
Czech Republic	1997-99[g]	4.0	. .	5.5	2.6	1.9	2.0	2.6	2.6	23.5
	1992-94[g]	4.7	. .	7.6	2.7	3.8	3.2	3.8	3.4	26.5
	1989-91[g]	6.5[i]	. .	11.4	3.0	. .	. .	. .	. .	27.0
European Union	1997-99[j]	2.2	1.8[k]	4.7	2.2[l]	4.2	3.7	4.8	3.5	15.7[m]
	1992-94[j]	2.6	2.0[l]	5.5	2.4[l]	5.5	4.0	6.0	3.6	16.2
	1986-88[j]	3.3	2.1[l]	7.6	2.7[l]	5.7	3.5	6.7	3.6	19.0
Hungary	1997-99[g]	4.8	3.3	7.6	3.3	6.9	4.2	1.9	1.8	26.5
	1992-94[g]	5.8	4.8	9.9	4.3	13.7	7.5	3.1	2.5	24.7
	1989-91[g]	. .	2.9	. .	4.3	. .	. .	. .	. .	23.4
Iceland	1997-99	9.6[h]	. .	8.5	7.8	0.6	0.2	2.2	5.1	16.9
	1992-94	9.9	6.6	9.6	7.7	0.7	0.3	2.7	5.9	19.3
	1986-88	10.5	6.1	10.5	10.8	1.3	0.1	2.6	5.1	31.3
Japan	1997-99	1.7	2.3	5.3	2.8	0.1	0.2	6.6	3.2	16.4
	1992-94	2.2	2.5	6.0	2.7	0.1	0.2	7.8	3.1	18.2
	1986-88	2.8	2.8	8.2	2.6	0.1	0.2	7.9	2.9	20.8
Korea	1997-99	5.1	1.9	11.8	0.9	0.5	0.5	3.6	1.2	15.4
	1992-94	6.9	2.1	14.7	1.0	0.5	0.5	3.6	1.2	19.1
	1986-88	10.4	2.1	22.1	1.3	. .	. .	. .	. .	25.7
Mexico	1997-99[g]	4.9	3.9	20.9	1.8	2.8	2.3	4.2	1.4	22.1
	1992-94[g]	5.7	3.5	25.7	2.1	3.8	2.4	6.0	2.2	22.4
	1989-91[g]	7.1	3.8	24.2[i]	. .	. .	. .	. .	. .	25.1
New Zealand	1997-99	7.2[h]	. .	8.9	3.8	37.1	4.0	2.9	4.5	10.8[h]
	1992-94	7.8	3.8	10.6	4.1	36.8	3.4	3.1	3.8	11.9
	1986-88	7.0	4.0	10.4	4.7	37.9	2.8	3.1	3.3	12.4
Norway	1997-99	2.0	. .	4.7	2.4	0.5	0.3	2.3	2.6	20.3
	1992-94	2.6	2.0	5.5	2.4	0.5	0.4	2.5	2.7	22.1
	1986-88	3.3	1.5	6.8	2.5	0.7	0.4	2.6	2.6	22.1
Poland	1997-99[g]	4.2	3.6	19.6	3.3	5.3	4.5	3.3	3.2	22.8
	1992-94[g]	6.5	6.9	24.6	3.1	6.9	4.3	5.4	4.3	29.3
	1989-91[g]	. .	9.6	26.7	2.5	. .	. .	. .	. .	32.7[i]
Switzerland	1997-99[g]	. .	. .	4.7	1.6	0.7	1.6	2.6	2.9	16.8
	1992-94	. .	. .	4.4	1.7	1.0	1.5	3.1	2.8	17.6
	1986-88	. .	. .	5.3	. .	1.2	1.4	3.3	3.0	. .
Turkey	1997-99[g]	15.6	4.8	43.1	. .	8.0	6.7	2.5	1.7	. .
	1992-94[g]	15.3	4.8	44.3	. .	12.3	7.2	2.3	2.0	. .
	1989-91[g]	18.2	4.6	47.3	. .	15.7	6.4	1.8	1.7	. .
United States	1997-99	1.5	1.3	2.7	1.3	5.1	1.7	1.6	2.1	7.4
	1992-94	1.7	1.4	2.8	1.4	6.5	1.8	1.9	2.2	8.1
	1986-88	1.8	1.4	3.0	1.4	8.6	1.5	2.0	3.0	8.7
OECD average	1997-99	2.1[o]	1.7[n]	7.9	1.9[n, q]	3.9	2.7	3.8	2.9	12.2[m, s]
	1992-94	2.5[p]	1.9[n]	9.0	2.0[n, q]	5.0	2.8	4.9	3.1	13.7[t]
	1986-88[n]	2.9[p]	2.0	8.7	2.2[q]	5.6[r]	2.5[r]	5.2[r]	3.3[r]	14.8[u]

. . Not available. For the 1997-99 average, where 1998 and/or 1999 data is unavailable; estimates are made from previous year.
Note: For definitions and sources, see following page.

Definitions and sources for the main agricultural indicators Annex Table I.1.

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. 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, N*ational Accounts* database. Latest year is 1999.

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. Latest year is 1997.

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 is 1999. Definitions and data taken from OECD, L*abour 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). Latest year is 1997. Data taken from OECD, STAN *database*.

e) % of agricultural trade in total merchandise trade: Trade data taken from the OECD F*oreign Trade Statistics*, Paris, January 2000, 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 year is 1999 for all countries.

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, N*ational Accounts*. Latest year is 1999.

g) OECD Secretariat estimates based on national sources.

h) No 1997-99 data; refers to latest available year (usually 1996).

i) 1990-91 average as 1989 value unavailable.

j) EU-15.

k) Excluding Ireland, Italy and Luxembourg.

l) Excluding Ireland and Luxembourg.

m) Excluding Luxembourg, Portugal, Sweden, United Kingdom.

n) Excluding Czech Republic, Hungary, Mexico and Poland (except Col 4, where 1992-94 and 1997-99 OECD averages include Mexico).

o) Excluding Iceland, New Zealand and Switzerland.

p) Excluding Switzerland.

q) Excluding Ireland, Luxembourg, Switzerland and Turkey.

r) Excluding Korea.

s) Excluding Australia, Czech Republic, Hungary, New Zealand and Turkey.

t) Excluding Czech Republic, Hungary and Turkey.

u) Excluding Switzerland and Turkey.

Annex Table I.2. **Selected structural indicators**

	Change in final agricultural output[1] %	Annual change in real net farm income[2] %		Share of agricultural land area in total land area[3] %	Change in agricultural land area[3] %	Change in the number of farms[4] %	New farmers[5]		Educational level of farmers[6]	
							% under 35 years	% over 35 years	% basic training	% full training
	1985-87 to 1995-97	Mid-1980s to Mid-1990s	1999 to 2000	Late 1990s	1985-87 to 1996-98	1985-87 to 1995-97	Late 1990s		Mid/late 1990s	
Australia	32	–1.6	2.0	61	0	–19	32	68	40	20
Austria	–2	4.3	–4.8	42	–1	–19	. .	. .	21	16
Belgium	22	0.7	12.2	46	2	–25	. .	. .	24	13
Canada	25	–1.3	22.2	8	0	. .	. .	. .	. .	8
Czech Republic	. .	. .	. .	55	–2	. .	. .	. .	. .	. .
Denmark	12	4.9	24.1	63	–4	–26	. .	. .	10	3
Finland	–6	–4.0	22.0	7	–6	–23	44	56	. .	. .
France	11	7.9	1.3	54	–5	–28	. .	. .	15	26
Germany	–1	. .	6.9	50	–5	–24	. .	. .	48	12
Greece	9	–3.9	0.0	71	–1	–16	. .	. .	<1	<1
Hungary	. .	. .	. .	67	–5	. .	. .	. .	. .	. .
Iceland	. .	. .	. .	23	0	. .	. .	. .	31	30
Ireland	17	. .	6.5	64	–23	–30	. .	. .	9	9
Italy	4	–0.1	–4.3	52	–10	–15	. .	. .	3	2
Japan	–10	2.8	–7.7	14	–7	–22	12	88	. .	. .
Korea	. .	–2.5	. .	20	–10	–33	. .	. .	1	2
Luxembourg	3	. .	0.4	. .	. .	–28	. .	. .	. .	. .
Mexico	. .	. .	. .	56	6	. .	59	41	. .	. .
Netherlands	13	0.4	3.7	58	–2	–15	. .	. .	40	25
New Zealand	. .	. .	18.9	62	–5	–15	. .	. .	. .	. .
Norway	–9	–1.7	. .	3	11	–24	51	49	33	. .
Poland	. .	. .	. .	61	–2	. .	. .	. .	. .	. .
Portugal	. .	. .	–7.5	40	–9	–25	. .	. .	3	< 1
Spain	12	. .	4.6	60	–2	–29	. .	. .	1	< 1
Sweden	–7	. .	4.9	8	–5	–17	32	68	. .	. .
Switzerland	–2	. .	. .	40	–22	–20	58	42	. .	. .
Turkey	16	. .	. .	53	5	. .	. .	. .	. .	. .
United Kingdom	3	. .	–10.8	72	–4	–10	24	76	12	14
United States	23	0.7	2.9	46	–3	–9	24	76	23	19
EU-15	. .	. .	1.3	45	–5	. .	. .	. .	. .	. .
OECD	. .	. .	. .	39	–1	. .	. .	. .	. .	. .

. . Not available.

1. Agricultural output in million US dollars converted using constant 1990 Purchasing Power Parities (PPPs). For Germany, the change in final agricultural output refers to the period 1990-92 to 1995-97.
2. The period mid-1980s refers to the early 1990s for Finland, France, Korea and the United States. All 1999 to 2000 figures are forecasts made by the respective national agencies.
3. Belgium: including Luxembourg; Czech Republic: national data for 1985-87 refer to 1980-82 and cover the Czech part of the former Czechoslovakia; Germany: data cover western and eastern part.
4. Germany: data cover western and eastern part. For Austria and Korea, data for the period 1985-87 refer to the year 1980. For Finland, the percentage covers the period 1990-95. For Portugal, data for the period 1985-87 refer to the year 1989 (new statistical methodology) and data for the period 1995-97 refer to the year 1995. For the United States, data for the period 1995-97 refer to the year 1994.
5. For the United Kingdom, the categories refer to under 45 years old and over 45 years old.
6. Basic training includes any training course completed after school at an agricultural college, such as an agricultural apprenticeship; Full training includes any training course for at least two years after school at an agricultural college, such as that completed at a university.

Source: OECD Environmental Indicators for Agriculture – Volume 3: Methods and Results, 2001; FAO Database, 2001; 1999-2000 farm income figures from the following sources:
Australia: Agricultural Industries Financial Statistics, Preliminary, 1998-99, Australian Bureau of Statistics, February 2001.
Canada: Farm Income, Financial Conditions and Government Assistance Data Book, Agriculture and Agri-Food Canada, October 2000.
EU Members: Statistics in Brief, Eurostat, 15 December 2000.
Japan: Monthly Statistics of Agriculture, Forestry and Fisheries, Ministry of Agriculture, Forestry and Fisheries, December 2000.
New Zealand: Situation and Outlook for New Zealand Agriculture and Forestry, Ministry of Agriculture and Forestry, September 2000.
United States: Agricultural Outlook, Economic Research Service, United States Department of Agriculture, January-February 2001.

Annex Table I.3. **Selected agri-environmental indicators**

	Semi-natural habitat[1]		Change in the nitrogen balance[2] (kg/ha of total agricultural land)	Change in pesticide use[3] (tonnes of active ingredients)	Share of agriculture water use in total use[4]	Share of greenhouse gas emissions from agriculture
	Share of pasture in total land area %	Change in pasture area %	%	%	%	%
	1996-98	1985-87 to 1996-98	1985-87 to 1995-97	1985-87 to 1995-97	Mid/late 1990s	1995-97
Australia	54	–2	9	. .	. .	20
Austria	24	0	–21	–37	. .	7
Belgium	21	–6	–4	10	0	10
Canada	3	0	111	–17	8	10
Czech Republic	12	12	–45	–66	0.80	3
Denmark	8	55	–23	–34	37	22
Finland	0	–14	–18	–49	. .	8
France	19	–13	–10	0	12	17
Germany	15	–9	–31	. .	. .	6
Greece	40	–2	–34	32	. .	13
Hungary	12	–7	–131	–73	8	6
Iceland	23	0	–2	. .	. .	11
Ireland	44	–35	27	16	15	34
Italy	15	–12	–30	–51	. .	10
Japan	1	0	–7	–13	65	2
Korea	1	–21	47	13	63	. .
Luxembourg	. .	. .	. .	. .	. .	5
Mexico	42	6	–28	. .	79	. .
Netherlands	31	–9	–17	–48	. .	12
New Zealand	50	–4	31	2	73	56
Norway	0	37	1	–45	7	10
Poland	13	1	–39	–43	9	5
Portugal	11	19	7	. .	. .	10
Spain	22	7	1	–24	. .	14
Sweden	1	–14	–28	–63	6	14
Switzerland	29	–2	–24	–25	. .	11
Turkey	16	12	–29	. .	. .	7
United Kingdom	46	0	–19	–14	1	8
United States	26	–1	23	–1	40	7
EU-15	18	–6	–15	–24	32	11
OECD	26	–1	–1	. .	44	8

. . Not available.

1. Belgium: including Luxembourg; Czech Republic: national data for 1985-87 refer to 1980-82 and cover the Czech part of the former Czechoslovakia; Germany: data cover western and eastern part; Switzerland: national data were used and 1996-98 refer to 1995-97.
2. While these calculations have been derived from using an internationally harmonised methodology, nitrogen conversion coefficients can differ between countries, which may be due to a variety of reasons. For example, differing agro-ecological conditions, varying livestock weights/yield, and differences in the methods used to estimate these coefficients. Also one part of the calculation is the atmospheric deposition of nitrogen which is mostly independent from agricultural activities.
   Czech Republic: data for the period 1985-92 refer to the Czech part of the former Czechoslovakia. Germany: data include eastern and western part for the whole period 1985-97.
   Iceland: the 1995-97 average refer to 1995.
   EU-15: data exclude Luxembourg.
   OECD: data exclude Luxembourg.
3. Some caution is required in comparing trends across countries because of differences in data definitions and coverage. Belgium: data include Luxembourg; EU-15: data exclude Germany and Portugal.
   Data for 1985-87 average cover:
   1986-87 average for Greece, Korea, and Spain; 1985 for New Zealand; 1985-86 average for Austria; 1987 for Italy; 1988 for Ireland and Switzerland; and 1989 for the Czech Republic.
   Data for 1995-97 average cover:
   1994-95 average for Hungary; 1994-96 average for Switzerland; 1995-96 average for Italy; 1991-93 average for the United States; 1994 for Canada; and 1997 for New Zealand.
4. Agricultural water use includes water abstracted from surface and groundwater, and return flows (withdrawals) from irrigation for some countries, but excludes precipitation directly onto agricultural land. Irrigation water use data were used as proxy for Finland, Germany, Greece, Italy, Portugal and Spain.
   Belgium: data include Luxembourg.
   EU-15: Austria and the Netherlands are excluded from the calculation of the share of agriculture water use in total use.
   OECD: Austria, Iceland, the Netherlands and Switzerland are excluded from the calculation of the share of agriculture water use.

Sources: OECD Environmental Indicators for Agriculture – Volume 3: Methods and Results, 2001; FAO Database, 2001.

Part II

BACKGROUND INFORMATION

BACKGROUND INFORMATION

I. AGRICULTURAL POLICY DEVELOPMENTS

This part of the report provides detailed background information on agricultural policies of each OECD country using a standard format. The main policy instruments are described, followed by developments in domestic agricultural policies during 2000. For the European Union, additional information is provided on policy developments in each Member State, concentrating on those implemented by the national authorities. Developments in trade policy are described under a separate heading. An overall evaluation, which includes a summary of changes in the level and composition of support, concludes each country chapter.

N*ote to readers*: The term *producers* refers to producers of primary agricultural products (generally farmers, growers and ranchers) and the term *consumers* refers to first consumers of these primary products – *e.g.* mills, dairies and slaughterhouses – and *not* to final consumers. Numbers relating to 2000 should be treated as provisional. All changes in prices and expenditure data are expressed in nominal terms unless stated otherwise. GDP deflators are included in Tables III.14-III.44 to facilitate interpretation of monetary changes in countries where inflation is high.

Australia

Main policy instruments

Australian agriculture is supported through regulatory arrangements and budgetary-financed general programmes. State level statutory and regulatory arrangements enable pooling of returns for some commodities, but the competition from imports, substitutes and the prospect of inter-state trade limit the scope of farmers to increase revenues. Budgetary-financed support includes general programmes, such as Agriculture – Advancing Australia (AAA) and the Natural Heritage Trust (NHT) for structural adjustment and the environment. Commonwealth[1] tax concessions smooth taxable income from one year to another and encourage investment in land and water conservation. Expenditure on research and development is financed from Commonwealth and State budgets, supplementing funds collected through special industry levies. Farmers, and some other consumers of diesel fuel, receive rebates on excise taxes on fuel used in off-road vehicles and machinery.

The Australian dairy industry was deregulated in mid-2000. Until then, state governments set farm-gate prices for fresh milk and operated a mix of pooling and quota arrangements, and Commonwealth marketing arrangements supported the producers of milk used to manufacture dairy products. To enable dairy farmers to adjust over time to a deregulated environment, the Commonwealth government has put in place adjustment assistance to dairy farmers, financed through a consumer levy (Box II.1).

Monopoly export arrangements are in place for wheat, barley (in Queensland, South Australia, and Victoria), rice (in New South Wales), and sugar (in Queensland). All sugar produced in Queensland is vested in the Queensland Sugar Limited although sales on the Queensland domestic market are at export parity prices.

Box II.1. **Deregulation of Australian Dairy Industry**

Fresh milk regulations in seven states and the federal regulations covering manufacturing milk were removed simultaneously in July 2000. Prior to deregulation farmers received Domestic Market Support (DMS) payments, funded by levies on domestic sales of fresh milk and manufactured dairy products. There were six sets of fresh milk regulations operating independently in each state. These regulations included farm-gate and retail price controls on fresh milk sales as well as regional supply management arrangements. While three states had tradable production quotas, the others had pooling arrangements where an equal proportion of each farmer's production was eligible to receive a fresh milk premium. The farm-gate price of fresh milk varied from state to state, but was always well above the price of manufacturing milk. Price differences remained despite the potential for inter-state trade, because an industry agreement ensured that inter-state fresh milk sales were priced to maintain the regulated farm-gate price. As part of a regulatory reform process, the states ended retail price controls and regional supply arrangements between 1995 and 1998, so that only farm-gate price controls were in place at the beginning of 1999.

A government mandated regulatory review process required each state to review the statutory fresh milk arrangements. In July 1999, the state of Victoria concluded there was no net public benefit from retaining farm-gate price controls and decided to deregulate. As Victoria is a low-cost dairy producer accounting for more than 60% of national milk supplies, the prospect of interstate trade would have undermined farm-gate price controls in the other states, thus making national deregulation inevitable. An industry restructuring plan was developed to avoid possible interstate price wars, a collapse in industry asset values and regional, rural adjustment pressures. The plan involved the simultaneous removal of DMS scheme and fresh milk regulations on 1 July 2000 to allow the market to determine milk prices. At the same time, a structural adjustment package was introduced to help producers cope with the adjustment pressures. The aim was to minimise the risk of a short-term collapse in industry confidence, which could lead to too many farmers leaving the industry. A further objective was to assist farmers to make the choice of adjusting to lower market returns or leaving the industry.

The Dairy Industry Adjustment Package (DIAP) costs around AUD 1.78 billion (USD 1 billion), and consists of a AUD 1.63 billion (USD 0.9 billion) Dairy Structural Adjustment Program (DSAP), a AUD 30 million (USD 17 million) Dairy Exit Program (DEP), and a 3-year AUD 45 million (USD 26 million) Dairy Regional Assistance Program (DRAP). The adjustment package is funded by a levy of 11 cents (USD 6 cents) per litre on all domestic sales of fresh milk. The levy will remain in place for approximately eight years until the package is fully funded. It partially replaced the implicit consumer tax inherent in the fresh milk regulations. As fresh milk prices were expected to fall sharply and then move more gradually towards the lower manufacturing milk price, the levy was set at a level to ensure consumer prices would not rise after deregulation.

Dairy farmers eligible for DSAP assistance receive a fixed quarterly payment over 8 years. The DSAP payments are based on milk production in 1998-99, they are unaffected by current or future milk production decisions and are subject to income tax. The payments assist producers to adjust to the expected reduction in farm incomes resulting from the deregulation of producer prices, taking into account variations between states according to the size of the regulated milk price premium and the shares of fresh and manufacturing milk. The fixed rate of payments for individual producers has led to some banks offering to convert the stream of assistance payments into a single lump sum payment, which is based on commercially determined discount rates for the payments paid. This is likely to improve the flexibility and effectiveness of the adjustment programme. Instead of DSAP payments, producers can choose to leave the dairy industry and get an exit payment of up to AUD 45 000 tax free under the Dairy Exit Program. The payments are subject to an asset test and the conditions attached to the programme prevent farmers from re-entering the industry at a later date. The Dairy Regional Assistance Program is intended to assist dairy-dependent communities generate alternative employment and deal with any social dislocation from deregulation.

ABARE (2001*) expects the milk price to fall substantially in fresh milk producing states, where milk will continue to be supplied locally, but the industry is likely to contract and manufacturing milk production will decline. The remaining producers will need to expand their scale of operations in order to remain economically viable over the medium term. In manufacturing milk producing states, the reduction in manufacturing milk prices has been offset by stronger world prices for dairy products and the low value of the Australian dollar. In those states, some small-scale producers will leave the industry while others will expand their operations. Deregulation will accelerate the industry adjustments and milk production is likely to increase. The overall impact on milk production is expected to be limited. A small fall in the national dairy herd is expected to be more than offset by continued growth in per cow milk yields. Milk production is expected to increase over the medium term if there are higher world prices.

Box II.1. **Deregulation of Australian Dairy Industry** (*cont.*)

In the longer term, higher farm productivity and increased demand for dairy products (generated through lower prices) resulting from deregulation are likely to bring significant benefits to those operators remaining in the industry. The consequent improved production efficiencies (at both the producer and processor levels) are also expected to improve the competitiveness of the industry in both domestic and international markets. Consumer prices, however, will remain above world market prices during the 8-year period, because of a levy used to finance the structural adjustment package for dairy farmers.

It is premature to draw conclusive policy lessons from this experience. Nevertheless, it is instructive to note that concerted actions to address long recognised inefficiencies and high costs followed very quickly the realisation that the alternative was no longer continued regulation, but sudden and uncertain industry adjustment to a deregulated environment. co-operation and communication across national and sub-national levels of government, and amongst the various levels of the food production chain, enabled the negative, short-term effects of reform to be identified and flexible adjustment schemes to be developed. Simultaneously, modest immediate benefits for consumers and substantive long-term potential benefits for producers and consumers alike were identified.

* ABARE 2001, T*he Australian Dairy Industry: Impact of an open market in fluid milk supply*, ABARE Report to the Federal Minister for Agriculture, Fisheries and Forestry, January 2001, Canberra, Australia.

Developments in domestic policies

In 2000, Australia's ***wheat*** marketing legislation was reviewed pursuant to the National Competition Policy to determine whether the single desk arrangements for wheat provide an overall net benefit for Australia. In particular, the review assessed the purposes of the Wheat Marketing Act and its effectiveness; its impact on, and the costs and benefits to, the Australian farming community and, whether Wheat Marketing Act restrictions on competition are justifiable in terms of net benefits. It also examined possible alternatives and the likely consequences of any change. In the final report, the review committee recommended retaining the single desk arrangements at least until 2004, while partially deregulating exports of durum wheat and non-bulk wheat for a three-year trial period. The final report was submitted to the Minister for Agriculture, Fisheries and Forestry in December 2000 and the government will announce its response in 2001 after having considered the recommendations.

A Commonwealth ***sugar*** support package was announced in September 2000 in response to a severe downturn in the sugar industry due to a combination of historically low world sugar prices, low sugar content, a serious outbreak of orange rust, rat plagues and a series of cyclones and floods over the 1998-2000 period. The package includes income support (equivalent to social welfare payments) for ten months to provide immediate support to eligible farmers in Queensland, New South Wales and Western Australia. These *ex gratia* payments can be made to cane growers whose primary source of income is derived from the planting and harvesting of sugar cane. In addition, interest rate subsidies on new loans up to a maximum of AUD 50 000 (USD 29 000) secured by growers for replanting purposes in either or both the 2000 or 2001 planting seasons will be granted. Interest rate subsidies on new or existing loans up to a maximum of AUD 100 000 (USD 58 000) will be provided for eligible growers subject to an off farm net assets test. Growers will also be encouraged to improve their business planning skills under the existing "FarmBis" element of the Agriculture – Advancing Australia package. Rural financial counselling assistance for growers will be made available to those who do not have ready access to financial counselling services. AUD 1 million (USD 0.6 million) was provided for an independent assessment of the sugar industry's viability and restructuring needs. Assuming a 50% take-up of income support, a 40% take-up of planting assistance, and a 30% use of loan interest subsidies, the total cost of the package over two years could reach AUD 83 million (USD 48 million).

New arrangements were put in place to establish **H*orticulture*** Australia Limited (HAL), a single marketing and research and development service corporation. HAL merges the functions of two

statutory authorities, the Australian Horticultural Corporation (AHC) and the Horticultural Research and Development Corporation (HRDC). HAL operates as a company limited by guarantee under Corporations Law and undertakes the activities formerly undertaken by the AHC and the HRDC. The arrangements concerning industry levies and government funding for R&D remained unchanged.

The Australian ***dairy*** industry was deregulated with the ending of the Domestic Market Support scheme in June 2000 and the repeal of regulatory arrangements by all Australian states in July 2000 (Box II.1). The Commonwealth government provides support to farmers to help them to adjust to the deregulated market. The total cost of the Dairy Industry Adjustment package is estimated to be AUD 1.78 billion (USD 1 billion) and consists of the Dairy Structural Adjustment Program, the Dairy Exit Program and the Dairy Regional Assistance Program. The package is funded by an AUD 11 cent (USD 6 cent) per litre levy on drinking milk. This consumer levy was introduced in July 2000 for a period of eight years. A Statutory Authority, known as the Dairy Adjustment Authority (DAA) is responsible for the determination of producer entitlements to the various payments.

The **Wool** Industry Future Directions Taskforce undertook a major inquiry into the future of the Australian wool industry in 1999. Whilst most of the recommendations of the Taskforce Report focused on individual farm businesses, some comments were included regarding the future of the statutory authority providing wool industry services, which as the Australian Wool Research and Promotion Organisation (AWRAP). Relating to the future of the statutory arrangements, the government decided:

- from July 2000, following a voluntary vote of wool producers, an interim wool tax rate of 3% to cover privatisation costs was introduced, with a further reduction to 2% once those costs have been met; and
- that AWRAP be converted into a Corporations Law holding company, Australian Wool Services Limited (AWS), with two operating subsidiaries. There has been widespread industry support for the reforms and the new company structure, with three-quarters of Australia's woolgrowers applying for AWS shares.

As part of the new tax arrangements which took effect in July, farmers will continue to receive a full ***diesel fuel tax rebate*** for off-road use and may also be eligible for a rebate for some other diesel-like fuels (*e.g.* light fuel oil and bunker fuel) under amendments to the Diesel Fuel Rebate Scheme. A second scheme, the Diesel and Alternative Fuels Grants Scheme, will offer grants that reduce the cost, across all sectors and industries, of on-road transport to regional and rural areas. This scheme will operate until June 2002 and applies to compressed natural gas, liquefied petroleum gas, recycled waste oil, ethanol and canola as well as diesel. The scheme only applies to heavy transport vehicles (4.5 tonnes or more) and trains. In addition, farmers, like all businesses, will be eligible for refunds on inputs and services of the Goods and Services Tax (GST), which came into operation in July 2000.

A federal ***flood relief package***, targeted at seriously affected wheat, cotton and horticultural farmers in northern New South Wales and southern Queensland, was introduced in 2000. The total cost of the package is estimated to be AUD 216 million (USD 125 million) over two years; it includes cash-grants for replanting crops, interest subsidies and limited income support (equivalent to social welfare payments) for farmers.

The 2000-01 Budget provided AUD 309.4 million (USD 179 million) under the Agriculture – Advancing Australia (AAA) package over the four financial years to 2004-5 to extend the programme and widen and enhance its measures (Table II.1). New measures include amalgamating FarmBis and Property Management Planning as well as introducing a national component; a two-year pilot Farm Innovation; introducing Farm Help – Supporting Families through Change (which enhances the successful Farm Family Restart Scheme); funding climate research through the Climate Variability in Agriculture Research and Development Program; supporting market development through Farm Growth Through Export Growth and maintaining the Retirement Assistance for Farmers Scheme until 2001.

The federal, state and territory governments agreed to jointly fund a AUD 1.4 billion (USD 0.8 billion) National Action Plan for **Salinity and Water Quality** over seven years. The Action Plan will support regional communities and landholders to undertake targeted action in 20 highly affected catchments or

Table II.1. **Australia: Expenditure on Agriculture – Advancing Australia programmes**

Programme	Annual expenditure			
	1999/2000		2000/2001	
	mn AUD	mn USD	mn AUD	mn USD
Farm Business Improvement Programme (FarmBis)				
National	0.7	0.5	0.8	0.5
State	7.0	4.5	23.3	13.5
FarmBis Australia – Skilling farmers for the future	–	–	8.9	5.1
Farm Help (formerly Farm Family Restart Scheme)	26.5	17.1	38.7	22.4
Farm Management Deposits Scheme	23.0	14.8	23	
Rural Adjustment Scheme (transitional arrangement)	16.0	10.3	18	10.4
Exceptional Circumstances Relief Payment Scheme	23.0	14.8	14.2	8.2
Climate Variability in Agriculture	1.1	0.7	0.5	0.3
Total	97.3	62.8	127.3	73.8

Source: Department of Agriculture, Fisheries and Forestry, Canberra, 2000.

regions. Key objectives of the Action Plan are to prevent, stabilise and reverse trends in dryland salinity affecting rural production, the conservation of the environment and community assets (houses, roads, etc.); to improve water quality and secure reliable water supplies for human, agricultural and industrial uses and the environment.

Developments in trade policy

Australia continues to maintain sanitary and phytosanitary standards which reflect its relatively disease-free status. Import arrangements were changed, permitting imports for the first time of durian from Thailand. In addition, the conditions for the import of baby corn from Thailand were broadened to include baby corn from all sources. The conditions for the import of cherries from the USA were broadened to allow cherries from counties other than the San Joaquin valley.

Imports of all ***beef*** and beef products from Europe were suspended from 8 January 2001 because of the fear of BSE or mad cow disease. Almost all the beef from Europe was in cans or prepared products, such as filled pasta, make up only 0.2% of total beef consumption. British beef products have been banned in Australia since 1996.

Australia surpassed its Food Aid Convention (FAC) commitment in 1999-2000, the value of food-aid was AUD 49.6 million (USD 29 million).

Overall evaluation

Australian agriculture is export-oriented. Domestic producer prices were 5% above world market prices in the mid-80s, by 2000 the price gap had declined to only 2%. This is reflected in the very low %PSE, which decreased from 9% in 1986-88 to 6% in 1998-2000, but increased slightly in 2000. Gross farm receipts were only 6% greater in 2000 than what they would have been without any support. Australia continued to have the second-lowest support levels among the OECD countries in 2000 (Tables III.14-15, Figure III.2).

The most significant policy development in 2000 was the removal of all milk pricing arrangements. Although milk is still the most supported commodity in Australia, the %PSE for milk– 16% in 2000[2] – is only about a third of the OECD average. The Commonwealth sugar support package caused the %PSE for sugar to increase to 9% in 2000, but this is still less than one fifth of the OECD average. Total market price support (MPS) has fallen by nearly a third since the mid-80s and accounts now for less than a third of the PSE.

The funding of the structural adjustment package for dairy farmers through a consumer levy means that consumer prices for milk will remain above world market prices during the 8-year adjustment period. Overall, the implicit tax on consumers (%CSE) was at the same level in 1998-2000 – 4% – as in 1986-88. The rate of import protection (consumer NPC) has decreased since the mid-80s and is the second-lowest among the OECD countries. Support to general services provided to agriculture (GSSE) decreased slightly in 2000, although the GSSE has increased significantly since 1986-88. Commonwealth expenditure on inspection services is about half of what it was in the mid-80s, but expenditure on research, development and infrastructure has more than doubled. The total support to agriculture (TSE) was 0.4% of GDP, which is about a third of the OECD average and half of the 1986-88 level in Australia.

The new and better-targeted programmes under the Agriculture – Advancing Australia package will benefit the rural sector through improving farm management skills and helping farmers to become more profitable. Given the extent of soil salinity problems in Australia, the new National Action Plan for Salinity and Water Quality seems especially timely.

Australian agriculture continues to be highly market-oriented. Deregulation of the dairy sector in 2000 was an important step in removing the last remaining statutory marketing arrangements. Overall the developments have been in-line with the long-term reform objective of reducing market distortions and support to agriculture

Canada

Main policy instruments

Federal and provincial governments are jointly responsible for the implementation of agricultural policies. Provincial governments provide roughly half of total budgetary expenditure on agricultural measures. Supply management, price support and trade measures are the main support instruments in the milk, poultry and egg sectors. Safety-net income support programmes – Fall cash advances, Crop Insurance, the Net Income Stabilization Account (NISA) and province-based companion programmes, which involve funding from both federal and provincial governments and producers, apply to all agricultural commodities except those covered by the supply management system. Following the 1998-99 Agricultural Income Disaster Assistance Program (AIDA), a Canadian Farm Income Program (CFIP) was introduced in 2000. It is a whole-farm income stabilisation programme that covers income from all agricultural commodities. National and regional adaptation programmes are being developed under the Canadian Adaptation and Rural Development (CARD) programme, with increasing attention being given to innovation, marketing, environmental protection, food safety, human resource capacity building and rural development.

Developments in domestic policies

The ***dairy sector*** continues to be the most heavily supported agricultural sector in Canada, accounting for around 40% of Canada's total producer support and close to three-quarters of market price support. Industrial milk production continues to be restricted through the use of production quotas determined by the Canadian Milk Supply Management Committee. In August, the Market Sharing Quota was increased to 46.03 million hectolitres, up 3.5% from August 1999. In November, it was further increased by 1.8% to 46.85 million hectolitres. In February, the federal dairy subsidy was cut by CAD 0.76 per hectolitre to CAD 1.52 per hectolitre (CAD 15.64 or USD 10.53 per tonne) and will be phased out by February 2002. The target price for industrial milk increased by 1.5% to CAD 56.65 per hectolitre (CAD 582.93 or USD 392.52 per tonne); support prices for butter and skimmed milk powder were raised, respectively, to CAD 5 540 (USD 3 330) and CAD 4 680 (USD 3 151) per tonne. The resulting increase in the domestic producer price for milk resulted in market price support for milk to rise by 7% between 1999 and 2000. Following the WTO ruling, changes were made to the milk marketing system as explained in the trade policy section.

No policy changes were implemented in the ***poultry*** sector. The commercial quota for turkey in 2000/01 will be 0.8% greater than that for the previous year. The quota for chicken was increased by 3.5% in 2000 on an annualised basis.

For the second consecutive year, those producers of breeding ***livestock*** in designated areas of Alberta, Nova Scotia and Saskatchewan, who had to sell all or part of their herds in 1999 due to drought, were made eligible for a one-year tax deferral on 2000 income from these sales.

Amendments to provisions of the **Canada Transportation Act** in relation to western ***grain*** handling and transportation were approved and implemented in mid 2000. The reforms involved removing the rate scale for regulated grain shipments and replacing it with maximum revenue entitlements for Canadian National and Canadian Pacific. The revenue ceilings will result in a reduction in the rail transportation costs of prairie farmers CAD 5.92 (USD 4) per tonne. The reforms also require the Canadian Wheat Board (CWB) to use a competitive public tendering system instead of an administered system to transport a portion of its grain to the four ports, and provide for an independent third-party to monitor and report on the impacts of the reform package. In addition, the federal government is offering the western provinces a total of CAD 175 million (USD 118 million) over five years towards maintaining and improving roads for use by grain truck traffic.

In August, it was announced that producers enrolled in the Market Revenue Program (MRP) in Ontario would receive interim payments in September, of up to 80% of their total expected MRP payments, rather than the initial interim amount of 50% of total payments. Final payments for 1999 would be made in December 2000. The total payments for the 1999 crop year equalled approximately CAD 127 million (USD 86 million). The MRP has been renewed for the 2000 crop year with payments to be made in 2001.

A three-year safety net framework agreement was signed in July. In addition to on-going programmes (Fall cash advances, NISA, Crop Insurance and provincial companion programmes), it sets out the principles for a new **Canadian Farm Income Program (CFIP)** worth CAD 2.2 billion (USD 1.5 billion) over three years (compared to CAD 5.5 billion or USD 3.7 billion for the whole agreement). The cost will be shared by Federal and Provincial governments on the same basis as for on-going stabilisation programmes (*i.e.* the Federal government provides 60% of the funds). The new programme is based on whole farm income and guarantees incomes at 70% of an applicant's reference period margin. It treats all farmers similarly regardless of which commodities they produce and includes all labour (family and non-family) as an allowable expense.

The two-year **Agricultural Income Disaster Assistance Program (AIDA)**, which was launched in December 1998, ended with the 1999 crop year. By September 2000, 48 000 applications had been received. A process to review AIDA claims has been launched with Review Committees in all provinces.

Grain and oilseed producers in Saskatchewan and Manitoba received one-time payments worth CAD 360 million (USD 242 million) from the federal and provincial governments. These payments, intended to aid producers in those provinces to adjust to higher transportation costs, were distributed under the **Canada-Saskatchewan Adjustment Program (C-SAP)**, CAD 260 million (USD 175 million), and the **Canada-Manitoba Adjustment Program (C-MAP)**, CAD 100 million (USD 67 million). Individual payments were equal to a percentage of the first CAD 125 000 (USD 84 000) of farmers' average eligible net sales.

Various initiatives are being implemented under the **Canadian Adaptation and Rural Development** (CARD) programme. The new adaptation priority areas will be innovation, marketing, environmental protection, food safety, human-resource capacity building and rural development.

As part of CARD initiatives, the government of Canada will invest CAD 10 million (USD 6.7 million) over the next three years to help the agricultural and agro-food sector continue work on a number of priority ***environmental issues***, including soil health, wildlife habitat, biodiversity, greenhouse gas emissions and water quality. This new programme will complement other CARD funding for environmental programmes, including Climate Change Research (CAD 4 million or USD 2.7 million), Climate Change Skills and Knowledge Transfer (CAD 465 000 or USD 313 000), on-farm wildlife habitat

programme (CAD 600 000 or USD 404 000 – also known as Countryside Canada) and the Livestock Environmental Initiative (CAD 1.3 million or USD 0.9 million).

In order to improve the Canadian food safety system, the government of Canada is providing CAD 11.4 million (USD 7.7 million) for ***the Canadian Food Safety Adaptation Program*** (CFSAP), an industry-government partnership under the CARD fund. The funding will help national associations or groups in the downstream industry develop risk management strategies, tools and systems to enhance food safety throughout the food chain, using a Hazard Analysis Critical Control Point approach.

The ***Canadian Rural Partnership*** **(CRP)** pilot projects initiative is a four-year cross-sectoral initiative supporting community development in rural and remote Canada. In 2000/01, the third year of implementation, CRP is funding 100 projects totalling approximately CAD 3 million (USD 2 million). In 2000, Canada announced and commenced implementation of the CAD 9.3 million (USD 6.3 million) ***Canadian Agricultural Rural Communities Initiative*** **(CARCI)** which focuses on enhancing the viability of rural agricultural communities. CARCI is funded from CARD and responds to its rural development priority. These funds are available to rural residents and organisations, and the projects are not necessarily agriculture-related.

Developments in trade policy

In respect of URAA commitments, most of the 21 tariff-rate-quotas (TRQs) were filled during the calendar year 1999 and the marketing year 1999/2000. Quotas for margarine, wheat, barley and barley products were significantly under-utilised.

Canada was a party to several WTO ***dispute settlement procedures*** involving agricultural commodities (Part II.2). In October 1999, the WTO Appellate Body ruled that Canada could continue limiting imports of fluid milk under its TRQ to cross-border purchases by Canadian consumers. As a result of the WTO ruling that certain Canadian export pricing practices for dairy products conferred export subsidies, changes have been made to the way milk is marketed in Canada. Changes to federal dairy marketing regulations were implemented in December 2000. In addition, new provincial dairy export mechanisms have been created. All the mechanisms are based on individual contracts between producers and processors. On 1 March 2001, following a request by the United States and New Zealand, a World Trade Organisation Compliance Panel was established to review Canada's new export pricing practices. A panel decision is expected by June 2001.

Canada and the Philippines signed a Memorandum of Understanding on Agricultural co-operation detailing future collaboration in the areas of quarantine and inspection systems, rural development and water management. In September 2000, Canada implemented an Order expanding duty-free access for over 300 agricultural tariff lines to imports originating from least developed countries. By virtue of this initiative, virtually all agro-food imports from LDCs enter Canada duty-free and without placing policy obligations on the exporting country. Refined sugar and out-of-quota (*i.e.* above WTO market access commitment levels) agro-food products continue to be excluded from duty-free treatment. Canada's expenditure on food aid increased by 26% in 2000, to about CAD 400 million (USD 269 million).

Overall evaluation

Canada has been moving away from commodity specific support towards an income safety-net approach. As measured by the %PSE, support decreased from 33% in 1986-88 to 18% in 1998-2000. However, both market price support and budgetary payments increased in 2000; as a result, the %PSE rose to 19%, which is about half the OECD average. The implicit tax on consumers as measured by the %CSE remained at 16% (Tables III.16-17, Figure III.3).

With the reduction of total support and the introduction of income safety-net payments, the combined share of MPS and output payments has on average remained stable at about two thirds of the PSE. The average producer NPC indicated that prices received by farmers were on average only 15% higher than those at the world market price during 1998-2000, a significant improvement on the average for 1986-88. The producer NPC varies across commodities with producers of most commodities

receiving prices close to the world price. Milk, which benefits from both market price support and payments based on output, is an exception to this pattern, and in 2000 the price received by producers for milk was more than double the world price.

In 2000, payments based on historical entitlements were introduced in some provinces and delivered as emergency *ad hoc* payments. Although these payments are not linked to current input or output levels, they may affect production decisions because producers come to expect extra assistance whenever the world price falls. The producer NAC has declined by half since 1986-88 and in 1998-2000 the value of gross farm receipts was on average 22% higher than what it would be at world market prices. The consumer NAC has shown a similar trend indicating an increase in the degree of market orientation. At 0.8% of GDP, the total support to agriculture measured by the TSE remains low.

Overall there has been a significant reduction in support to Canada's agricultural sector over the last decade and a considerable movement towards market orientation, but progress has been unequal among sectors. No changes have been made to supply managed sectors, and the dairy sector stands out as receiving the highest support. Use of emergency *ad hoc* payments, if continued, would be expected to affect production decisions and potentially reduce market orientation.

Czech Republic

Main policy instruments

The State Fund for Market Regulation (SFMR)[3] was replaced by the State Agricultural Intervention Fund (SAIF) in 2000. The new legislation gives to the SAIF extended powers to regulate markets, including to introduce production quotas, set-aside schemes and provide direct payments to producers. Nonetheless, the mode of operation in 2000 remained unchanged but new measures are planned for 2001. Market price support remains an important element of support to agriculture provided through price regulations, trade barriers and export subsidies. Up to 2000, price regulation has been focused mainly on bread-wheat and milk. In the case of bread-wheat, the market regulation operates through forward-purchase contracts to provide advance payments to farmers before the sowing period, and intervention purchases at guaranteed prices after harvest. In the dairy sector, all the processors have been required to pay farmers a minimum price for all milk deliveries since 1999.[4] Export subsidies are granted to export large dairy surpluses (around one fifth of total market production). Milk production is also supported by headage payments on dairy cows with high yields. In addition to export subsidies for milk, direct export subsidies are used on an *ad hoc* basis for other commodities. The export of some other commodities is also assisted by export credits. The prices of other products – notably beef, poultry, sugar and oilseeds – are supported mainly through border measures.

Under the "Landscape care"(*Údrzba Krajiny*) programme, a generalised agricultural area payment (introduced in 1998) is available to all farmers and is pegged to the administrative (official) price of land. This payment is intended to support the "non-productive" functions of agriculture, such as the maintenance of agricultural landscape. Higher rates of payments per hectare are provided to agricultural land in National Parks and Protected Landscape Areas as a compensation for stricter legal limitations on production imposed in these areas. Other area-based payments support organic agriculture. In less favoured areas (LFAs), headage payments are available for meat cattle and sheep. This support is conditional on maintaining an animal density between 0.3 and 1.5 livestock units per hectare. Payments for bee-keeping and flax production, as well as payments supporting newly established vineyards, hop gardens and grassland areas, are maintained as separate programmes. Credit subsidies and guarantees on loans from commercial banks, which are administered by the Support and Guarantee Fund for Farmers and Forestry (SGFFF), provide support to investment in agriculture. Tax refunds and concessions are accorded to farmers and the processing industry, the most important being the refund of the fuel tax. Charges are levied per head of ruminant animals to reduce ammonia emissions. Since 1998, farmers in water supply basins have been compensated,[5] using area based payments, for losses incurred by extra restrictions placed on their activities. The government supports agricultural training and education, research and extension, and plant and animal breeding.

Rural development measures focus mainly on village infrastructure and communal services. Since 1999, the Plan for Rural Development has been developed as a project to be implemented through the Special Accession Programme for Agriculture and Rural Development (SAPARD) co-financed by European Union funds.

Developments in domestic policies

For ***bread-wheat***, price support in the marketing year 2000/2001 was provided through state intervention purchases after harvest. As in the previous year (1999/2000), the guaranteed price for these purchases was fixed at CZK 3 300 (USD 85) (Table II.2). Due to the situation on the markets (price increases) no limits were set for the volumes to be bought into intervention. The SFMR spent around CZK 346 million (USD 9.1 million) to purchase around 100 000 tonnes of wheat from the 2000 harvest, *i.e.* one-fifth of the purchases in previous years. Most of the expenditures under the grain market regulation in 2000 were spent in repayments of credits that financed interventions in previous years and financing the storage costs of accumulated intervention stocks. In 2000, the total cost of intervention on the wheat markets, including repayment of loans to finance the 1999 intervention and storage costs, net of revenues from grain sales (CZK 1.9 billion, or USD 49 million) were CZK 809 million (USD 21 million) which is one quarter of 1999 expenditures (Table II.2). For the marketing year 2000/2001 the government introduced a system of quotas and administered prices for ***sugar and sugar beet***, similar to that in the European Union. However, the administered prices are fixed at a lower level than in European Union. For "A" quota, the minimum guarantee price is fixed at CZK 16 650 (USD 431) per tonne of refined white sugar and at CZK 948 (USD 25) per tonne of sugar beet. The government also fixed a maximum price for sugar, which is 2% higher than the minimum guarantee price.

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

	1999		2000p		Change in CZK price 1999 to 2000
	CZK/tonne	USD/tonne[4]	CZK/tonne	USD/tonne[4]	%
Procurement price[1]	3 300	95	3 300	85	0.0
	'000 tonnes		'000 tonnes		%
Maximum intervention quantity[2]	500		n.a.		n.c.
Actual intervention quantity	496		100		–79.8
	mn CZK	mn USD	mn CZK	mn USD	%
Total intervention cost[3]	3 092	89	809	21	–73.8

n.a. Not applicable.
n.c. Not calculated.
1. Price valid for all the crop year (July to June).
2. Quantity set by the SFMR before the 1999 harvest, linked with the credits available to finance intervention purchases. In 2000 no limits were set for intervention quantities.
3. SFMR net expenditures of wheat market regulation (total expenditure for wheat market regulation net of receipts from grains sold from intervention stocks in a given calendar year).
4. Conversion uses OECD annual exchange rates (January to December).
Source: State Agricultural Intervention Fund, Prague, 2000.

Following various changes in the minimum price for ***milk***, and in the system of regulation in 1999, the SFMR approved market regulation rules applicable for the whole year 2000. The minimum price for milk was set at CZK 7.50 (USD 0.19) per litre, which is 4% lower than the minimum price applied in the second half of 1999. The surplus production of milk was estimated at 500 million litres (around 20% of total production) but due to higher prices in world markets, the export support for dairy products was 15% lower than in 1999 (Table II.3).

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

	1999		2000p		Change in CZK price 1999 to 2000 %
	CZK	USD[3]	CZK	USD[3]	
Minimum price/litre	7.8[1]	0.23	7.5[2]	0.19	–3.8
Export subsidy (mn)	1 154	33	985	25	–14.6

1. For the first quarter the price was set at CZK 7.80; this minimum price was paid by exporting dairies in order to obtain export subsidies; from the 2nd quarter of 1999 the minimum price was lowered to CZK 7.20 and made compulsory for all milk deliveries and all dairies, from July 15 the minimum price was set again at CZK 7.80.
2. Minimum price compulsory for all milk deliveries.
3. Conversion uses OECD annual exchange rates (January to December).

Source: State Agricultural Intervention Fund, Prague, 2000.

The ***area payments*** (per hectare) for agricultural land, which are differentiated according to the official price of land, declined by 12% to reach CZK 3.3 billion (USD 86 million) in 2000. However, they remain the most important direct payments to agriculture. There were important structural changes to programmes providing ***headage payments***. Headage payments under the former programmes were substantially reduced (Table II.4) and a new programme, providing support to extensive livestock breeding on permanent pastures, was introduced in 2000. Overall the headage payments were 21% lower than in 1999. Total expenditures on area and headage payments declined by 14% (Table II.4). Direct payments to promote ***organic farming***, introduced in 1998, were increased by 6% (*i.e.* a much smaller increase than in 1999) to reach CZK 89 million (USD 2.3 million) in 2000. To compensate partly for the damages to crops resulting from a severe drought the government approved a payment to farms of CZK 200 million (USD 5.3 million).

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

	1999		2000p		Change in CZK price 1999 to 2000 %
	CZK	USD[6]	CZK	USD[8]	
Acreage payments[1] (mn)	3 755	109	3 317	86	–11.7
Headage payments meat type cattle[2] (mn)	426	12	190	5	–55.4
Payment/head[3]	1 095-6570	32-190	2 642	68	n.c.
Headage payments dairy cows[4] (mn)	781	23	186	5	–76.2
Payment/dairy cow	2 800-3500[7]	81-101	2 250	58	n.c.
Headage payments sheep[5] (mn)	54	2	30	1	–44.4
Payment/sheep	986-1076	29-31	1 001	26	n.c.
Payments for animals on pasture[6] (mn)	n.a.	n.a.	590	15	n.c.
Payment/livestock unit	n.a.	n.a.	2 500	65	n.c.
Total headage payments (mn)	1 261	36	996	26	–21.0
Total acreage and headage payments	5 016	145	4 313	112	–14.0

n.a. Not applicable.
10. Not calculated.
1. Payments per hectare of agricultural land for the whole territory, differentiated according to the official price of land.
2. In 1999 payments to all agricultural area with payments rates differentiated according to the official land price. In 2000 payments available only to less favoured areas.
3. Payments per head of meat type suckled calf in 1999, and per head of suckler cow with a meat type calf in 2000.
4. In 1999, payments per head of dairy cow with milk yield over 4 500 litres/year. In areas with official land prices lower than CZK 4/m^2, the payment is subject to a limitation of one livestock unit per hectare of feed crops. In 2000 payments for dairy cow with milk yield over 7 000 kg/year.
5. Payment per sheep in areas where the official land price is lower than CZK 3.5/m^2.
6. Payments for extensive breeding of cattle, sheep, goats and horses on permanent pasture land (max. 1.4 cattle units per hectare of pasture land and at least 4 months a year on pasture).
7. Payment of CZK 2 800 per head of a dairy cow with milk yields from 4 500 to 5 500 litres/head/year, and of CZK 3 500 per head of dairy cow with yields higher than 5 500 litres/head/year.
8. Conversion uses OECD annual exchange rates (January to December).

Source: Research Institute of Agricultural Economics, Prague, 2000.

Payments based on input use are mainly 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. The new principles and guidelines for support, and additional programmes introduced by the SGFFF in August 1999, were applied without substantial change in 2000. However, the new programme supporting investment in food processing was not applied due to a lack of finance. Overall, the support provided to agriculture through the SGFFF is diminishing. The value of credit subsidies extended to farmers by the SGFFF declined by 10% compared with 1999. The amount of new subsidised credits granted also continued to decline. At the end of 2000 subsidised credits were CZK 5.4 billion (USD 14 million), which is 40% less than in 1999. As in previous years, the government partly wrote-off or extended the repayment period for the reimbursable financial assistance extended from the budget during 1991-1993. Moreover, in 2000, the government reduced the value of the privatised assets in agriculture due to the State Land Fund by 52% and extended the reimbursement of the residual value for up to 30 years. One-off area-based payments for the restoration of vineyards, hop-gardens and orchards almost doubled in 2000 to CZK 174 million (USD 4.5 million). In 1999, the government introduced payments to partly compensate for the costs of irrigation water, and for the application of lime on acid soils. In 2000, in the case of water these payments were not applied and, in the case of lime, they were substantially reduced. In 2000, the government introduced payments of CZK 77 million (USD 2 million) supporting the use of organic fertilisers. A 60% refund of fuel tax became an important input support to agriculture representing CZK 1 billion (USD 26 million) in 2000.

Developments in trade policy

The Czech Republic has continued to lower import tariffs in accordance with the URAA. To enable minimum and current ***market access,*** a total of 32 tariff-rate quotas (TRQ) were in operation in 2000 (29 with reduced in tariff quota rates and three with zero in tariff quota rates). The commodity structure of the TRQs was similar to that in the previous year. The TRQ for potato starch, eliminated in 1999, was reintroduced. In July 2000, the TRQ for red wine (at an in-quota tariff of 25%) was increased by 150 000 hectolitres. The government continued to apply automatic ***import licences***, covering the same commodities as in 1999 with the exception of wheat imports from Hungary where licensing has been cancelled since April 1999.

Export subsidies were used for milk products (CZK 985 million or USD 26 million), malt (CZK 120 million or USD 3 million), potato starch (CZK 33 million or USD 0.9 million) and pigmeat (CZK 3 million or USD 78 000). For all commodities, the export subsidies remained within the limits of the WTO URAA commitments. In 1999, exports of dairy products and malt were also supported by interest subsidies on ***export credits*** provided by the SGFFF within the framework of the Export Programme. No new export credits were allocated under the Export Programme in 2000 and SGFFF expenditures in 2000 relate to export credits given in previous years (mainly 1998 and 1999). At the end of 1999 the Czech Export Bank[6] (CEB) granted a credit to export wheat from the State intervention funds to Belarus. During 1999 and 2000, export credits were granted on 400 000 tonnes of wheat at CZK 1.7 billion (USD 44 million). In order to control the exports of some agro-food products, the government continued to maintain its system of non-automatic ***export licences.*** From July 2000, a new governmental decree limits the application of non-automatic export licences to a range of agricultural commodities (live cattle up to 300 kg, cows, live pigs up to 50 kg, wheat, rye, barley and maize). However, exports of some other agro-food products are controlled through limits for exports with automatic export licences.

In July 2000, the Czech Republic concluded negotiations with the European Union on further liberalisation of bilateral agro-food trade (the so-called "double-zero agreement) by mutual cancellation of import tariffs and export subsidies for some (less sensitive) agro-food products. Additionally, new concessions for some other agro-food are under negotiation. Trade in agro-food products under the ***Customs Union with the Slovak Republic*** continued to be subject to quota limitations for the same range of products as in 1999.

Overall evaluation

During the period 1986-2000 there has been a pronounced decline in the support to agriculture in the Czech Republic and in 2000 the overall PSE is 18%. In recent years, support has been stable at around 19%, which is one third of the support in the pre-reform period (1986-88) and one half of the support in the first years of the transition (1991-1993). The decline in the market price support in 2000 (mainly milk and pigmeat) resulted in a reduction in the implicit tax on consumers, as measured by the overall %CSE. The support to general services provided to agriculture (GSSE) rose by 6% in each of the years 1999 and 2000, mainly due to increased spending on infrastructure and inspection services. Total support to agriculture declined to 1.3% of GDP (Tables III.18-19, Figure III.4).

The average producer NPC indicated that prices received by farmers were on average only 13% higher than those at the world market price during 1998-2000, a significant improvement on the average for 1986-88 when prices were 143% times higher. The consumer NPC reflects similar changes indicating the relatively low level of protection for the agricultural sector in Czech Republic.

Another important category of support is payments based on input use. These affect production decisions and, in the case of investment aid, production effects could be prolonged. The area based payments under the *Údrzba Krajiny* programme have weaker linkages to production decisions, but the potential of these payments to improve environmental performance (which is the main declared objective) remains limited, as most[7] of them are provided to the entire agricultural area without specific constraints on production or input use. The substantial reduction in headage payments for dairy cows, and the introduction of headage payments for extensive livestock breeding on permanent pastures, reduces support to intensive milk production and introduces schemes whose main targets are environmental rather than production support.

In 2000 the producer NAC increased slightly so that total farm receipts were 22% higher than those generated at world market prices. But the dramatic reduction in the producer NAC in the first years of the reforms from 104% in 1991 to 20% in 1995, reflects the significant move towards more market orientation.

Overall, the reduction in support and protection in 2000 further improves market orientation. However, for some products, plans to introduce market regimes in the direction of the European Union CAP may reverse this trend.

European Union

Main policy instruments

The *Agenda* 2000 CAP reform package provides the basic legislative framework governing agricultural policy for the period 2000-06. Market price support and area and headage payments are the main policy instruments. Market price support, where applied, is provided through administered prices, export subsidies, tariffs and tariff-rate quotas (TRQs). Market price support policies are often combined with production quotas or land set-aside. Area payments for cereals and oilseeds are based on historic, regional yields and are paid on condition that producers set aside a defined percentage of their arable land; small-scale producers are exempted from the set-aside requirement. Payments are also made in respect of the land that is set-aside. There are no administered prices for oilseeds and protein crops (peas, beans and sweet lupins). Administered prices and production quotas are used for milk and sugar in conjunction with import protection and export subsidies. Beef is supported through administered prices, aid for private storage, headage payments based on fixed, reference livestock numbers subject to limits on stock density, TRQs and e xport subsidies. Support for pigmeat is through administered prices, intervention purchases, import protection and export subsidies, whereas for sheepmeat, it comprises a pricing system based on a ewe premium and import tariffs. For poultry and eggs there are TRQs and export subsidies. A number of measures aimed at promoting structural adjustment, rural development, marketing and promotion, research and extension, input subsidies and improved agri-environmental performance, are either co-financed or are entirely financed by European Union member States (Table II.5).

Table II.5. **European Union: National expenditures**
Millions of Euro

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999e	2000p
Austria	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1 359	1 241	1 073	996	919	884
Belgium	288	515	476	261	338	276	450	258	235	241	246	254	211	276	395
Denmark	182	180	193	265	299	231	175	227	179	274	248	245	228	249	286
Finland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2 210	1 567	1 499	1 528	1 374	1 385
France	2 761	2 274	2 153	2 292	2 881	2 954	2 890	3 491	3 456	3 451	3 563	3 308	2 768	3 109	3 243
Germany	1 268	1 395	1 386	1 824	1 841	3 358	3 940	4 111	4 136	2 675	2 246	1 811	1 589	1 600	1 600
Greece	428	392	419	430	466	488	344	214	172	134	167	167	164	149	135
Ireland	175	116	124	114	83	99	117	86	168	94	102	78	79	353	514
Italy[1]	704	923	979	1 462	2 226	2 108	2 008	993	1 038	1 210	1 312	1 638	1 625	1 625	1 655
Luxembourg	17	15	22	26	27	48	30	31	32	27	32	35	30	. .	. .
Netherlands	539	555	492	536	546	562	524	601	597	626	589	1 502	859	1 143	1 090
Portugal	131	236	241	220	254	237	237	214	210	132	159	308	303	295	295
Spain[1]	495	473	559	583	612	590	922	1 359	1 341	805	744	689	622	662	703
Sweden	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	252	242	318	335	360	420
United Kingdom	844	786	830	921	950	1 018	970	952	858	694	1 675	1 635	1 232	1 147	1 111

. . Not available.
n.a. Not applicable.
e Estimate.
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.

Developments in domestic policies

As foreseen in the *Agenda* 2000 CAP reforms, ***intervention prices*** in 2000/01 for cereals and beef were reduced from 1999/2000 levels. However, intervention prices for sugar, rice, dairy and sheepmeat were unchanged (Table II.6). The intervention price for beef will be replaced by a basic price for private storage fixed at euro 2 224 (USD 2 050) per tonne as of 1 July 2002.

Cereals, oilseeds, beef and sheepmeat are the main items of budgetary expenditure. In 2000, actual CAP spending was slightly under-budget, amounting to euro 40.4 billion (USD 37.2 billion), or over 99% of budget appropriations.

Table II.6. **European Union: Selected institutional prices**

Product	1999/00		2000/2001		Change in euro price 1999/00 to 2000/01
	Euro/t[1]	USD/t	Euro/t[1]	USD/t	%
Cereals[2]	119	133	110	102	–7.5
Rice	316	353	316	291	0.0
Sugarbeet[4]	48	53	48	44	0.0
Milk[2]					
Skimmed milk powder	2 055	2 299	2 055	1 894	0.0
Butter	3 282	3 671	3 282	3 025	0.0
Beef and veal[3]	3 475	3 886	3 242	2 988	–6.7
Pigmeat[4]	1 509	1 688	1 509	1 391	0.0
Sheepmeat[4]	5 041	5 638	5 041	4 646	0.0

Notes: Marketing year July to June for cereals, rice, sugarbeet and milk, April to May for beef and veal and sheepmeat, and November to October for pigmeat.
1. Prices in market euro.
2. Intervention prices.
3. Intervention price for beef carcass R3 grade.
4. Basic price.
Source: European Commission, 2000.

To compensate partially for the reduction in the cereals intervention price, the rate of ***area payments*** related to cereals was increased in 2000/2001 (Table II.7). On the other hand, for oilseeds, including linseed, the area payment rate was reduced to euro 81.74 (USD 75.33) per tonne in 2000/2001 and is scheduled to reach euro 63 (USD 58) per tonne from 2002/2003 onwards to align it with the area payment for cereals and the payment for set-aside land use. The basic compulsory set-aside rate is retained at 10% for the whole 2000-06 period. The rate of area payment for ***protein crops*** and for ***non-textile linseed*** was also reduced. For ***durum wheat***, the standard additional per hectare payment remained unchanged, at euro 344.5 (USD 317.5) per hectare for the traditional areas and euro 138.9 (USD 128) per hectare for other areas, subject to the maximum guaranteed areas set by European Union member States, and on condition that certified seed is used. Grass silage is eligible for the arable crops area payment only in Sweden and Finland since is not possible to grow maize silage in these countries. The rate per tonne of payments for ***potato starch*** was set at euro 98.74 (USD 91) in 2000 and is scheduled to increase to euro 110.54 (USD 101.87) from 2001 onwards. On 4 October 2000, the European Commission adopted a proposal for modifying the ***sugar*** support regime. Its main elements comprise a permanent cut in production quota of 115 000 tonnes and the abolition of the reimbursement of storage costs to producers. The production quota system, production levies and preferential import arrangements from African, Caribbean and Pacific (ACP) countries and India are to be continued until the 2002/2003 marketing year. Proposals to modify the ***rice*** support regime have been put forward by the European Commission. One proposal envisages the abolition of intervention arrangements for rice but with the possible retention of aid for private storage. It is also proposed to provide compensatory payments to rice producers at the same rate as that applicable to cereals and oilseeds. The European Commission adopted a proposal to extend for two years the existing production support regime laid down in the common market organisation for ***hops***. The ***flax*** and ***hemp*** support regime was revised and the sector will be included in the general aid scheme for arable crops, aligning the aid per hectare with aid rates for linseed. In addition, supplementary assistance in the form of processing aid for flax straw will be introduced. The revised payment system will become applicable in 2001/2002.

The European Union Council of Agriculture Ministers agreed to amend the support system for ***fruit*** and ***vegetables, processed products*** and ***citrus fruits*** in order to establish national threshold levels for processing tomatoes, peaches and pears, and citrus fruits, and to cap support for these products. The system of financing operational funds for producer organisations was also simplified. The European Commission adopted a proposal to reform the ***cotton*** support regime, aimed at tightening the penalties for over-production, curbing budget expenditures and protecting the environment. As part of the implementation of *Agenda* 2000 CAP reforms, a new Common Market Organisation for ***wine*** was established. The European Commission also put forward a proposal to extend the current ***olive oil*** support regime until November 2003.

Headage payments for ***beef and veal*** were increased in 2000 and the regional ceilings for the special premium and the national ceilings for the suckler cow premium were reduced. Claims for both the special premium and the suckler cow premium are subject to a maximum stocking density limit of two livestock units (LU) per hectare of forage area. An additional premium payment is made to producers receiving the beef special and suckler cow *premia* if the stocking density of their holding is within certain limit (extensification premium). European Union member States have the option of introducing either a single rate per beef special premium and suckler cow premium of euro 100 (USD 92) per head where the stocking density is less than or equal to 1.4 LU per hectare or a two-tier system with differentiated rates depending on stocking densities (Table II.7). A slaughter premium was introduced. Headage payments for ***sheepmeat*** were reduced. The definition of a sheep producer in a less-favoured area (LFA), which has given rise to problems of interpretation and has also made checks difficult by obliging the physical presence of animals on the land to be verified, has been amended. In the ***dairy*** sector, the scheme for school milk, which has been in operation since 1977, was extended and European Union support was fixed at 75% instead of the previous 95%.

The *Agenda* 2000 CAP reform encompasses a new ***rural development policy***. It streamlines rural development measures by bringing them together in one regulation. It also requires that European

Table II.7. **European Union: Area and headage payment rates**

	1999/00		2000/01		Change in euro price 1999/00 to 2000/01
	Euro/t	USD/t	Euro/t	USD/t	%
Cereals	54.3	57.9	58.7	54.1	8.0
Oilseeds (cereal equivalent)	94.2	100.4	81.7	75.3	–13.3
Grass silage[1]	none	none	58.7	54.1	–
Protein crops	78.5	83.6	72.5	66.8	–7.6
Non-textile linseed	105.1	111.9	88.3	81.4	–16.0
Set aside payment	68.8	73.3	58.7	54.1	–14.8
	Euro/head	USD/head	Euro/head	USD/head	
Beef					
Suckler cow premium	144.9	154.4	163.0	150.2	12.5
Special beef premium					
Bull[2]	135.0	143.8	160.0	147.4	18.5
Steer[3]	108.7	115.8	122.0	112.4	13.0
Deseasonalisation premium	72.45-18.11	77.25-19.30			0.0
Extensification premium[4]	36.2	38.6	–	–	–
Stocking density = > 1.6 < 2 LU/ha			33.0	30.4	–
Stocking density < 1.6 LU/ha			66.0	60.9	–
Calf processing premium	115.0	122.5			0.0
Slaughter premium					
Adult bovines	None	None	27.0	24.9	–
Calves	None	None	17.0	15.7	–
Sheepmeat					
Ewe premium[5]	Basic price minus market price		Basic price minus market price		
Additional ewe premium/LFAs	5.9 – 6.6	6.3 – 7.0	5.9 – 6.6	5.4 – 6.1	0.0

Notes: Marketing year July/June for cereals and oilseeds; calendar year for beef and sheepmeat.
1. Eligible for payments only in Sweden and Finland.
2. Claimable once in the lifetime of the younger bull.
3. Claimable twice in the lifetime of the steer.
4. Available in addition to the suckler cow and special beef premium. With the AGENDA 2000, Member States have the option of introducing either a single rate or a two-tier system with differentiated rates of compensation depending on stocking densities. If stocking density is less than 1 livestock unit per hectare, the premium could increase to euro 52.
5. The basic price is adjusted for the budget stabiliser which since 1993 has been fixed at 7% of the basic price. The market price is the arithmetic mean of the weakly average weighted prices on the representative EU market. As the difference is per 100kg carcass weight, a technical coefficient is used to convert the premium to a per ewe basis.

Source: European Commission, 2000.

Union member States define suitable ***environmental*** measures to be implemented by farmers and allow payments to be made subject to compliance with general or specific environmental requirements or agri-environmental commitments entered into by farmers. It provides for such payments to vary ("modulate") by farm holding, depending on the labour employed or overall farm earnings. Savings resulting from failure to comply with the environmental conditions or as a result of the modulation of payments will remain available to European Union member States as additional European Union support for the financing of agri-environmental measures, early retirement schemes, afforestation, and payments to assist farmers in LFAs. The compensatory allowances in LFAs, previously based on headage, will be calculated on a per hectare basis and the amount may be varied according to objective criteria between euro 25 (USD 23) and euro 200 (USD 184) per hectare of agricultural area. Payments over euro 200 (USD 184) may be granted, on condition that the average level of payments granted within the programme concerned does not exceed this ceiling. In addition, farmers in areas subject to environmental constraints can also benefit from payments intended to compensate for the resulting costs and income losses. These payments cannot exceed euro 200 (USD 184) per hectare of agricultural area. To qualify for the LFA and environmental constraints payments, the land area of the regions subject to environmental constraints, added to LFAs affected by specific disadvantages, must not exceed 10% of the total area of the member State.

In order to simplify the management of structural funds, the number of objectives was reduced from seven to three and the percentage of the population covered from 51% to 40%. Outside the objective 1 regions, rural development measures will be financed only from the EAGGF-Guarantee Section. In 2000, payments for rural development measures (training, early-retirement, compensatory allowances for LFAs, agri-environmental payments, investments in agricultural buildings and setting up for young farmers, processing and marketing of agricultural products, forestry, adaptation and development of rural areas) are estimated at euro 4.3 billion (USD 4 billion). Of this amount, half is for agri-environmental measures. New structural measures have been put in place for the outermost regions of the European Union (*i.e.* the four French overseas departments, the Canary Islands in Spain, and the Açores and Madeira in Portugal). These include, *inter alia*, raising the maximum level of support under the EAGG Fund for investment on farms from 50% to 75%, and for investment in processing and marketing of agricultural products from 50% to 65%, and extending European Union funding to forests owned by local authorities.

Increasingly, more emphasis is placed on financial monitoring in the implementation of agri-environmental and rural development programmes. A report has been released by the European Court of Auditors (ECA) on the environmental shortcomings of changes made by the 1992 CAP reform and problems encountered in achieving the environmental benefits which the new "accompanying measures" were designed to bring about. It concludes that, although these policies have had some beneficial environmental impact, the measures did not address the serious environmental problems arising from intensive livestock production. It is argued that the effectiveness of some agri-environmental measures was hampered by inadequacies in programme design, resource targeting, evaluation and implementation. In some cases, aid rates were perceived as insufficient to attract farmers to adopt farming techniques that are environmentally more friendly. According to the ECA, the Agenda 2000 CAP reforms, which require prioritising environment within agricultural policy, intend to address a number of the points raised by the ECA. However, the ECA requires application of the Polluter Pays Principle and the provision of payment only for actions which go beyond "good farming practices". The report also assesses the environmental impact of the 1992 CAP reform itself. It concludes that to a significant extent the expected environmental benefits of policy changes to the Common Organisations of the Market have not materialised. Area aid is still perceived as an incentive for production methods which are incompatible with good environmental practices, particularly in respect of cereals, while in the livestock sector the reduction in intensity has not succeeded because agri-environmental support was not sufficiently applied. Furthermore, lower feed prices brought about by the 1992 CAP reform have resulted in the intensification of livestock production.

On 19 December 2000, the European Union Council of Agriculture Ministers held an open debate on the subject of ***food safety*** and the structure and mode of operation of the European Food Authority (EFA) on the basis a proposal submitted by the European Commission. The main functions of the EFA, according to the European Commission, will be: The provision of independent scientific opinions; advising on technical food issues to underpin policy and legislation on food safety, nutrition, animal health and welfare, and plant health; the collection and analysis of data on dietary patterns; assessing exposure to food based hazards and monitoring food safety; identification of emerging risks; day-to-day operation of the rapid alert system covering both food and animal feed; and informing the public on food safety issues. The Council endorsed the overall approach and there was broad agreement that a high-level, independent, transparent assessment of risks to health is vital to effective risk management. It was felt that in crisis situations it would be for the Food Authority – by means of its scientific opinions – to advise the European Commission and the member States as fully and as swiftly as possible on the emergency measures to be taken.

In response to a renewed **BSE** crisis, a number of emergency measures were taken with regard to traceability, including the labelling of processed products, and the withdrawal of specified risk material, at both European Union and national level. At the European Union level, the following actions have been taken: surveillance measures for the detection, control and eradication of BSE; a ban on feeding mammalian meat and bone meal to ruminants; a temporary ban on the feeding of meat and bone meal to all farm animals; treatment of animal waste to reduce its infectivity; withdrawal of bovine animal

intestines from the food chain, irrespective of the age of the animal; implementation programmes using rapid BSE-detection tests for categories of animals at risk, including animals over 30 months; exclusion of the use of carcasses from fallen animals in meat and bone meal in farm animal feed; a requirement that the current list of specified risk materials (SRMs) – which must be removed and destroyed – will now also include the entire intestine of bovine of all ages; raising the advances paid for the beef *premia* from 60% to 80%; and a "purchase for destruction" scheme to remove from the food chain all cattle aged over 30 months, unless they test BSE-negative, implemented from 1 January 2001. The price paid to farmers for animals not for human consumption is fixed on the basis of the prevailing market price of the relevant quality in the member States. The European Union budget will co-fund the expenditure at a flat-rate of 70%. Following the decision of the European Union's Council of Farm Ministers on 4 December 2000, the low BSE-risk countries, namely Finland, Austria and Sweden, have the option of allowing animals aged over 30 months to be slaughtered for their national market without a BSE test. All meat exported has to be BSE-tested. In March 2001, a "special purchase" scheme for cattle older than 30 months entered into force replacing the "purchase for destruction" scheme. According to the new scheme, European Union member States which have already full BSE-test capacity for cattle over 30 months will have the choice either to store or to destroy this meat. The financial compensation (70% European Union, 30% member States) paid to farmers is the same. No fixed quantities per European Union member State apply. The special measures under the new scheme shall apply until the end of 2001. For those European Union member States without full testing capacity, the provisions of the "purchase for destruction scheme" remain in force until 30 June 2001.

On 19 December 2000, the European Union Council of Agriculture Ministers expressed a favourable opinion concerning a draft overall Regulation on transmissible spongiform encephalopathies (TSE), which incorporates all measures for combating BSE already adopted at European Union level. The Regulation lays down rules for the prevention and control of certain TSEs and amends Directive 91/68/EEC as regards scrapie. It is expected that a common position could be adopted in early-2001 for forwarding this draft regulation to the European Parliament.

The European Union Council of Agriculture Ministers adopted a common position with a view to the adoption of a Regulation of the European Parliament and of the Council establishing a system for the identification and registration of bovine animals, and the ***labelling*** of beef and beef products. Discussion of new European Union legislation for approval of genetically modified organisms (**GMOs**), including new laws for the labelling of food containing GMOs, continued. Farmers who had to destroy colza plants containing unauthorised GMOs will receive the payments they are entitled to under existing rules for traditional area payments.

The European Union Council of Agriculture Ministers adopted a Regulation on ***information*** and ***promotion*** measures for agricultural products on the internal European Union market. This is intended to harmonise and simplify the present system of provision of information on and promotion of agricultural products. The purpose of the system is to finance the provision of generic and collective information (public relations, advertising, dissemination of scientific information) – 50% from the European Union, 30% from professional organisations and 20% from member States – while avoiding duplication of the promotional activity of firms or of national or regional authorities. Nineteen programmes promoting consumption of milk and milk products in the European Union were adopted. The total cost of these promotional measures, fully financed by the European Union, is euro 8 million (USD 7.4 million) and will last for a year. Ten programmes in eight European Union member States (Belgium, Denmark, Germany, Spain, France, Netherlands, Austria and the United Kingdom) were adopted to promote their consumption of apples and citrus fruit. The total cost of these programmes is euro 9.8 million (USD 8.9 million of which 60% is financed by the European Union. Amendments on certain ***marketing*** standards for eggs were adopted and as from 1 January 2004 it will be compulsory to indicate the farming method on eggs and packs and to simplify the classification of eggs by amalgamating the current Classes B and C.

In the context of European Union enlargement, negotiations with the applicant countries continued and a "strategy paper" and a timetable for negotiations with candidate countries in Central and Eastern

Europe has been prepared by the European Commission. Agricultural negotiations are scheduled for the second half of 2001 and the first half of 2002. The Multi-annual and Annual Financing Agreements with candidate countries, which lay down the detailed provisions for delegating the management of the rural development programmes to the candidate countries, was signed (SAPARD programmes). The overall budget in each year of the programme's seven-year operation (2000-06) amounts to euro 520 million (USD 479 million).

Developments in trade policy

In 2000, the total amount spent on export subsidies is estimated to have declined by 6%, to euro 4.6 billion (USD 4.2 billion), compared with 1999. A combination of cuts in intervention prices under *Agenda* 2000 – and a weaker euro against the dollar allowed exports of around 3 million tonnes of cereals without export refunds during the first half of the 2000/01 marketing year, lessening pressure to meet WTO commitments on export subsidies. Payments of euro 200 million (USD 184 million) to finance exports of primary commodities, such as cereals, will be made available to farmers in the outermost regions of the European Union. According to the most recent ***European Union notifications to the* WTO** on market access, the simple average tariff-quota fill rate increased in the marketing year 1999 as compared to the previous year, but was nonetheless relatively low for sweet potatoes, orange juice and some pigmeat products. The European Union was a party to several WTO ***dispute settlement procedures*** involving agricultural products (see Part II.2). After an increase of 4% in 1999, European Union expenditure on food aid was reduced by that same percentage in 2000, to reach euro 335 million (USD 309 million).

In an effort to comply with WTO rules, the European Union Council of Agriculture Ministers reached agreement in December 2000 on amending the ***banana*** import regime to a tariff-only system from 2006. Initially, there will be a transition system of tariff quotas maintaining both the current bound quota of 2.2 million tonnes and the autonomous quota of 353 000 tonnes, both at the rate of euro 75 (USD 69) per-tonne and open to all suppliers. A new quota of 850 000 tonnes will be open to all suppliers at a maximum rate of euro 300 (USD 276) per-tonne. Banana imports from ACP countries will be duty free. A "tariff only" system will enter into force at the end of the transitional period (1 January 2006 at the latest). The common customs tariff rate to be applied at that stage will be determined by the European Union Council of Agriculture Ministers in the light of the outcome of the negotiations to be conducted with banana suppliers under Article XXVIII of the GATT. On ***beef hormones***, the European Union is in the process of amending its legislation to conform with the WTO ruling on beef hormones, although this needs to be approved by parliamentary procedures.

In the context of the European Union Agreements with ten Central and Eastern European countries, concessions in the form of European Union tariff quotas for certain agricultural products were agreed. In the area of trade in agricultural biotechnology products, the European Union and the United States have begun high-level discussions on regulatory issues. Agreements on wine and spirits were signed with Hungary, Romania and Bulgaria, and came into force on 1 January 2001. A wine and spirits agreement with Canada is under discussion.

The European Council adopted a proposal to grant across-the-board duty-free access to the EU market for 48 least developed countries the so-called Everything But Arms initiative. The proposal will exempt all non-military trade, including agricultural products, from import duty with immediate effect, although there would be a phase-in period for sugar, rice and bananas. In reaction to the BSE scare and the Foot and Mouth Disease Outbreak (FMD), a number of countries, including European Union member States, have temporarily suspended the imports of animals and animal products from the European Union in March 2001.

Overall evaluation

Agricultural policy developments in the European Union are being implemented within the framework of the *Agenda* 2000 CAP reform, which deepens and extends the 1992 CAP reform. Support to agriculture as measured by the %PSE, declined from an average of 44% in 1986-88 to 42% in 1992-94 and down to 40% in 1998-2000. In 2000, reversing the trend of the last two years, the total PSE declined by

9% and the %PSE by 5 percentage points to 38%, which is 4 percentage points above the OECD average. Market price support for all commodities, except poultry, has decreased. The increase in world prices in euros, resulting from the depreciation of the euro against the US dollar, was the main factor explaining the PSE decline. This was mirrored in a decrease in both the total CSE of 20% and the implicit tax on consumers as measured by the %CSE of 8 percentage points to 29%, which is 3 percentage points above the OECD average. Overall, total support to agriculture is estimated to have declined by almost 8%, and now represents 1.3% of GDP (Tables III.20-21, Figure III.5).

The combined share of market price support and payments based on output fell from 91% of the PSE in 1986-88 to 66% in 1998-2000, with a particularly noticeable fall in 2000. The change in the composition of support, involving a move away from market price support and towards area and headage payments has reduced protection and the effects of support on production and trade. As shown by the producer NPC, prices received by farmers were on average 37% above those on the world market in 2000, compared with 55% in 1999, and 85% in 1986-88. Nevertheless, the forms of support which potentially have the largest effects on production and trade still constitute the predominant type of producer support and the degree of protection remains above the OECD average. All other categories of budgetary support to farmers remained relatively stable, except payments based on input use which have declined in 2000 by 11%. Overall, farm receipts were 62% above what they would have been if generated on the world market in 2000, compared with 75% in 1999, which shows an improvement in market orientation, as shown by the NAC.

Food safety has been the dominant policy concern at both the European Union and national level, in particular as a consequence of the BSE crisis FMD outbreak, together with the continuing controversy over the use of genetically modified organisms (GMOs). This has led to measures to restore consumer confidence and the creation of the European Food Authority has the potential to provide a framework for development of a consistent and coherent European Union food policy, although it will not have any power to act independently of the European institutions. While agri-environmental concerns continue to be a high priority in the Union, measures still account for only a small share (around 5%) of budgetary expenditure. Moreover, a Court of Auditors' report concluded that, although these policies have had some beneficial environmental impact, they did not address the serious environmental problems arising from intensive livestock production and the effectiveness of some agri-environmental measures was hampered by inadequacies in programme design, resource targeting, evaluation and implementation. Although the new LFA payments are better targeted than under the previous system, such payments could encourage agriculture in areas which are not best suited to the most efficient production.

Overall, the long-term reduction in support and protection shown by the indicators is a development in the right direction. However, although there has been a shift from market price support, the level of support remains high at 38% and output-related payments still represent the majority of support. The support measure still impose a burden on European Union consumers and on taxpayers. Although the reduction of producer support had reduced overall market distortion and increased market orientation, these developments have been unequal across sectors, some of which, such as sugar and dairy, are still highly supported.

Developments in European Union *member* State *policies*

Austria

In 2000, total budgetary support for agriculture (including European Union payments) amounted to ATS 25.5 billion (euro 1.85 billion), *i.e.* to about 4.4% less than in 1999. The decline in expenditure was mainly due to a reduction of aid for mountainous or less favoured areas. As in previous years, about half of the total budgetary support for agriculture came from the European Union, with the remainder coming from the federal government and the federal provinces. Most national and provincial funds were devoted to structural measures and aid for less favoured areas (ATS 5.8 billion, euro 0.42 billion), agri-environmental measures (ATS 4.4 billion, euro 0.32 billion), and research, education, and extension

services (ATS 1.1 billion, euro 0.08 billion). An exceptional ATS 0.1 billion (euro 7 million) was set aside by the national parliament for a disaster relief programme. These funds, which were matched by corresponding expenditure from provincial budgets, were used to provide concessionary credits to farmers who had suffered from the severe drought in spring 2000. Expenditure on the Austrian agri-environmental programme (ÖPUL), which covered about 155 000 farms in 2000, increased by 2.6% compared to the previous year.

In conformity with the European Union's Agenda 2000 programme, extensification payments in 2000 were extended to farmers who kept less than 1.4 dairy cows per hectare of forage area. Moreover, Austria was allowed to count goats towards its reference quantity for sheep held in mountainous areas. As a result, the owners of about 15 000 goats, *i.e.* about 30% of Austria's goat population, were for the first time entitled to the sheep-payment. In the least developed province of Burgenland, an investment promotion programme for the period 2000-06 was launched. Over the seven years, agricultural investment projects in the region will be supported with about ATS 0.56 billion (euro 0.04 billion).

During 2000, the ministries for agriculture and environment were merged to form the Federal Ministry of Agriculture, Forestry, Environment and Water Management. Moreover, the last of the federal provinces, the province of Vienna, adopted a Framework Law on Agriculture, which outlines the broad objectives for the province's agricultural policy. These call for the conservation of family farms and the maintenance of rural infrastructure, the participation of farm households in general economic growth and social development, and the improvement of international competitiveness of farming and marketing activities.

Several laws concerning farming practices were changed. The plant protection law was amended to improve border controls and adjust storage requirements. The legislation on seeds was brought into line with European Union legislation concerning the protection of genetic resources and imports of genetically modified seeds and plant varieties. Moreover, the number of permits for foreigners to enter the country under fast-track procedures in order to work during harvest time for up to six weeks was increased by 7 000.

Belgium

In 2000, the agricultural budget of the Federal government, excluding the contribution from the European Union, was increased by 2% to BEF 50.2 billion (euro 1.24 billion) but is expected to remain stable in 2001.

The government introduced a programme of BEF 5.7 billion (euro 141.3 million) to compensate pig, beef, dairy, poultry and egg farmers for losses suffered as a consequence of the dioxin crisis, including BEF 2.42 billion (euro 60 million) to cover the cost of testing animals and their removal from the food and feed chain. BEF 103 million (euro 2.55 million) was granted to provide low-interest loans.

In order to be able to guarantee food safety in Belgium, the government decided to institute from January 2000 a Federal Agency for food safety, taking responsibilities formerly spread over five different agencies at two different ministries. A Contaminant Surveillance Scheme for epidemiological monitoring of the whole livestock sector has also been introduced. The scheme entails 12 000 tests a year of raw materials used in feed production.

A political decision was taken in order to assign all powers to regional Ministries of Agriculture. When this process is completed, there will no longer be a national Ministry of Agriculture and Belgium will be represented by the Foreign Trade Secretary of State in the European Union Agriculture Council.

In order to reduce nitrate emissions before 2005, the Flemish Ministry of Environment and Agriculture will grant BEF 730 million (euro 18 million) for a buy-out scheme to reduce the pig stock.

Denmark

The total agricultural budget for 2000, excluding European Union payments, amounted to DKK 3.1 billion (euro 414 million). In March 2000, the government introduced **Pesticide Action Plan II**. The plan aims to reduce pesticide use and designates certain areas adjacent to rivers and lakes as

pesticide-free belts. The total public funding of the plan is expected to amount to DKK 593 million (euro 79 million) in the period 1998-2005. An ***Action Plan for the Aquatic Environment*** was evaluated and modified at the end of 2000. This action plan was introduced by Parliament in 1998, in an attempt to reduce the total nitrogen surplus leached from farming activity by half over a 6 year period from 1987 to 2003. The government aims to spend DKK 554 million (euro 74 million) for this plan in the period 1999-2003.

Finland

In 2000, the total agricultural budget, including European Union payments was FIM 13.2 billion (euro 2.2 billion), which is about FIM 1.2 billion (euro 0.2 billion) more than in 1999. European Union-contributions accounted for about 43% of the total budget. At FIM 3.5 billion (euro 0.6 billion), nationally financed support payments to agriculture were 16 % lower than in 1999. National support consisted of Northern aid (FIM 2.07 billion, euro 0.35 billion), National aid for Southern Finland (FIM 856 million, euro 144 million) and National aid for crop production (FIM 429 million, euro 72 million). Although direct payments for wheat increased in south-west Finland, the FIM 68 million (euro 11 million) limit for total national payments for wheat means that area payments will have to be reduced, if production increases substantially. The dairy support in northern Finland remained unchanged, but the support limit for pasture production was decreased and the total amount of payments decreased from FIM 270 million to FIM 245 million (euro 45 million to euro 41 million). Although farmers received less support through national measures in 2000, the increase in direct support through Agenda 2000 programmes more than compensated for the cutbacks. Co-financed agri-environmental support was FIM 1.3 billion (euro 0.2 billion) in 2000.

Nationally financed support measures for years 2000-2003 were agreed with the European Commission. Under the new agreement, national direct payments will continue for livestock, milk, and certain horticultural products during 2000-2003, with annual reductions of 3.5-4.5%.

Support to animal producers through national measures remained stable, with the exception of broiler producers, for whom support decreased by nearly 50%. Direct payments to ewe and goat producers in northern Finland were also cut substantially. National support to pig producers decreased by FIM 10 (euro 1.7) per pig.

France

The budget of the Ministry of Agriculture and Fisheries rose by 3% in 2000, to about FF 29 billion (euros 4.4 billion), excluding transfers to the social security system. Implementation of changes introduced by the 1999 agricultural framework law continued.

By the end of 2000, 4 201 contracts for territorial management were approved and 2 604 were signed. Although this number is below the ambitious target set in July 1999 when the framework low was adopted of 50 000 by the end of 2000, the fact that contracts have been signed in every single *département* would indicate that the mechanisms to implement this new policy are in place. The government's current target is that 100 000 contracts be signed by the end of 2001. Of the FRF 2 billion (euro 0.3 billion) a year attributed to the contracts, half the funding will come from national sources, of which 65% will come from reallocation of existing funds and 35% from new funds. The remainder will be generated by the modulation of European Union direct payments, a process which allows European Union member States to levy up to 20% from direct payments and to reallocate the resulting amount to finance rural development and environmental measures.

The long-term objective is for most assistance to agriculture, other than direct production aids, to be channelled through the contracts, though for the time being some measures can still be provided outside the framework. While the payments are more equally distributed than production-related assistance, they account for a very small share of total support to the sector. Transaction costs associated with the contracts are significant although the complex administrative structures already exist, and those structures will receive more funds in the future.

Within the framework law, the scope of SAFER activities has been widened. In addition to buying and selling land, and undertaking research on land related issues, SAFER can now participate in projects related to landscape improvement and environment protection and have a pre-emption right on land covered by these projects. They also acquired the legal right to rent land.

The eligibility criteria for concessional loans for young farmers entering the sector were eased. The maximum age was raised from 35 to 40. Within a territorial contract, such loans can be granted in case of a gradual hand-over. The ceiling for available loans is now set at the national level, loans are available to pluriactive farmers in lowland areas (and not just to main occupation farmers in those areas or to all farmers in mountain regions as before) and they can be used to create employment for young people (*emplois-jeunes*).

New measures were announced to reduce farmers' fiscal expenses (FRF 200 million or euros 30 million for tax rebates and FRF 148 million or euro 23 million for National Insurance contributions). In total, tax-related rebates for farmers will amount to FRF 2.2 billion (euro 0.3 billion) in 2001. In addition, from July 2000, the rebate on employers' National Insurance contributions for fruit, vegetable and flower producers increased from 75% to 90% for 100 days. For winegrowers, the rebate increased from 58% to 75% (85% if the contract is open-ended).

The general tax on polluting activities will now apply to phytosanitary products. Its level depends on the toxicity and eco-toxicity of active ingredients. Over half the products on the market are considered safe and are therefore not taxed.

An action plan for the sheep-breeding sector, worth FRF 200 million (euro 30 million) and funded through OFIVAL, was announced in February 2000. It includes the following measures:

- a maximum of FRF 22 500 (euro 3 430) per annum, available to sheep producers as part of a territorial contract, with a 5 year duration;
- an additional FRF 100 (euro 15) per livestock unit as a specific compensation for natural handicaps in high mountain and dry mountain areas;
- a payment of FRF 100 to FRF 200 (euro 15 to euro 30) per head for the establishment or the expansion of sheep breeding units; and
- concessional loans for installation available exceptionally at the maximum rate in those regions.

A pilot programme to detect BSE was launched in June. As a result, a number of new measures were taken in November. In particular, the feeding of animal meals was banned for all species and additional offals was removed from the food chain (see measures taken at the European Union level).

To help the beef sector to adjust to new BSE-related measures and to the reduction of demand following the most recent crisis, an emergency plan was announced at the end of November 2000. Complementing the European Union plan, it includes:

- reduction of interest costs for cattle farmers, worth FRF 400 million (euro 61 million);
- carry forward of personal and business National Insurance contributions of cattle farmers;
- carry forward of business National Insurance contributions of downstream industries;
- concessional loans of 5 years duration at 1.5% to downstream industries with repayment starting after 3 years (total of FRF 500 million or euro 76 million); and
- concessional loans at 1.5% to cattle farmers (total of FRF 500 million or euro 76 million).

Germany

In 2000, the agricultural budget of the Federal government, excluding European Union contributions and expenditure by the L*änder*, amounted to DEM 11.0 billion (euro 5.6 billion), which is 4.6% lower than in the previous year. The budget cuts were the result of a general budgetary consolidation programme adopted by the federal parliament in 1999. Many items within the agricultural budget were affected by the cut-backs, so that the structure of the expenditure remained largely unchanged.

One of the few programmes that was not affected by the consolidation was expenditure under the "joint task for the improvement of agricultural structures and coastal protection", which is co-financed by the *Länder*. In the framework of Agenda 2000 and the European Union's policy for rural development, the measures within the "joint task" became subject to European Union approval procedures, starting in 2000. The programmes of the *Länder* provide for public expenditures of about DEM 32 billion (euro 17 billion) over the period 2000 to 2006, DEM 17 billion (euro 9 billion) of which are financed from EAGGF funds. Half of the national co-financing will be supplied within the joint task.

Subsidies on diesel fuel were cut by more than 50% from their 1999-level to DEM 0.375 billion (euro 0.192 billion) in 2000, and were entirely eliminated in January 2001. Yet, in the context of significantly lower fuel taxes for farmers in some other European Union countries, the federal parliament adopted a law that introduced a special agricultural tax rate of DEM 57 (euro 29) per 100 litre of diesel, applicable from January 2001. This rate represents a reduction by DEM 23 (euro 12) per 100 litre from the regular tax rate, and will reduce the government's tax revenue by about DEM 0.46 billion (euro 0.24 billion) in 2001.

Concerning food safety, the Federal government implemented a number of precautionary measures related to BSE. These included the implementation of the European Union's decisions concerning disposal of specified risk materials, and the mandatory indication of place of birth and rearing on labels for beef in order to better inform consumers about the origin of meat. Also, the ban on the use of meat and bone meal as animal feed was extended to pigs and poultry. In January 2001, the Ministry for Food, Agriculture and Forestry obtained additional responsibilities in the area of food safety and consumer policy and was renamed the Ministry for Consumer Protection, Food and Agriculture.

Conditions for the use of renewable resources from agriculture were further improved in 2000 with the adoption of a "renewable energy law", which significantly raised the rate of remuneration for electricity produced, for example, from biomass. Moreover, government programmes introduced in 1999 and 2000 promote marketing initiatives for industrial lubricants and fuels based on vegetable oils, and facilitates the use of renewable resources for energy generation.

The Federal government passed a bill on changes in the organisational structure of social security programmes in agriculture. The law aims at improving the efficiency of the institutional framework by reducing the number of administrative entities involved and by grouping the tasks at central associations. Another aim is to strengthen the influence of the Federal government in the sectoral social security system.

Greece

Total budgetary support to agriculture (including European Union payments) in 2000 is estimated to have increased by 17%, to GRD 1 872 billion (euro 5.6 billion), of which 50% was financed out of the national budget. Support to agriculture from the national budget is primarily to compensate farmers for natural disasters and to debt arrangements of livestock producers. Support which is co-financed with the European Union is mainly geared towards early retirement, afforestation, agri-environmental programmes, quality control of fruit and vegetables, and improvement of the livestock sector. National contributions to payments for the transportation of agricultural products in the smaller Aegean islands, for the distribution of agricultural products to deprived persons and to improve production and transportation of honey were increased. In 2000, GRD 14 billion (euro 0.042 billion) were available to debt arrangements of livestock producers (programme already approved by the European Commission) and to compensate farmers for natural disasters. Also funds worth GRD 4.2 (euro 0.012) billion were available to subsidise interest rates on rural loans. Thirty-four research programmes were financed in 2000, at an estimated cost of GRD 0.451 (euro 0.001) billion. Farmers' pensions were increased by GRD 10 000 (euro 30) per month. In 1999, GRD 3 615 (euro 11.1) billion were allocated to natural disasters.

Out of the GRD 8 733 billion (euro 26 billion) of the European Union 2000-06 Community Support Framework, 8.5% would be made available for rural and agricultural development. Of this amount 75% is

financed by the European Union. The "Agricultural Development Plan", for the period 2000 to 2006, has been announced. The main priorities are an overhaul of the agricultural sector, an improvement of infrastructure and a focus on water resource management. Measures range from lower interest rates on loans to those to improve agricultural productivity. The cost is estimated at approximately GRD 11 000 billion (euro 32.7 billion), 73% of which will be financed by national sources and the rest by European Union funds. It focuses on: euro 1.2 billion for the early retirement of 50 000 farmers aged between 55 and 65 years of age who hand over their farms to farmers aged under 40; euro 1 billion for additional payments to farmers working in mountainous and less-favoured areas; euro 0.4 billion for the implementation of agri-environmental measures, particularly for extensive animal breeding; and euro 0.2 billion for the provision of incentives to convert unproductive plots to forest land.

In response to the BSE scare, the Greek government banned the feeding of meat and bone meal to all animals as of 22 November 2000. In addition to the measures taken at the European Union level, it has also banned imports from France of cattle aged over 20 months, T-bone steaks, animal fats, bones and offal.

Ireland

Total public expenditure on agriculture and rural development is estimated at IEP 736.9 million (euro 935.7 million) for the year 2000. Of this amount, 57% was financed from the national budget. Of the total expenditure, headage payments, environmental programmes and research and training schemes were the largest items and disease control measures were also significant.

In 2000, some adjustments were made to existing tax measures that benefit farmers. The accelerated capital allowance scheme for necessary expenditure on pollution control facilities was extended until April 2003. The allowance is subject to a maximum that was increased from IEP 15 000 (euro 19 000) to IEP 25 000 (euro 32 000) (or 50% of the expenditure on which the relief is claimed, whichever is lower). The period over which it can be claimed was reduced from eight to seven years. However farmers will be able to claim relief in any of the seven years and not only the year in which the expenditure took place. As in previous years, all farmers who were not registered for VAT were entitled to a flat VAT refund on their purchases of inputs. The refund rate was increased from 4% in 1999 to 4.2% in 2000. Schemes whereby farmers are totally or partially exempted from income tax on increases in stock values were continued. These reliefs allow for a general 25% exemption while the rate applicable to young trained farmers is 100%. Stamp duty relief on gifts and sales of land to young trained farmers was increased from two-thirds to 100%.

There were 7 685 persons in receipt of Farm Assist as of 3 November 2000. The scheme effective as of April 1999 is designed to support farmers with low incomes and replaces the existing Small-holders Assistance Scheme. Farm Assist is open to any person aged between 18 and 66 years who is engaged in farming. The scheme is means-tested taking into account both farm and off-farm income of both farmer and spouse. Eligibility is based on actual income assessed as being within specified income thresholds.

About IEP 260 million (euro 330 million), mainly European Union funded, has been provided under the National Development Plan for On Farm Investment and a new Scheme of Installation Aid for Young Farmers. The National Development Plan will run from 2000-2006. The nationally funded schemes for the Control of Farm Pollution (CFP) and for the Improvement in Dairy Hygiene Standards (NDH) and the Scheme of Installation Aid continue to be applied. An aid package (IEP 1 million (euro 1.3 million) to help farmers re-schedule debts and to reduce interests costs) was decided in favour of pig producers in the border area with Northern Ireland who had suffered large losses resulting from a major abattoir fire. The Agenda 2000 decision raised the Irish milk quota by 96 000 tonnes from 1 April 2000. This has been allocated to young farmers and those farmers whose existing quota is below 250 000 litres.

Italy

The total agriculture budget for 2000, excluding European Union contribution, is estimated at ITL 6 404 billion (euro 3.3 billion), of which ITL 4 413 billion (euro 2 3 billion) was allocated by the 2000

Finance Act to programmes in the agriculture, forestry and fishing sectors, and the rest to cover routine expenses such as operational costs of the Ministry of Agricultural Policies and other linked institutions. This corresponds to a 19% increase compared with the previous year.

The *Rationalization of measures in the agricultural, agro-food, agri-industrial and forestry sectors Law* allocated a budget of ITL 801.8 billion (euro 0.4 billion) for the year 2000, out of a total ITL 2 882 billion (euro 1.5 billion) for the 1999-2002 period. The main objectives of this multi-year agricultural plan are to guarantee long-term coherence to political measures in favour of the agricultural and agri-industrial sectors; to improve competition of firms at the international level; and to promote rural development measures with attention to the multifunctional aspects and sustainable development priorities. A synthesis *Programme Document for the Agro-food Sector* is under development. This document includes regional agricultural and inter-regional programmes, training schemes and measures which target young entrepreneurs, as well as measures for the rationalisation of the agricultural sector. In addition, all aids for agriculture, both national and European Union-funded, will be documented.

Concerning more specific measures, special aids were provided to poultry growers following consecutive losses due to the avian flu as well as emergency assistance to farmers after torrential rains and floods caused major damage in northern and north-western Italy. Attention was also given to organic agriculture and biotechnology with the Ministry of Agriculture and the Ministry of Environment setting up two special commissions dealing with questions relating to organic farming and biotechnology, respectively. A special fund was also established to promote the development of organic and quality agriculture. The 2000 Finance Act sought to encourage organic farming through the taxation of products and animal feed containing animal flour and proteins. Tax relief for the creation or enlargement of farming estates was extended up to 2001 and special VAT regimes for agriculture was extended for the entire year 2000.

The Netherlands

The total budget of the Ministry of Agriculture, Nature Management and Fisheries, including the European Union contribution, was NLG 3.9 billion (euro 1.8 billion) in 2000, which is about 9% less than in 1999. Most of the expenditure was directed to research, education, extension and the management of natural, rural and recreation areas. Significant attention is also given to aspects related to the environment, animal welfare and food safety. Agricultural research institutions were partly privatised and became more independent.

From January 2001, BSE-tests have been conducted on sick or suspect bovine animals older than 12 months and all bovine animals older than 30 months. This means that about 600 000 cattle or about 60% of the total slaughter will be tested annually. The annual cost for extra storage and laboratory tests is estimated to be NLG 120 to 140 million (euro 54 to 64 million). The cost of testing was financed by the government until April 2001. From April to July 2001 it is partly financed by the government, after which producers are responsible for paying for the testing. The Netherlands was exempted from the European Union "Purchase and Destruction" scheme (the intervention and destruction programme for non-tested cattle older than 30 months). In addition, all imported cows from France of 12 months and older are to be tested for BSE and the import or use of animal by-products not approved for human consumption has been banned in all feeds. A centralised National Food Safety Authority (Nederlandse Voedsel Autoriteit, NVA) that deals with the BSE inspection programme is being established.

The European Union Nitrate Directive, and adjustment of the Dutch regulation (MINAS) to reduce nitrate emissions, will have considerable effects on farm management. From 2002, farmers may keep animals only if they have enough land on which to spread their manure, have been able to contract with arable farmers to do so, or have a contract with a manure processing unit that guarantees that the remaining products will be used outside of Dutch agriculture. To reduce the present surplus of manure the government introduced a programme that allows pig and poultry farmers to sell their farms to the government. The total funding available for this programme is NLG 670 million (euro 304 million).

Mandatory labelling of poultry meat with regard to Salmonella and Campylobacteria infections will enter into force in 2001.

In a 2000 policy document, "Voedsel en Groen", the Ministry of Agriculture, Nature Management and Fisheries described the future strategy of the Dutch agro-food sector, including the need for interaction between agri-business, government agencies, NGOs and research institutions. A policy document on organic farming was published in 2000. While the 1997-2000 Action Plan for organic farming aimed at supporting market development, improving quality and stimulating conversion to organic farming, the new plan covering the next four years focuses on demand. Various organisations are involved in promoting organic farming. In the pig sector, for example, organisations such as the Product Board of Livestock and Meat, the Foundation for Nature and Environment and Platform Biologica (a non-governmental organisation supporting organic farming) aim to increase the stock of organic pigs to a total of 470 000 by 2005 (about 40 000 in 2000).

The government is preparing legislation to stop further expansion of intensive animal farming in valuable natural environments as well as buying more land for nature conservation.

Portugal

The national contribution to Portugal's budget for agriculture and rural development (*i.e.* excluding the contribution from the European Union) was increased by 2.4% to ESC 65 billion (euro 324 million) in 2000.

In March 2000, the government announced emergency measures to compensate farmers for drought losses resulting from the dry 1999/2000 winter. These measures include adjustments to the national regionalisation plan for maximum guaranteed crop and set-aside areas, and a livestock water subsidy of PTE 522 million (euro 2.6 million) entirely nationally funded and covering 65% of the cost of livestock drinking water. The European Commission required Portugal to take all measures necessary to recover from pig producers the credit subsidies granted in 1999 following the market crisis at the end of 1998. In view of the exceptionally high harvest and low price of potatoes in the 1998-99 season, a credit line of a maximum of PTE 2 billion (euro 10 million), with an interest subsidy of 65% of the commercial rate was open for co-operatives and other traders purchasing potatoes from that season at a minimum price of PTE 25 000 (euro 10) per tonne.

In 1999, the milk quota was exceeded for the first time by 63 000 tonnes. The government purchased 54 000 tonnes of milk quota at PTE 60 000 (euro 300) per tonne from producers willing to sell, and distributed it freely to producers producing above their quota. From now on quotas will be compulsory taken from producers producing less than 70% of their quota and redistributed in the following year to producers who are exceeding their quota. Moreover, a "quota market" has been created on the web site of the Ministry for Agriculture providing contact information about potential buyers and sellers of milk quotas.

The ban on exports of live animals and beef products imposed in 1998 due to the rising incidence of BSE in Portugal remained in force during 2000 despite the BSE eradication programme. The incidence of BSE declined compared with the number of cases reported over the past two years. Since 1998, Portugal has banned meat and bonemeal from all livestock feed.

Spain

The total agricultural budget of the central government for 2000, excluding most transfers from the European Union and expenditures by regional governments, is estimated to have increased by 2.3% compared with 1999, to ESP 228 billion (euro 1.4 billion). A drought during the first quarter of the year was followed by torrential spring rain in some areas. Nevertheless farm income was estimated to grow 4.6% after falling in three consecutive years.

The most important nationally financed agricultural programme, accounting for more than 10% of the total agricultural budget, is the Combined Agricultural Insurance System, managed by the State Agricultural Insurance Agency (ENESA). The second-largest programme in 2000 was an estimated expenditure of ESP 2.4 billion (euro 14 million) on emergency aid for drought in 2000. This amount was increased in August by 12% given the weather conditions. The aid is provided mainly as subsidised

credits to affected farmers. The research institute INIA received a budget transfer of ESP 6.4 billion (euro 39 million) to develop agricultural and food technologies. Most other measures are co-financed by the European Union. Part of the technical work associated with agricultural policies is sub-contracted to a public enterprise called TRAGSATEC. Spanish farmers have special tax income and social security regimes, and they have lower tax rates for fuel and VAT. Farm workers have a special unemployment benefit scheme.

The system of insurance subsidies covers around 36% of agricultural output (13% of livestock output, but more than 80% of cereals and tobacco). ENESA pays an average of 37% of the premium received by the insurance company for crop insurance and 43% for livestock (Table 1). Regional governments provide additional subsidies for specific products. Drought insurance was extended to cover olive trees, vineyards, sunflower and sugar-beet. In 2000, ENESA received a budget transfer of ESP 26.5 billion (euro 159 million): 9% more than in 1999.

Table 1. **ENESA Insurance Programmes in Spain**

Million euros	1999		2000	
	Crops	Livestock	Crops	Livestock
Value of production insured	4 774	517	5 630	508
Premiums	297	32	329	30
ENESA subsidy	98	14	121	13
Rate of subsidy	33%	42%	37%	43%

Source: ENESA.

Within the framework of the National Irrigation Plan, a new set of public enterprises covering different geographic areas was created in order to rationalise investment in irrigation infrastructure. The National Agencies for Agricultural Infrastructure (SEIA) are in charge of financing and contracting improvement works on irrigation infrastructure and giving technical assistance to the users. Each project will have 50% of the costs financed by the users (the irrigation communities) and the rest co-financed by any of the agrarian public administrations, be it at the regional government, national government or the European Union Commission. The 2000 budget foresees an expenditure of ESP 13 121 million (euro 79 million) in irrigation infrastructure, almost the same as in 1999.

Spain introduced a new programme co-financed with the European Union, comprising of a per hectare payment for sunflower on non-irrigated land with a maximum of ESP 10 000 (euro 60) per hectare. It is an agro-environmental measure accompanying the CAP. The payment is conditional on planting sunflower in at least five consecutive years and on using specific land conservation practices.

Protests against the rising petrol prices in September ended with an agreement involving both the finance and the Agricultural Ministries. The agreement allows cuts in income and value added taxes for farmers and facilitates the direct sale of petrol from farm co-operatives to farmers. There has been no evaluation of the budget costs of these measures.

The first reported case of BSE in Spain was in November 2000 and the Spanish government responded with a programme of ESP 56 billion (euro 337 millions) to control the disease. The programme will be financed with resources from central government, regional governments and the livestock sector.

The government introduced a new programme to promote indigenous Spanish animal breeds covering beef, sheep, pig and goats. It is a payment per head of breeding animal up to a total budget of ESP 434 million (euro 2.6 million) between 1999-2000. The programme is administered by the regional governments involved.

Sweden

The total agricultural budget, including European Union payments, was SEK 9.73 billion (euro 1.15 billion) in 2000, which is about SEK 2.25 billion (euro 0.27 billion) 20% less than in 1999. The reduction was due mainly to a fall in area payments. European Union contributions accounted for about 60% of the total budget. In accordance with Agenda 2000, the commodity coverage of compensatory payments was extended to silage grass. The base area remained unchanged, but a specific sub-base area of 130 000 ha was introduced for silage grass. Within the national envelopes of Agenda 2000, additional livestock payments were provided for animal grazing, primarily for heifers and steers. In addition, a supplementary payment for drying cereals was introduced in the northern part of Sweden due to difficult climatic conditions. Trading in milk quotas was deregulated in January 2000. Before that, the quota system had allowed quotas to be traded once a year, at a price set by the Board of Agriculture, and only within the region where the farms were located.

"The Environmental and Rural Development Plan for Sweden 2000-2006" was introduced in 2000, with measures for environmentally sustainable agriculture as the main focus of the plan. Expenditure on these measures is estimated at SEK 2.9 billion (euro 0.34 billion) per year. This means a slight increase in the budget compared with the previous period. Examples of green measures are support for organic farming and the conversion of arable land into wetlands in order to reduce nitrogen leaching. Support for organic milk production is available through environmental support for organic crop production. The support amounts to about SEK 600 (euro 71) per cow per year (about 2% of total income per cow).

Sweden has applied for permission from the European Commission to implement extensive labelling for domestically produced meat before the European Union-wide implementation in 2002. Although the new regulations mean higher costs for the industry and thus consumers, according to the National Food Administration, Swedish consumers are willing to pay more for labelled meat.

United Kingdom

Agricultural budgetary expenditure for 2000, including European Union contributions, was GBP 678 million (euro 1 111 million), representing a 10% reduction in agricultural expenditure from 1999. Just over 60% of this expenditure was on European Union co-financed programmes, estimated to have been GBP 416 million (euro 683 million), with the remaining 40% national expenditure. Total real farm income (business profits plus income to farmers, partners and directors) in 2000 fell by 29% in 2000 and, although it doubled between 1990 and 1995, it is at its lowest level since 1973. The fall is largely due to the pressure on agricultural prices caused by a further rise in sterling against the euro, but also increased costs for fuel and fertilisers and the autumn floods experienced on many farms.

In response to the recent decline in farm incomes a new strategy for agriculture – **A *New Direction for Agriculture*** – was announced in December 1999, and implemented in March through the launch of the **Action Plan for Farming** to help the industry to modernise and provide additional support to the hardest hit sectors. The main measures compensate for currency fluctuations and help to restructure the pig industry.

Farmers received a second instalment of compensation for the end of the "green rate freeze" totalling GBP 89 million (euro 146 million). This was paid to producers of arable crops, GBP 57 million (euro 94 million); beef, GBP 21 million (euro 34 million); and sheepmeat, GBP 11 million (euro 18 million). The government also announced in March that the beef, sheepmeat and dairy sectors would be paid GBP 22 million (euro 36 million) each, while in November a payment of GBP 34 million (euro 56 million) was provided to the arable sector. These payments were made to offset the effects of currency fluctuations during 1999/2000. Most of this support came from the European Union budget, with GBP 28 million (euro 46 million) paid from national funds. Arable and livestock producers will receive up to a further GBP 43 million (euro 71 million) in 2001. Support under the Hill Livestock Compensatory Allowance scheme was reduced from 1999 by 18% to GBP 152 million (euro 250 million).

Payments as part of the BSE emergency measures have declined from nearly GBP 800 million in 1996 to 120 million in 2000 (euro 1 314 to 197 million). To date 80 people have died in the United Kingdom from new variant CJD. In October the government published the report on the inquiry into BSE – the "Phillips" Report (for further information on this Report and BSE in the United Kingdom see the website: *www.maff.gov.uk/animalh/bse/index.html*).

Following the confirmation of Foot and Mouth Disease (FMD) on 20 February 2001 the United Kingdom suspended the issue of export health certificates for all live animals susceptible to FMD and their products. On 9 March the export to non-European Union member countries of live animals of FMD-susceptible species of animal products of those species was prohibited, unless certain strict conditions were met. In addition to the disruption to United Kingdom exports, FMD dislocated the internal supply chain through the restrictions on livestock movements (this has led to a rise in meat imports by the United Kingdom to meet its domestic consumption requirements).

European Union reform of the flax and hemp regime, concluded in June, favours production for traditional uses and is likely to lead to significant cuts in United Kingdom production where these crops are grown for industrial uses. In October, a new ***Energy Crops Scheme*** was introduced as part of the England Rural Development Programme, providing funds to establish short-rotation coppice (SRC) and miscanthus (area based payments) and 50% of the set-up costs for farmers to establish SRC producer groups. Over GBP 10 million (euro 16 million) was paid to farmers under the ***Organic Farming Scheme*** in 2000, with nearly 2% of agricultural land in England now under organic farming. From January 2001, around GBP 13 million (euro 21 million) will become available for new organic farmers under the scheme, as part of the GBP 140 million (euro 230 million) funding over the next seven years to expand organic farming.

The ***Rural Development Plans***, which the United Kingdom submitted to the European Commission in 2000 under the Rural Development Regulation, were approved and launched in the autumn of 2000. These include the on-going agri-environment and forestry contracts under European Union Council Regulations 2078/92 and 2080/92 as well as new contracts under Council Regulation 1257/99 (the Rural Development Regulation). Awards of some GBP 2 million (euro 3 million) were made under the 1999 ***Agricultural Development Scheme*** in February, 2000. A second (and final) bidding round was opened in April to provide support for marketing initiatives prior to the England Rural Development Programme (ERDP) measures coming on stream and awards totalling some GBP 3 million (euro 5 million) were announced in August.

Hungary

Main policy instruments

Market regulation and export refunds are the key elements of agricultural policies in Hungary. Important support to agriculture is also provided through subsidised credits and area payments. The Office for Agricultural Market Regime (OAMR) together with the agricultural Intervention Centre (AIC) are the agencies which implement the market regulation policies for all the main commodities. The OAMR intervention is based on a system of guaranteed and guidance prices. The activities of the OAMR are co-ordinated with the "Product Councils"[8] which exist for all major commodities or groups of commodities. The AIC, established in 1998, monitors and controls export subsidy spending. Up to 1999 the State purchased limited quantities of bread-wheat and feed maize at guaranteed prices. From 2000, the OAMR sets a guaranteed price and a minimum and maximum intervention price. The OAMR intervenes directly (*i.e.* procurement into intervention stocks) when the market prices fall below the guaranteed price. Moreover, the market is also regulated by storage programmes financed by the state. Public warehouse receipts (for grains stored) are used by grain producers to obtain subsidised credits mainly to finance their working capital. For livestock products (milk, beef and pigmeat), budgetary payments are paid to processors who pay prices above the guidance price to farmers, or to farmers when prices they receive are lower than guidance prices. In addition to market price support, price premiums for high-quality production are provided for milk, poultry and pigmeat.[9] The prices of other

products are supported mainly through import tariffs. Export subsidies are an important part of the market intervention especially for pigmeat and poultry.

Differentiated area payments are granted to farms with up to 300 hectares of agricultural land (in less favoured areas, the area payments are available also to farms over 300 hectares). Budgetary support based on the use of inputs is provided mainly in the form of subsidised interest rates for farm credit (for investments as well as for working capital) and capital grants (for land improvement and the purchases of agricultural machinery and breeding animals). Part of the support in the form of capital grants is provided for young farmers. A fuel tax concession is granted to farms based on a standard fuel consumption per hectare of agricultural land (arable land, plantations, grassland) and per dairy cow. Environmental improvement and rural development is supported mainly through capital grants, interest-rate subsidies, and tax concessions.

Developments in domestic policies

In the crop sector, the market regulation remained for grains (wheat and maize) but the market intervention mechanism has changed. In addition to the guarantee price the OAMR also sets a minimum and maximum intervention price and intervention (*i.e.* subsidising exports, financing storage costs, selling of public stocks) occurs when the market price is outside the band defined by the intervention prices. For ***bread-wheat*** (grade B1, B2), the guaranteed price for the 2000 harvest was decreased by 11% (in USD terms it declined by 33%), and a maximum intervention price was set at HUF 25 000 (USD 89) per tonne. For ***feed maize*** the guaranteed price set for the 2000 crop was the same as in 1999 (18% lower in USD terms), and a maximum intervention price was set at HUF 21 000 (USD 74) per tonne. The recovery of world grain market prices, combined with the expected shortages of domestic grain (due to poor weather) led to prices rising on the domestic market well above the maximum intervention prices set by the OAMR. In November 2000, the price of maize reached HUF 32 000 (USD 113) per tonne and the government introduced a temporary ***export ban*** to preserve supplies for the domestic market. For the year 2000, similar institutional prices were also set for ***sugar*** and ***sugar beet***. For sugar beet, the guidance price is HUF 6 800 (USD 24) per tonne, the minimum intervention price is set at HUF 6 000 (USD 21) per tonne and the maximum intervention price at HUF 7 600 (USD 27) per tonne. For sugar, the guidance price is HUF 110 000 (USD 390) per tonne, the minimum intervention price was set at HUF 100 000 (USD 354) per tonne and the maximum intervention price was at HUF 125 000 (USD 443) per tonne. No market regulations are applied to ***oilseeds***.

Prices for the main livestock products (milk, pigmeat, beef and poultry) are supported by a guidance price system, with the possibility of intervention. In 2000, the guidance price for ***milk*** rose by 6% while the guarantee price was reduced by 17%. During 2000, the milk production quota was increased from 1.9 billion litres to 2 billion litres (2.06 million tonnes). The penalty for milk delivered above the quota was set at HUF 10 (USD 4 cents) per litre for the first 100 000 litres and at HUF 30 (USD 12 cents per litre (around a half the milk price) for other deliveries. Penalties are paid into the Milk Product Council Fund and contribute to financing of market regulation. For **B*eef***, the guidance price remained almost at the 1999 level but declined in USD terms. The guaranteed price was 15% lower than in 1999. A minimum intervention price was introduced, below which producers can apply for deficiency payments. After the reduction in the guidance and guarantee prices for ***pigmeat*** in 1999 (as a reaction to the depressed market), the government increased the guidance and guaranteed prices in 2000 (Table II.8). The guidance price was increased by 11% and the guaranteed price by 1.9% (–14% in USD terms). The maximum intervention prices (above which the Product Council can require additional payments from producers into their funds) were also set for beef HUF 276 000 (USD 978) per tonne of live weight and pigmeat HUF 323 000 (USD 1 148) per tonne of carcass weight.

Budgetary ***payments based on output*** were provided mainly to livestock products in the form of "quality payments" (direct payments to products meeting specified quality standards) for milk, poultry and pigmeat. A direct payment of HUF 4 500 (USD 16) per tonne was paid to producers of extra quality milk (which represents around 75% to 80% of total sales). Payments of HUF 11 000 (USD 39) per tonne were paid for high quality poultry delivered to slaughterhouses respecting European Union quality

Table II.8. **Hungary: Guaranteed prices**

Product	1999		2000		Change in HUF price 1999 to 2000
	HUF/t	USD/t[7]	HUF/t	USD/t[7]	%
Bread wheat[1, 2] guaranteed price	18 000	76	16 000	57	–11.1
Maize[1, 3] Guaranteed price	14 000	59	14 000	50	0.0
Beef[4] guaranteed price	260 000	1 097	220 000	779	–15.4
Pigmeat[5] Guaranteed price	216 000	911	220 000	779	1.9
Milk[6] Guaranteed price	53 000	224	44 000	156	–17.0

1. Crop year July to June, *i.e.* in the table 1999 = crop year 1999/2000; 2000 = 2000/2001.
2. Guarantee price for grades B1, B2; procurement period from 01.08. to 01.12.
3. Guarantee price for feed maize; procurement period from 01.12 to 01.03.
4. Price for liveweight (VAT excluded); extra and 1st class quality; males type I (special meat types).
5. Price for carcass weight (VAT excluded); grade E.
6. Price for premium-quality milk (VAT excluded).
7. Conversion uses OECD annual exchange rates (January to December).

Source: Office for Agricultural Market Regulation, Budapest, 2000.

standards (accredited by the European Union), for other poultry the payment was set at HUF 5 500 (USD 20) per tonne. In reaction to market price developments the government first reduced, and later eliminated, quality payments for pigmeat. In total, output-related payments for livestock declined by 25% to reach HUF 13 billion (USD 46 million) in 2000. Payments based on crop output were only one fifth of 1999 payments. This was due to a large drop in payments to grains compared to 1999, when the government provided payments to farms to dissuade them from selling grains into intervention stocks. In 2000, most of the payments were allocated to apple and wine production. Overall, output-related payments fell by almost 50% from 1999.

The scheme "Area-based payment", established in 1999, which makes ***payments on the basis of the income potential of farms***, remained one of the main programmes providing direct payments to farms. The scheme provides differentiated payments per hectare of specified arable crops to all farms from 1 to 300 hectares, with payments per hectare inversely proportional to farm size. In 2000, the payments were HUF 8 000 (USD 28) per hectare for farms from 1 to 20 hectares, HUF 6 000 (USD 21) per hectare for farms from 21 to 50 hectares, and HUF 4 000 (USD 14) per hectare for farms from 51 to 300 hectares. In less favoured areas, a payment of HUF 3 000 (USD 11) per hectare was also granted to farms over 300 hectares. Overall, the amount spent on these payments increased by 40% over 1999 to HUF 15.6 billion (USD 55 million) as additional crops such as fruits, grapes, and vegetables produced on arable land were added to the scheme.

Payments based on the use of inputs are the most important budgetary item at HUF 70 billion (USD 248 million) in 2000. Almost 60% of the support was provided in the form of subsidised interest rates and guarantees for farm credit (for investments as well as for working capital), 23% through capital grants (mainly for the purchase of agricultural machinery and breeding animals), and 17% by a fuel tax concession granted to farms. Overall, support based on input use increased by 14% in 2000.

Developments in trade policy

Imports are regulated by *ad valorem* ***import tariffs*** and ***tariff rate quotas*** (TRQs). In accordance with the URAA, Hungary lowered import tariffs and opened TRQs to enable minimum and current domestic market access requirements to be met.

In 2000, ***export subsidies*** were used for a range of products in accordance with Hungary's waiver from its URAA export subsidy commitments. The total amount spent on export subsidies is estimated to have been HUF 24.5 billion (USD 87 million), which was around the same level (3% lower in USD) as in 1999. By end of June 2000, pigmeat export subsidies reached WTO limits (HUF 5.7 billion) and the government could not subsidise pigmeat exports during the rest of the year. No export subsidies were given for milk and dairy products in 2000.

A new ***agricultural trade agreement between Hungary and European Union*** entered in force on 1 July 2000. This agreement further liberalised agro-food trade according to the so-called "double-zero" principle under which the two parties agreed not to use export refunds or import duties for a range of products. For some more sensitive products, where this principle was not applied, preferential quotas were extended. On the other hand, no progress was made concerning further agro-food trade liberalisation among the CEFTA countries.

Other developments

During 2000, some re-allocations of budgetary resources were made to finance programmes providing support to production and to finance market regulation (including export subsidies). Due to pressures on budgetary resources, the implementation of some planned programmes was postponed (cattle programme) or only partially applied (national environmental programme, support to sanitary and phytosanitary services), and support to farm machinery purchases was also restricted. On the other hand, more budgetary resources were allocated to support farm extension services, and to build the institutional framework to implement the programmes to be co-financed from the European Union budget in the framework of the Special Accession Programme for Agriculture and Rural Development (SAPARD). Increased investment aids were also granted to the food industry in order to ensure compliance with European Union quality and food safety regulations.

Overall evaluation

Hungarian agricultural policy combines measures addressing the problems of transition towards a market economy and measures implementing progressively the mechanisms of the European Union CAP. During the period 1986-2000, the %PSE declined from 39% to 20%. This downward trend conceals considerable fluctuation in market price support. In 2000, the total PSE is estimated to have fallen by 11%, mainly due to a decline in market price support for pigmeat, sugar and milk. The %PSE is estimated at 18%, which is 5 percentage points lower than in 1999 and below the OECD average. The decline in market price support resulted in 2000 in a reduction in the implicit tax on consumers, as measured by the %CSE. The support to general services provided to agriculture rose by 13% in 2000 mainly due to increased spending on inspection services, marketing and promotion. The total support to agriculture declined by 0.6 percentage points to 2.3% of GDP which is still above the OECD average (Tables III.22-23, Figure III.6).

Payments based on output provided to the main commodities (deficiency payments and payments for quality) in 2000 were only half those provided in 1999. The combined share of market price support and payments based on output declined from 70% in 1999 to 63% in 2000. That is the forms of support that potentially have the greatest effects on production and trade were reduced but still dominate total support. The producer NPC declined in 2000, and is much lower than in the pre-reform period, so that the prices received by farmers (including the payments per output) were, on average 14%, higher than those in the world market compared to 52% in 1986-88. This demonstrates a relatively low level of protection compared with the previous period. However, this average includes little protection for all crop products (except sugar) and relatively high protection for some livestock products such as eggs (2.00), milk (1.70) and poultry (1.36). The consumer NPC, which estimates the rate of import protection, is slightly lo wer as the output based payments do not affect consumer prices; consumers were paying 12% more than at world market prices in 2000.

Among the other payments, those based on input use remain the most important category (29% of total support in 2000). These are likely to affect production decisions and, in the case of investment aid

production effects could be prolonged. General area based payments were replaced from 1999 by payments based on the area planted in specific crops so that these payments have now become more strongly linked to production decisions. Despite this, the reduction in the producer NAC illustrates a move towards more market orientation. After an increase in 1998 and 1999, the producer NAC declined in 2000, showing that the total farm receipts were 22% higher than those that would have been generated without any payment at world market prices (compared with 66% in 1986-88), but they remained below the OECD average.

Overall the reduction in support and protection in 2000 signalled an increase in market orientation. However, the introduction of minimum and maximum intervention prices (grains, beef, pigmeat) and related policy measures (*e.g.* the temporary export ban on maize in 2000) may impede the development of well functioning markets and isolate the domestic market from world market developments.

Iceland

Main policy instruments

The Icelandic agricultural sector is highly regulated. For milk, administered prices are used at the producer level as well as the wholesale level in conjunction with a production quota system. Direct payments based on output are also made to milk producers. For sheepmeat, direct payments are de-linked from current production levels but based on their former production quota entitlements under a system that was abolished in 1996. A levy is imposed on the total agricultural income of each farm and refunded within and between agricultural bodies. Trade in domestically produced commodities subject to WTO minimum access provisions is regulated and in most instances limited to scheduled volumes. Tariff rate quotas under current access have generally been filled. Consumer subsidies for wool are provided at the wholesale level. Interest concessions on agricultural loans are the main support to inputs.

Developments in domestic policies

For the production year 2000-2001, the administered prices for milk at the producer level and at the wholesale level were increased by 6% and 5% respectively (Table II.9). The administered price for milk at the wholesale level will be abolished in June 2001. The milk quota was slightly increased by about 0.4%, and the unit value of direct payments for milk, limited to the current quota level, rose by 11%. For sheepmeat, the unit value of payments based on historical entitlements decreased by 6.7%. While there was no surplus stock of sheepmeat at the end of the 1999-2000 marketing year, about 11% of total sheepmeat production was exported.

In March 2000, the government and the Farmers' Association reached an agreement on policy measures regarding sheepmeat production for the period 2001 to 2007. The agreement focuses on improving quality control in production, environmental issues, strengthening research and training and providing assistance to farmers who wish to take early retirement. Based on the agreement, the transfer of historical support entitlements among sheep farmers will be permitted, once a target number of entitlements has been realised in the agreed buy-back scheme, in order to rationalise the sheepmeat-

Table II.9. **Iceland: Administered prices for milk**

Product	1999		2000		Change in ISK price 1999 to 2000 %
	ISK/t	USD/t	ISK/t	USD/t	
Price at the producer level[1]	65 924	910	69 866	886	6.0
Price at the wholesale level	52 322	722	54 944	697	5.0

1. Including direct payments.
Source: Ministry of Agriculture, Reykjavik, 2001 .

farming sector. Under the terms of the agreement, the government purchases up to 45 000 entitlements from farmers who wish to retire, and re-issues up to 25 000 of these to active farmers.

Developments in trade policy

Iceland has met its WTO commitments to date, although tariff-rate quotas for meat and butter under minimum access commitments continue to be under-filled. With respect to current access commitments, only vegetables and flowers are subject to tariff quota administration, while demand is the only limitation on imports of other products at current access tariff levels.

Overall evaluation

Agriculture in Iceland is characterised by high support level and limited market orientation. In 2000, Iceland's agricultural support as measured by the %PSE was nearly twice the OECD average at 63%. Despite the fact that in the past decade Iceland has implemented a number of reforms in its agricultural sector, abolishing most of its administered prices and moving towards payments based on output for the dairy sector and based on historical entitlements for the sheepmeat sector, its %PSE has not decreased significantly. It declined from 75% in 1986-88 to 66% in 1998-2000. The share of market price support, the most production and trade distorting form of support, in the total PSE has declined from 87% to 51% over the same period, although payments based on output increased significantly (Tables III.24-25, Figure III.7).

The price domestic producers received in 2000, as measured by the producer NPC, was 153% higher than the world price meaning producers in Iceland are effectively insulated from the world market. Thus resulting in their gross farm receipts (including support), as measured by the producer NAC, being almost three times higher the amount they would be at world market prices.

The domestic consumer prices and the world price for agricultural commodities as measured by the consumer NPC were almost four times the world price in 1986-88 compared with more than two times the world price in 1998-2000. Support for general services to agriculture (GSSE) accounts for 10% of the TSE. Transfers from taxpayers and consumers associated with agricultural policies, as measured by the TSE, are estimated at 2% of Iceland's GDP.

Although the shift away from market price support has reduced the burden on consumers, the support levels remain among the highest in the OECD thus effectively shielding Iceland's producers from the world market.

Japan

Main policy instruments

Support is primarily provided through administered prices, trade measures and supply management regimes. Administered prices are used for major agricultural products. For rice, government purchase and selling prices apply to some 10% of consumption and production. The government purchases this quantity as a national reserve from producers who follow the government's guidelines for rice supply control. A state-trading body, the Agriculture and Livestock Industries Corporation (ALIC), operates price support programmes for certain dairy products (mainly butter and skimmed milk powder) as well as price stabilisation systems for beef and pigmeat. Tariff-rate quota systems apply to major commodities such as rice, wheat and barley. A state trading body, the Food Agency, is responsible for importing rice under Japan's WTO URAA minimum-access commitment. Supply controls include quotas on milk production, and the diversion of land from rice to other crops under the Production Adjustment Promotion Programme (PAPP). The Rice Farming Income Stabilisation Programme (JRIS) provides direct payments based on output to farmers to compensate for part of the loss of income caused by a fall in the market price when compared with the average price of the three preceding years. Budgetary support is provided for irrigation and drainage, and the readjustment of agricultural land. Deficiency payments are given for calves and manufacturing milk. Prefectural and local governments provide

infrastructure and extension services. Agri-environmental programmes are important aspects of agricultural policy, including measures to encourage farmers to adopt sustainable agricultural practices that reduce the amount of fertiliser and pesticide usage as well as improve the quality of soil with composting.

Developments in domestic policies

The Basic Law on Food, Agriculture and Rural Areas came into force in July 1999. Based on the law, the government established ***the Basic Plan on Food, Agriculture and Rural Areas*** in March 2000, which provides specific guidelines for implementation of the basic principles of the Law.

The Basic Plan sets out ***targets for food self-sufficiency*** in consideration of national concerns about Japan's low food self-sufficiency ratio and the uncertainties of global food supply and demand in future. The target for total food self-sufficiency ratio is 45% (supplied calorie base) in 2010 (40% was the level in 1998). To achieve these targets, the Basic Plan indicates production and consumption levels for major agricultural commodities, on the assumption that Japanese people shift towards a more healthy diet, containing the right balance of nutrients and with less on fat, as recommended by the government. It was also assumed that domestic agricultural products are able to meet consumer price and quality demands. Since self-sufficiency ratios are determined not only by domestic agricultural production but also domestic food consumption, raising the ratios above the current level requires concerted efforts by all concerned, including the government, farmers, agricultural groups, food industry and consumers.

The Basic Plan acknowledges the need to reconsider the current administered price policies in order to improve market orientation. At the same time, it considers that policy measures to stabilise the farm economy against the risk of price fluctuations caused by policy reform need to be introduced. In the light of this, the support mechanisms for several agricultural commodities were changed in 2000. For example, the deficiency payment for ***soybean*** was replaced by a new payment based on output, which increases market orientation. The method of calculating minimum producer prices for ***sugar beet*** and ***sugar cane*** was changed to try to reflect market prices for sugar. Price support for manufacturing milk was abolished in March 2001, after which the price has been determined by the market. Each of these policy changes focuses on a specific commodity. However, the government is considering the possibility of integrating commodity-based policies, including the rice policy, into a single payment based on farm income.

To implement the Basic Plan, the government formulated ***the working programme for Food, Agriculture and Rural Areas*** in August 2000. This programme brings together all existing policy measures as well as new measures in a comprehensive package, scheduled to be carried out over the five-year period starting in fiscal 2000.

The government purchase price for the 2000 ***rice*** crop was reduced by 2.7%, and the government selling price for domestic rice was reduced by 1.6% (Table II.10). The government selling price for imported rice under the minimum-access commitment was also reduced by 1.6%.

Table II.10. **Japan: Administered prices for rice**

	1998/99 (November to October)		1999/2000 (November to October)		Change in JPY price 1998/99 to 1999/2000 %
	JPY/t	USD/t	JPY/t	USD/t	
Government purchase price					
Domestic rice	258 800	2 272	251 733	2 334	–2.7
Imported rice[1]	35 600	313	30 300	281	–14.9
Government selling price					
Domestic rice	280 100	2 459	275 600	2 556	–1.6
Imported rice[1]	206 483	1 813	203 117	1 884	–1.6

1. Average government purchase or selling price for imported rice under the minimum access arrangement.
Source: Ministry of Agriculture, Forestry and Fisheries, Tokyo, 2000.

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

Product	1999/2000[1]		2000/01[1]		Change in JPY price 1999/2000 to 2000/01
	JPY/t	USD/t	JPY/t	USD/t	%
Wheat[2]	148 217	1 301	147 067	1 364	–0.8
Wheat[3]	38 571	339	36 635	340	–5.0
Barley[2]	127 680	1 121	126 680	1 175	–0.8
Barley[3]	33 676	296	32 000	297	–5.0
Sugar beet[4]	16 770	147	17 040	158	1.6
Sugar cane[4]	20 140	177	20 370	189	1.1

1. Crop years are July to June for wheat and barley, and October to September for all other crops.
2. Government purchase price for domestic production.
3. Government selling price for domestic production, applicable as of 1 February in each year.
4. Minimum producer price.

Source: Ministry of Agriculture, Forestry and Fisheries, Tokyo, 2000.

The total government contribution to JRIS payments in 2000 was JPY 93 billion (USD 0.9 billion) with the target area to be planted in rice of 963 000 hectares in 2000.

The government purchase prices for ***wheat*** and ***barley*** were reduced by only 0.8% and the government selling prices by 5.0% (Table II.11). Meanwhile, minimum producer prices for ***sugar beet*** and ***sugar cane*** were increased by 1.6% and 1.1% respectively.

The guaranteed producer price for ***manufacturing milk*** was reduced by 1.7% (Table II.12); although, the deficiency payment ceilings were maintained at 1999 levels. While the stabilisation indicative price for butter was reduced by 2.3%, the price for skimmed milk powder was maintained at its 1999 level. The mark-ups on import prices were JPY 304 000 (USD 2 800) per tonne for skimmed milk powder and JPY 806 000 (USD 7 500) per tonne for butter. ALIC will continue to import certain dairy products. Most administered prices for ***calves*** were frozen at their 1999 levels except for the price of dairy calves, which was reduced by 16% (Table II.13).

Table II.12. **Japan: Administered prices for livestock products**

Product	1999/2000 (April to March)		2000/01 (April to March)		Change in JPY price 1999/2000 to 2000/01
	JPY/t	USD/t	JPY/t	USD/t	%
Manufacturing milk[1]	73 360	644	72 130	669	–1.7
Butter[2]	931 000	8 175	910 000	8 439	–2.3
Skimmed milk powder[2]	523 600	4 597	523 600	4 855	0.0
Pigmeat[3]	370 000	3 249	365 000	3 385	–1.4

1. Guaranteed producer price.
2. Indicative stabilisation price.
3. Floor price in the price stabilisation band.

Source: Ministry of Agriculture, Forestry and Fisheries, Tokyo, 2000.

The floor level of the ***pigmeat*** price stabilisation band, maintained principally by ALIC intervention, was reduced by 1.0%. Government payments based on output to ***egg*** producers were reduced by 1.6% in 2000.

Budget outlays on programmes promoting ***environmental conservation*** and reducing the adverse environmental effects of agriculture were increased from JPY 18.2 billion (USD 160 million) in fiscal year 1999 to JPY 37.7 billion (USD 350 million) in fiscal year 2000. These programmes include financial support, such as

Table II.13. **Japan: Guaranteed prices for calves per head**

Breed	1998/99 (April to March)		1999/2000 (April to March)		Change in JPY price 1998/99 to 1999/2000 %
	JPY/head	USD/head	JPY/head	USD/head	
Black Wagyu	304 000	2 669	304 000	2 819	0.0
Brown Wagyu	280 000	2 459	280 000	2 597	0.0
Other beef breeds	200 000	1 756	200 000	1 855	0.0
Dairy breeds	156 000	1 370	131 000	1 215	–16

Source: Ministry of Agriculture, Forestry and Fisheries, Tokyo, 2000.

the extension of repayment schedules on agricultural loans for farmers' expenses on environmentally friendly farming practices, for example, reducing excessive use of fertiliser and pesticides.

Government expenditure to improve ***rural infrastructure***, such as constructing roads and sewerage systems in these areas, was increased compared with that envisaged in the initial budget, from JPY 391 billion (USD 3.44 billion) in 1999 to JPY 392 billion (USD 3.64 billion) in 2000.

A new direct payment ***to farmers in hilly and mountainous areas***, was introduced as from fiscal year 2000. It is considered that agricultural activities in hilly and mountainous areas provide important environmental benefits, such as preventing soil erosion and preserving water resources. However, various geographical constraints create a disadvantage for agricultural producers in these areas. The number of farmers in these areas has been falling, resulting in an increase in abandoned agricultural land. This new policy measure aims to prevent the abandonment of agricultural lands in hilly and mountainous areas in order to maintain the environmental benefits. The farmland concerned needs to be located in certain naturally, economically and socially disadvantaged regions, designated by several regional assistance laws, and meet certain objective criteria regarding the slope, shape or size. Although the land is intended for farming, producers are not obliged to plant or produce any commodities to receive the area payment.

New ***labelling regulations for all foods*** came into effect in June 2000, although a certain grace period is allowed. According to the new rules, food manufactures and distributors are obliged to label all food and drink products with specific information. Labels on all basic products (*i.e.* non-processed foods) should indicate their place of origin. The government has standardised organic foods in accordance with the *Codex Alimentarius*, and only those certified as fulfilling these standards can be labelled "organic food". New labelling rules for products containing genetically modified (GM) crops were also adopted after two years of discussion between the government, consumer representatives, food processors and scientists. The labelling rule will be applied to five GM products (soybeans, maize, potato, rapeseed and cottonseed) which are sold for direct human consumption in Japan, and to designated processed foods. While the new mandatory labelling requirements must be implemented as from April 2001, some food manufacturers have already begun to respond to consumers' strong preferences for GM-free foods by eliminating GM ingredients from processed food.

In March 2000, ***foot and mouth disease*** (FMD) broke out in Japan for the first time in almost 100 years. A total of 22 cows infected with the disease were found in herds in Miyazaki and Hokkaido prefectures. After disinfection of the farms involved and following sanitary surveillance, Japan regained its status as a FMD free country in September 2000. Experts suggest that hay imported from China could have been a factor in the occurrence of this disease.

Developments in trade policy

The quantitative restriction on rice imports was abolished and replaced by a tariff-quota system in 1999. The over-quota tariff-rate was JPY 341 000 (USD 3 162) per tonne for 2000. The tariff-quota for rice increased to 767 000 tonnes in 2000, in line with Japan's URAA commitments, and the maximum mark-up for rice imports was set at JPY 292 000 (USD 2 708) per tonne. The quantity of rice exported as

food aid to developing countries was around 0.7 million tonnes in 1998. The share of imported rice in the total shipment of the aid was about 48%. While no reduction was made to the in-quota tariff-rate for dairy products, the over-quota tariff-rate and mark-ups were reduced by 2.5%. Regarding the implementation of Japan's URAA commitments, some of Japan's tariff-rate quotas were under filled during 1999 for some products, including skimmed milk powder for school lunches and for feed, mineral concentrated whey, whey for infant formula and for feed, butter and butter oil for specific uses, starches and ground nuts. Japan invoked the WTO special agricultural safeguard clause, and applied additional tariffs on several commodities, such as peas, wheat flour, evaporated milk and *inulin* in 2000. Japan was party to two WTO ***dispute settlement procedures*** involving agricultural products (Part II.2).

Overall evaluation

Japanese agriculture is characterised by high support levels and limited market orientation. Although the %PSE declined from 67% in 1986-88 to 63% in 1998-2000, it is still twice the OECD average. The composition of support has remained unchanged, 91% of which was market price support in the mid-80s and in 2000. The gap between domestic producer and world prices has not narrowed despite the reduction or freezing of almost all administered prices in the past three years. The average producer NPC has increased slightly since 1986-88 reaching 2.97 in 2000, showing that the domestic producer prices were about three times the world market prices in 2000. The producer NPC varies significantly across commodities, the highest occurring for rice (eight times the world price), wheat (six times world price), milk (five times world price) and sugar (twice the world price). Although the producer NAC declined marginally from 3.00 to 2.78 over the same period, gross farm receipts in 2000 were about 180% greater than what they would have been without any support (Tables III.26-27, Figure III.8).

Although the gap between domestic consumer prices and world prices has somewhat narrowed since the mid-80s, consumers continue to pay more than twice what they would pay if world market prices prevailed. The implicit tax on consumers, as measured by the %CSE has decreased slightly since the mid-80s to 54% in 2000. However, transfers from taxpayers and consumers associated with agricultural policies, as measured by TSE, remained constant at 1.6% of GDP in 2000, having decreased from 2.6% in 1986-88. Support provided to general services to agriculture has decreased in recent years, representing 18% of the TSE in 2000.

An objective of the recent policy reform is to ensure greater self-sufficiency in agriculture through increasing demand for domestic agricultural products and reducing production costs, but this will be very costly to the economy. Given that Japan is a significant net food importer it will be a challenge to meet food self-sufficiency targets given the high production costs in Japan.

The level of support to agriculture has decreased only slightly since the mid-80s, despite the implementation of a series of reforms. Implementing of the new Basic Law has the potential to move the reform process forward, although further efforts are needed to increase the exposure of the sector to market prices.

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. The government has also implemented programmes to enhance agriculture's competitiveness through developing the agricultural infrastructure, including land improvement and farm consolidation, to cope with the changing agricultural policy environment since the conclusion of the Uruguay Round. Other important elements in agricultural policy are agri-environment, marketing and technological development. New policies have been introduced recently concerning the application of biotechnology and information technology to the agricultural sector. A number of direct payment schemes have been introduced over recent years, although they still account for a small proportion of total support.

Agriculture's share of the national budget has decreased from its peak of 13.1% in 1995 to 8.8% in 2001. The government is replacing direct grants with long-term loans with the intention of promoting self-reliance among producers. A new framework law for agricultural and rural policies, the Agricultural and Rural Basic Law, came into force in January 2000.

Developments in domestic policies

In 2000, the government purchase price of ***rice*** was increased by 5.5%, following a 5% rise in 1999. The volume purchased by the government was, in fact, scheduled to fall by an even greater proportion in order to allow Korea to meet its Aggregate Measure of Support (AMS) reduction commitment under the URAA. However, in 1998 and 1999, the government actually purchased less than planned because market prices rose to the level of the government purchasing price at harvest. In contrast, as the market price came down in 2000, farmers sold to the government increasing the quantity purchased by the government compared to 1999 (Table II.14). In general, farmers have been increasing the proportion of rice that they sell to the private market, in particular to the Rice Processing Complexes (RPC) which buy paddy rice directly from farmers. The share of rice marketing being handled by the RPCs has now reached 30%. As of 2000, 324 RPCs were in operation.

For other crops, such as ***barley, maize*** and ***soyabeans***, the price support system is managed by the National Agricultural Co-operative Federation (NACF). In 2000, the NACF increased the purchase prices of barley by 4%, that of maize by 5.5%, and soyabeans by 20% (Table II.14).

In early 2000, the Foot and Mouth Disease (FMD) broke out in cows with 88 suspected cases reported up until April 2000. In 15 cases involving 81 animals, the results were positive. Over 2 500 infected cattle plus animals from neighbouring farms were slaughtered. The last confirmed outbreak was in April 2000 suggesting that the measures taken to control and contain the outbreak were effective. Compensation based on current prices was given to producers required to slaughter livestock while special loan (total KRW 70.1 billion) facilities were provided to farms affected by restrictions on

Table II.14. **Korea: Purchase prices and quantities of major cereals**

	Units	1996[1]	1997[1]	1998[1]	1999[1]	2000[1] (p)	Percentage change		
							1997 to 1998	1998 to 1999	1999 to 2000
Rice[2]									
Purchase price	'000 KRW/t	1 647	1 647	1 738	1 825	1 925	5.5	5.0	5.5
	USD/t	2 047	1 733	1 241	1 538	1 703			
Purchase quantity	'000 t	1 241	1 224	928	876	906	–24.2	–5.6	3.4
Barley[3]									
Purchase price	'000 KRW/t	926	926	977	1 026	1 067	5.5	5.0	n.c.
	USD/t	1 151	974	698	865	944			
Purchase quantity	'000 t	318	163	188	246	158	15.3	30.9	n.c.
Maize[2]									
Purchase price	'000 KRW/t	478	478	504	529	558	5.4	5.0	5.5
	USD/t	594	503	360	446	494			
Purchase quantity	'000 t	13	13	14	8	25	7.7	–42.9	212.5
Soyabeans[2]									
Purchase price	'000 KRW/t	1 433	1 433	1 512	1 739	2 087	5.5	15.0	20.0
	USD/t	1 781	1 508	1 080	1 465	1 846			
Purchase quantity	'000 t	1.2	5.49	6.15	2.22	15.80	12.1	–63.9	611.7

n.c. Not calculated.
1. Calendar year basis.
2. Polished-grain equivalent.
3. Polished-grain equivalent in the case of price, and unhulled-grain equivalent in the case of quantity.
Source: Ministry of Agriculture and Forestry, Seoul, Korea, 2000.

Table II.15. **Korea: Consumption and price of beef and milk**

	Units	1998[1]	1999[1]	2000[1]	Percentage change	
					1998 to 1999	1999 to 2000
Beef						
Production[2]	'000 t	377	342	264	–9.3	–22.8
Consumption[2]	'000 t	494	561	585	13.6	4.3
Producer price	'000 KRW/t	5 400	7 176	7 512	32.9	4.7
Producer price	USD/t	3 856	6 047	6 644		
Purchased cattle	Head	112 774	. .	33 635	n.c.	n.c.
Milk						
Production	'000 t	2 027	2 244	2 288	10.7	2.0
Consumption	'000 t	2 286	2 747	2 753	20.2	0.2
Producer price	'000 KRW/t	538	538	600	0.0	11.5
Producer price	USD/t	384	453	531		

. . Not available.
n.c. Not calculated.
1. Calendar year basis.
2. Carcass weight equivalent.
Source: Ministry of Agriculture and Forestry, Seoul, Korea, 2000.

livestock movements. The government purchased 34 635 cows and 408 000 pigs (2% and 3% of annual consumption) from the restricted area during the period March to July. The purchased meat was released according to the market situation.

Beef production decreased by 23% in 2000, but consumption increased by 4%. **Milk** production and consumption remained at the level of the previous year (Table II.15). To improve sanitation, seven Livestock Packing Centres (LPCs), with automated processing from slaughtering to marketing, began operation in 2000.

Recently small-scale farmers have been leaving cattle farming. With the completion of the liberalisation process from January 2001, beef production is expected to decrease further. From that date, beef imports are subject to a "tariff only' import regime and the Livestock Products Marketing Organisation ceased its import function. The tariff on beef is around 41%. In 2000, 75 000 farms (26% of all cattle farms) participated in a ***calf breeding stabilisation scheme,*** which covered 206 000 cows. The stabilisation price per calf is KRW 1 million (USD 884) and the ceiling for the deficiency payment is KRW 250 000 (USD 221) per calf. This scheme will be administered by the new NACF from 2001. Overall, the number of cattle has been falling since 1997, from 2.7 million in 1997 to 1.7 million in September 2000 (a 37.4% decrease), although beef consumption has increased by 4% per annum during the same period.

Since 1997, the government has been gradually introducing direct payment schemes. ***Direct payments for environmentally friendly farming*** are currently being paid on a trial basis. A payment of KRW 524 000 (USD 463) per hectare is available to farmers who restrict the use of fertiliser and pesticide in drinking water conservation areas. A ***new scheme of direct payments for environment preservation*** will be implemented from 2001 with a budget of KRW 210.5 billion (USD 186 million). This payment will be given to farmers involved in paddy field production who carry out environmental conservation, including reduced use of fertilisers and pesticides and reporting certain farm records to the authorities. With this programme, the government intends to promote environmentally friendly farming nation-wide. Participating farmers will receive KRW 200 000 to 250 000 (USD 177 to 221) per hectare according to whether or not they are located in an agricultural promotion area.

An ***insurance scheme for agricultural crops*** will be applied in 2001 on a trial basis for apple and pear producers. The objective is to reduce farm income fluctuations caused by natural disasters. Farmers who want to participate will pay 70% of the insurance premium and the remaining 30% will be covered by the budget. Following the 2001 pilot project, the scheme will be extended to food grains. The budget outlay envisaged for 2001 is KRW 4.6 billion (USD 4.1 million).

Traditionally, all transactions in wholesale markets have been by auction. In response to changing market conditions, a ***Wholesaler System*** (a direct transaction system) was put in place alongside the auction system. The required amendment of the Act for Supply and Demand and Price Stabilisation of Agricultural and Fisheries Products was made in the second half of 1999. It became effective from June 2000 and regional wholesale markets are currently monitoring the application of the system. In addition, a computerised auction system was used in about half of the 22 fruit markets and a real-time information network was established in order to improve the transparency and flow of market information. Increased use of direct contracts between producers and consumers was also an important policy in the drive to reduce the number of agents in the marketing chain and the associated margins.

Food safety measures were intensified in 2000. The system for monitoring pesticide residues in agricultural products at the point of marketing has been further strengthened, with the number of checks increasing from 40 000 in 2000 to 51 000 in 2001. If residues exceed the permitted limits, products are removed from the market. For livestock, a ***Hazard Analysis Critical Control Points*** (HACCP) system has been implemented from the slaughterhouse to the final consumer. ***Genetically Modified*** soyabeans, soy sprouts and maize will be labelled as such from March 2001, in accordance with Article 16 of the Agricultural and Fisheries Quality Control Act.

Based on the Sustainable Agriculture Promotion Act passed in December 1998, ***sustainable and environmentally friendly farming*** is being given a high priority. Efforts are underway to reduce the use of fertiliser and pesticide through a more effective combination of farming technologies. A total of 16 models for Integrated-Pest-Nutrient-Management (IPNM) were implemented in 2000. Under the ***Scheme for environmentally friendly farming areas***, 20 "water conservation areas" have been established over the past two years from 1998 and 2000, with a total budget of KRW 300 billion (USD 265 million). This programme targets mainly organic farmers with a view to reducing the use of fertiliser and pesticide. For the period 1998-2004, it is envisaged that 189 areas will be established with a total investment of KRW 378 billion (USD 334 million). Specialised sale facilities for organic products are being developed in metropolitan areas. Consumer organisations are becoming more active in the marketing of organic products in response to growing concerns about food safety and quality.

Currently the government, recognising the potential importance of biotechnology in agriculture, is preparing a biotechnology development plan. Projects to enhance the use of ***information technology*** in agricultural areas are underway. The government and the NACF provided information technology education for 30 756 farmers in 2000. The government also provided an Asymmetric Digital Subscriber Line (ADSL) service in 63 areas (from among 1 229 small rural areas) in 2000.

Since 1997 support to farmers previously given as grants has been converted into long-term loans in order to improve self-reliance. In this regard, a new loan system has funding of KRW 185.5 billion (USD 164 million) in 2001. Under the system, the farmers themselves decide on how to use the loans within the budget limit, but can receive professional farm management advice.

The new ***National Agriculture Co-operative Federation***, which includes the livestock and ginseng sectors, was launched in July 2000. Continuing reforms are concentrating on marketing activities in rural areas and on a continuing process of downsizing. From a total of 2 818 offices, a further 200 branches are to be closed or merged. The newly merged ***Korean Agricultural and Rural Infrastructure Corporation*** (KARICO), which deals with land and water resources, came into operation in January 2000.

Developments in trade policy

The liberalisation of the beef market was completed in January 2001. The Livestock Products Marketing Organisation (LPMO), a state trading organisation which dealt with beef imports, ceased to function and beef imports became subject to a tariff-only import regime. All commodities except rice are now liberalised in the sense that the only trade measure consists of a tariff. As the domestic economy and food consumption recovered from the deep recession of 1998, consumption of imports increased so the 1999 level of tariff-rate quota (TRQs) fill was higher than in 1998. Out of 64 agricultural products subject to TRQ, 35 were completely filled, 17 were partially filled and no imports occurred for 12 products. Korea was involved in one WTO ***dispute settlement procedure,*** concerning beef marketing (Part II.2).

Overall evaluation

Korean agriculture is characterised by high support levels and limited market orientation. After decreasing from 71% in 1986-88 to 66% in 1998-2000, the %PSE reached 73% in 2000. The increase was mainly due to an increase in market price support, although budgetary payments to producers also increased. The %CSE has decreased slightly from 67% in 1986-88 to 63% in 1998-2000. The PSE and other indicators increased and now are all above the levels observed before the economic crisis of 1997/98. Korea's %PSE is the highest in the OECD, and almost double the OECD average (Tables III.28-29, Figure III.9).

Market price support, which is the most trade and production distorting measure, accounted for 96% of the total support to producers in 2000. The prices received by producers and paid by consumers as measured by the NPC in 2000 were more than three times the world price. The producer NPC has remained virtually unchanged since 1986-88, but it does vary across commodities. Producers receive over seven times the world market price for oilseeds, over four times the world price for rice, and over three times the world price for milk and beef. The value of gross farm receipts for 2000 was around four times higher than what it would be at world market prices, this increase in producer NAC indicates a reduction in market orientation.

Support provided to general services to agriculture has decreased gradually over the last three years and represents about 14% of the TSE. Total transfers to agriculture increased to an estimated KRW 27 trillion (USD 24 billion), which represents over 5% of Korea's GDP, the highest share for the OECD.

Overall the indicators show that the agricultural policy changes implemented in Korea since 1986 have had minimal impact on the market orientation of the agricultural sector, although Korea has made efforts to move towards environmental and other direct payments. The predominance of market price support policies for agricultural commodities creates a burden on Korea's consumers, while the large TSE is an imposition on Korea's economy. The new policies are a step in the right direction if payments are increasingly decoupled from production and targeted to specific objectives such as environmental quality.

Mexico

Main policy instruments

Agricultural policies consist mainly of market price support, provided through border measures, and budget payments to producers based on historical entitlements and input use. Mexico's border protection with Canada and the United States is being reduced within the framework of the North American Free Trade Agreement (NAFTA) and with other countries according to the URAA. For some products, such as maize, milk and other livestock products, Mexico allocates its import tariff-rate quotas (TRQ) through auction, and very often the annual quota is increased in response to changing market conditions. The set of programmes under the ALIANZA PARA EL CAMPO (Alliance for Agriculture) dates from 1996 and, with the participation of State governments, aims at enhancing investment in farms, especially in poor, rural areas. The PROCAMPO programme disburses payments to eligible farmers, according to the area planted during a historical base period, on the condition that the land is used for agricultural or livestock production, or is in an environmental programme. The Support Services for Agricultural Marketing Agency (ASERCA) provides payments per tonne to the first-hand buyers of wheat, maize and sorghum in certain states, and to growers of rice. Additionally, the National Water Commission – a government agency in charge of the administration of water, and of the building and maintenance of water infrastructure – receives budget transfers that reduce farmers' irrigation costs. The Secretariat for Social Development (SEDESOL) distributes free tortillas to poor families. Since 1993, the PROCEDE programme, run by the Secretariat for Agricultural Reform, has promoted a better definition of land property rights in the Ejidos (Box II.2).

Box II.2. **First evaluation of the PROCEDE programme defining Ejido's land property rights**

There are three forms of land ownership recognised by the Mexican Constitution: small private ownership with well-defined size limits, community land and Ejidos. These two latter forms of social ownership were promoted during several decades of land redistribution from 1917 to 1992. Currently Communities and Ejidos cover an area of 103 million hectares, which is about half the area of the country.

The reform of Article 27 of the Mexican Constitution in 1992, and the subsequent Agrarian Law opened the possibility of defining individual property rights on land held under the Ejido or Communal property system. The definition and effective protection of these rights requires the following steps, all of them needing the express approval of a two-thirds majority of the Ejido Assembly:

1. Drawing a map and measuring the size of the land and the limits of the Ejido.
2. Deciding the use of the land in each Ejido, including residential land, common land and plots.
3. Registering the limits and uses of the land in the National Agrarian Registry.

When this process finishes in an Ejido, the ejidatarios receive a certificate with a map defining the limits of their plots, and their rights to residential and common land. The programme PROCEDE was launched in 1993 with the objective of implementing these steps with all the guarantees. The programme PROCEDE is voluntary and free. In practical terms it required using satellite photographs and other topographic instruments to draw maps and define the limits of plots in an area equal to half the area of the country. 30 000 assemblies with more than three million ejidatarios needed to agree on a land use in their Ejidos, and over five million secure certificates needed to be produced.

By October 2000, 72% of the Ejidos and Communities in Mexico had already been certified under the PROCEDE programme. The share was much smaller in some southern states such as Chiapas (39%) and Oaxaca (44%). The share of the land area already certified is lower because the largest Ejidos are not yet certified. The most frequent reason for delays in the certification process has been disagreement among the ejidatarios on the boundaries of the plots. This is likely to continue to be the case, especially in the largest Ejidos.

The plots certified through PROCEDE can be rented to anyone and sold to other members of the Ejido with no need for approval from the Assembly. These rights are protected by the "Procaduría Agraria" in charge of conflict resolutions. However, the certified plots cannot be sold to anyone outside the Ejido. In order to do so the Assembly has to allow for "full property" by a two-thirds majority. In practical terms this seems to be unlikely. By 1998, only 1.9% of all Ejidos had approved "full property" on part of their area, and only 0.1% adopted full property for the entire area. A significant part of this land was not agricultural land.

The certification process is a significant step in the direction of defining land rights inside the Ejidos. However, so far it has had a limited impact on the agricultural land market in Mexico. The land in the Ejidos has always been rented informally. Now this may be done in the certified plots with more guarantees, but the amount of agricultural land that has been sold from the Ejidos seems to be marginal.

Developments in domestic policies

There have been no significant changes in Mexican agricultural policy in 2000. The ASERCA payments to first buyers of maize, wheat and sorghum were allocated through different closed-tender auctions covering up to 3.2 million tonnes of maize, 1.7 million tonnes of wheat and 2.3 million tonnes of sorghum. These auctions involved production from selected main producer states such as Sinaloa for maize, North-East region for wheat and Tamaulipas for sorghum. The payments are conditional on the buyers having paid producers an administered minimum price (Table II.16). In the year 2000 retail prices of maize – Mexico's main staple food- continued the rising trend observed in 1999 as shown in Table II.17. Rice growers received a deficiency payment from ASERCA for every tonne marketed, up to a overall limit of 275 000 tonnes.

Payments per hectare under PROCAMPO increased by 13% in 2000 to MXN 708 (USD 75) for the autumn/winter crop season and by 10% to MXN 778 (USD 82) for the spring/summer season (Table II.18).

Table II.16. **Mexico: Administered prices**

Product	Producer level						Change in MXN price	
	1998		1999		2000p		1998-1999	1999-2000
	MXN/t	USD/t	MXN/t	USD/t	MXN/t	USD/t	%	
Maize blanco[1]								
Autumn/winter	1 315	144	1 355	142	1 350	143	3.0	–0.4
Spring/summer	1 355	148	1 350	141	1 500	159	–0.4	11.1
Sorghum from:								
– Tamaulipas[2]	960	105	960	100	1 050	111	0.0	9.4
Wheat from:								
– The North-East[2]	1 400	153	1 375	144	1 460	154	–1.8	6.2
– El Bajío[2]	1 368	149	1 368	143	1 453	154	0.0	6.2
Sugar[3]	3 513	384	3 739	391	4 295	454	6.4	14.9

1. Minimum price to be paid to the producer under the ASERCA programme in Sinaloa for AW prices and Chiapas for SS.
2. Minimum price to be paid to the producer under the ASERCA programme. This minimum price is only fixed for the autumn/winter production.
3. Ex-factory prices for raw sugar (*azucar estandar*) on the basis of which sugar cane producer prices are determined.

Source: Minimum prices: Official Journal; Ex-factory prices for raw sugar: Sugar Industry Committee (COAZUCAR), 2000.

Table II.17. **Mexico: Retail price for maize products**

	1998		1999		2000p		Change in MXN price (%)	
	MXN/t	USD/t	MXN/t	USD/t	MXN/t	USD/t	98 to 99	99 to 00
Tortilla[1]	2 688	294	3 795	397	4 140	438	41.2	9.1
Flour[2]	4 269	466	4 744	497	5 109	540	11.1	7.7

p Provisional.
1. Retail prices of both tortilla and flour in Mexico DF, Monterrey, Guadalajara and Puebla.
2. Flour sold in the form of 1 kg bags for which retail prices were liberalised in 1995.

Source: Banco de Mexico, Mexico D.F., 2000.

Table II.18. **Mexico: PROCAMPO direct payments**

	Unit	1998		1999		2000p		Change in MXN price %	
		MXN	USD	MXN	USD	MXN	USD	1998 to 1999	1999 to 2000
Rate of payments (crop season)									
Autumn/winter	Per hectare	556	61	626	66	708	75	12.6	13.1
Spring/summer	Per hectare	626	68	708	74	778	82	13.1	9.9
Total payments	Million	8 491	928	9 372	981	10 634	1 125	10.4	13.5
		1998		1999		2000p		Change %	
Area benefiting	Million hectares	13.9		13.5		13.9		–2.5	2.7

p Provisional.

Source: Secretariat of Agriculture and Rural Development (SAGAR), Mexico D.F.,2000.

Table II.19. **Mexico: Alliance for Agriculture**

Type of programme	1998		1999		2000p		% Change in MXN		Main objective of the programme
	mn MXN	mn USD	mn MXN	mn USD	mn MXN	mn USD	1998 to 99	99 to 2000	
Payments based on limited area planted	**335.5**	**36.7**	**292.1**	**30.6**	**395.1**	**41.8**	**–12.9**	**35.3**	
Coffee programme	199.3	21.8	204.7	21.4	315.7	33.4	2.7	54.2	Improve coffee plants, productivity and renovation of plantations
Cotton	80.0	8.7	30.1	3.2	5.0	0.5	–62.4	–83.4	Technical assistance, pest control and genetic improvement
Other programmes	56.1	6.1	57.3	6.0	74.3	7.9	2.1	29.8	
Payments based on historical plantings	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**n.c.**	**n.c.**	
Payments based on use of variable inputs	**201.2**	**22.0**	**308.8**	**32.3**	**211.4**	**22.4**	**53.5**	**–31.5**	
Maize and beans seed improvement	187.0	20.4	235.8	24.7	137.9	14.6	26.1	–41.5	Use of certified seeds in low productivity units.
Other programmes	14.2	1.6	73.0	7.6	73.5	7.8	412.9	0.7	
Payments based on use of on-farm services	**675.6**	**73.8**	**979.6**	**102.5**	**965.2**	**102.1**	**45.0**	**–1.5**	
Elementary Programme of Technical Assistance	125.7	13.7	167.2	17.5	167.9	17.8	33.0	0.5	Technical support for increasing productivity of basic crops
Training and Extension	142.9	15.6	190.0	19.9	193.9	20.5	32.9	2.0	Extension services to improve productivity of small producers.
Animal health	145.1	15.8	173.5	18.2	196.9	20.8	19.6	13.5	Pest and diseases prevention, control, surveillance and eradication
Plant health	125.9	13.8	163.7	17.1	173.1	18.3	30.0	5.8	Pest prevention, control and/or eradication
Oil-palm and soybeans	74.9	8.2	155.4	16.3	83.9	8.9	107.4	–46.0	Increasing the planted area of resistent oil-palm and soybeans in the tropic.
Other programmes	61.1	6.7	129.9	13.6	149.5	15.8	112.5	15.1	
Payments based on use of fixed inputs	**1 619.5**	**176.9**	**2 111.3**	**221.0**	**2 128.0**	**225.1**	**30.4**	**0.8**	
Ferti-irrigation	348.8	38.1	319.2	33.4	187.8	19.9	–8.5	–41.2	Irrigation systems to allow a more efficient use of water, energy and fertilisers.
Mechanisation	203.3	22.2	215.8	22.6	149.4	15.8	6.2	–30.8	Facilitate the acquisition/repair of tractors and seeding machines
Creation of Pairies	190.1	20.8	193.6	20.3	180.2	19.1	1.8	–6.9	Increase of production and efficient use of forage
Milk Programme	109.4	12.0	139.4	14.6	124.9	13.2	27.4	–10.4	Installation of building materials and equipment for milk production
Livestock Genetic Improvement	138.2	15.1	161.1	16.9	176.9	18.7	16.5	9.8	Promote artificial insemination and improve breeding quality of cattle
Genetic Improvement	65.5	7.2	59.2	6.2	59.6	6.3	–9.6	0.7	Acquisition of genetic material and cattle samples for repopulating
Rural equipment	382.0	41.7	630.0	65.9	809.6	85.6	64.9	28.5	Acquisition of small equipment by young, female and indigenous farmers
Development of indigenous Areas	56.2	6.1	150.2	15.7	0.0	0.0	167.5	–100.0	Promote productive projects in extremely poor areas.
Other programmes	126.1	13.8	242.9	25.4	439.5	46.5	92.7	81.0	
Payments based on established minimum farming income	**403.0**	**44.0**	**648.3**	**67.9**	**549.1**	**58.1**	**60.9**	**–15.3**	
Temporary employment programme in poor areas	403.0	44.0	648.3	67.9	549.1	58.1	60.9	–15.3	Rehabilitate basic infrastructures and provide temporary employment
Miscellaneous Sub-national payments	**0.0**	**0.0**	**50.0**	**5.2**	**0.0**	**0.0**	**n.c.**	**n.c.**	
Research and Development	**149.5**	**16.3**	**170.0**	**17.8**	**149.7**	**15.8**	**13.7**	**–11.9**	
Technology transfers	149.5	16.3	170.0	17.8	149.7	15.8	13.7	–11.9	Research, validation and technology transfers by research foundations
Inspection services	**1.1**	**0.1**	**2.7**	**0.3**	**1.9**	**0.2**	**153.3**	**–28.6**	
Marketing and promotion	**36.5**	**4.0**	**140.2**	**14.7**	**227.0**	**24.0**	**284.4**	**61.9**	
Other Programmes	**2.0**	**0.2**	**8.2**	**0.9**	**36.8**	**3.9**			
Total	**3 424**	**374.0**	**4 711**	**493.2**	**4 664**	**493.4**	**37.6**	**–1.0**	
Share by State Governments	32%		34%		31%		4.9		

n.c. Not calculated.
Note: Alianza programs have been allocated according to the OECD's classification on the basis of implementation (see part II in this volume).

The budget for the **ALIANZA** agricultural programmes remained stable in nominal terms (Table II.19). The part of the budget for these programmes provided by State governments fell by 9% to cover 31% of the total compared to 36% in 1996, when the Alianza was launched. Of a total expenditure of MXN 4.66 billion (USD 493 million), 65% went to support investment and on-farm services.

Developments in trade policy

In 2000, the free trade agreement between Mexico and the European Union entered into force. It is, with NAFTA, the most important of a long list of free trade agreements signed by Mexico in the last decade with Chile, Bolivia, Costa Rica, Colombia, Venezuela, Nicaragua, El Salvador, Guatemala and Honduras. It was followed by two other agreements with Israel and with EFTA. Most fruit and vegetables, very significant in Mexican exports, will enter the European Union at reduced or zero tariffs in less than ten years time. The list of excluded products will be revised in 2003. So far, the NAFTA agreement is the most significant for agricultural policies. Tariffs for most products from the United States and Canada have been reduced already and will become zero in 2003, or 2008 for maize, milk and sugar.

Overall evaluation

Mexico engaged in a process of trade liberalisation with several free trade agreements. The launch of PROCAMPO in 1994 implied a shift to more decoupled payments. However, the average %PSE has increased from –1% in 1986-88 to 16% in 1998-2000. This is well below the OECD average of 34%. The %PSE increased in 2000[10] from 15% to 18% continuing a trend that began in 1996 following the devaluation of the peso. This trend mainly reflects the evolution of market price support. The %CSE has been negative since 1997, indicating that consumers are being implicitly taxed. General services to agriculture decreased slightly in 2000, accounting for 6% of the Total Support Estimate (TSE). The TSE increased by 36% to MXN 71 048 million (USD 7 516 million); that is about 1.3% of Mexican GDP (Tables III.30-31, Figure III.10).

The higher level of market price support in 2000 was due both to higher producer prices in Mexico and a slight appreciation of the peso. This form of support, which has the greatest effect on production and trade, represented 70% of total PSE in 2000. The evolution of market price support in Mexico has been strongly affected by the large depreciation of the peso in the 1980's and in 1994. Nominal producer prices did not immediately adjust to the new exchange rate and this temporally created negative market price support values. These soon turned positive when domestic prices increased. Currency stability and lower inflation rates in 2000 have not stopped this upward trend in Mexican agricultural prices. The Producer NPC increased from 1.12 in 1999 to 1.18 in 2000, that is, the prices received by farmers were on average 18% higher than those in the world market. The NPC for consumers was 1.23.

The producer NAC increased to 1.23 in 2000, indicating that gross farm receipts (including support) were 23% higher than they would have been without any support. In 1986-88 all budgetary payments were based on input use; by 1998-2000, 60% of the payments were based on historical entitlements, which are regarded as less distorting. The %CSE and the consumer NAC increased from –11% and 1.12 in 1999, to –15% and 1.18 in 2000, respectively. As indicated by the consumer NAC, consumers of domestically produced farm commodities were implicitly taxed, and paid on average 18% more than what they would have in the absence of support to producers and consumer subsidies.

Despite the increase of support since 1986-88, Mexico has made significant reforms in agricultural policy, increasing the share of support given through historical entitlements payments, gradually opening its markets mainly to NAFTA members and better defining property rights in the Ejidos. However, several years of currency instability and inflation have created some inertia in agricultural prices that are still partially governed by policy decisions.

New Zealand

Main policy instruments

Support to agriculture in New Zealand is provided mainly through general budget outlays for basic research and for the control of pests and diseases. Direct payments are granted for adverse climatic events and natural disasters, but only in the event of large-scale emergencies of national significance that are beyond the response capacity of local farmer or grower organisations and territorial local authorities. Historically, marketing of most agricultural products in New Zealand was largely under the control of statutory producer and marketing boards. Producer boards for milk, kiwifruit, apples and pears enjoy statutory powers controlling a range of activities. The non-trading boards for meat (Meat New Zealand), wool (Wools of New Zealand), deer and other game (Game Industry Board), and pork (the Pork Industry Board) have statutory powers to collect levies from producers. Revenues from these levies are spent on promotion, research and development and, less significantly, on quality assurance and trade policy. Currently, the Boards themselves determine the level of compulsory levies on producers. The ability of producers to influence the levying process is indirect only.

Developments in domestic policy

In May 1999, the ***dairy industry*** proposed the formation of a mega co-operative ("MergeCo") through the merger of most of New Zealand's co-operative dairy processing companies. Under the proposal, the New Zealand Dairy Board would have become a subsidiary of MergeCo and the Board's statutory export monopoly would have been removed. In September 1999, legislation was passed to facilitate the industry's plan. However, in March 2000, the dairy industry announced that it had failed to agree to merger terms. In September 2000, the facilitating legislation expired, so the New Zealand Dairy Board remains the statutory exporter of New Zealand dairy products.

The government and the dairy industry consider that commercial pressures make change in the economic organisation of this sector inevitable and discussions about the options for doing that are ongoing. No time period has been agreed for this process.

Emergency payments were entirely devoted to fighting the presence of *Varroa jacobsoni* mite, a serious pest of honey bees, which was confirmed in South Auckland in April 2000. The pest is currently confined to the North Island. In July, the Cabinet agreed to a three-phase ***management programme*** for varroa involving immediate assisted pesticide treatment of high-risk hives, a two-year interim management programme and a long-term varroa pest management strategy. The objectives of the two-year interim management programme are to ensure that the South Island remains free of varroa for as long as possible. The programme involves movement controls, surveillance, treatment, and South Island incursion response, as well as extension services, and the initiation of research to assist beekeepers to adapt to varroa's presence and make a smooth transition to sustainable long-term arrangements.

The second phase of the ***Animal Products Act*** came into force in November 2000. This governs risk management programmes for processors of meat, fish and other animal products. Under the terms of this part of the Act, new businesses involved in primary processing of animal products now need to have a risk management programme in place before they begin operating. Existing processors have until October 2002 to put risk management programmes in place. This part of the Act removes the prescriptive nature of the former law, by focussing on outcomes so that detailed specifications are used only where necessary. It encourages the industry to be innovative, flexible and produce a broader range of consumer goods. Dairy produce is excluded because it is covered under the Dairy Industry Act.

The ***Animal Welfare Act***, which came into force in 1 January 2000, replaces the Animals Protection Act and reflects a major philosophical shift. Instead of focusing on punishment for acts of cruelty, it adopts an animal welfare philosophy, providing minimum standards and recommendations for the care of animals. The codes will be developed in a consultative manner allowing the community's views to be taken into account.

In September 1999, the ***apple and pear industry and kiwifruit industry*** underwent reform and legislation was passed providing for the corporatisation of the commercial businesses of these Boards; into "Zespri' in the case of kiwifruit and "ENZA' in the case of apples and pears. Growers were allocated shares in these entities with normal rights and obligations. It is envisaged that this shareholding structure will increase commercial discipline on Zespri and ENZA. Shares are tradable only amongst growers.

Zespri and ENZA continue to enjoy export privileges, though provision has been made to enhance exports of fruit by independent and third party exporters. A small regulatory board has been established in each industry. These new boards are not able to trade, but authorise Zespri and ENZA, respectively, to be the principal exporters, thus maintaining the "single desks' for kiwifruit and apples. Other companies may be permitted to export apples and pears provided their exports do not undermine the activities of ENZA. An independent export permits committee considers such applications. Other companies may be permitted to export kiwifruit where such exports would return more than would Zespri exporting alone. The new kiwifruit board considers such applications.

The current regulations for apples and pears have been controversial due to the continued low profitability of the sector, concern about the workings of the export permit process, and the purchase of a minority controlling share of ENZA by corporate investors. The government has therefore commenced a review of the Apple and Pear Export Regulations 1999. Any changes to the regulations are anticipated to take effect from the 2001/2002 growing season. There are currently no formal plans to review the kiwi export regulations.

The Hop Marketing Board retains its single desk powers and acts as the sole agent for New Zealand's hop growers. In late 2000, the Board indicated to Government that it wished to consider options for deregulation. Firm proposals for reform are yet to be developed.

The **N*ew Zealand* Wool Board** has been subject to an industry-initiated review since October 1999. Consultants have prepared an industry strategy, which advocates a move away from statutory backed Board activities to those operating on a commercial basis. In August 2000, woolgrowers voted overwhelmingly in support of change, and the industry is now evaluating options and planning for implementation.

No formal proposals for changes to the **N*ew Zealand* Meat Board** have been put forward. However, consideration is being given to combining the functions of the Meat Board with the residual non-commercial functions of the Wool Board or its successor. This is at the conceptual stage only.

The **S*ustainable* Farming Fund**, launched in September 2000, is administered by the Ministry of Agriculture and Forestry and aims to help rural communities in the sustainable use of land-based resources, assisting them to overcome barriers to economic, social, and environmental well-being. It provides money for projects that enable access to information, technology, or tools and that bring together communities to address problems and improve the community economic base.

The focus of the Fund is on short-term projects (1-3 years) that are practical and help with the transfer of information and technology from experts into the hands of the wider community. The Fund will provide financial support through grants. The government has set aside NZD 24 million (USD 11 million) for the project over three years. The maximum grant payable will normally not exceed NZD 200 000 (USD 90 700) per project per year. Successful applications were identified in mid-December 2000. Work on these projects will begin in 2001.

A **M*inister of* Rural Affairs** has been appointed and a small policy group within the Ministry of Agriculture and Forestry was established to encourage government agencies to consider the impact of their policies on people and businesses in rural communities and to consult effectively with them. The group monitors a range of policy issues, including taxation, transport, telecommunications, accident insurance, energy, health and education.

Developments in trade policy

Effective as of 1 July 2001, New Zealand will provide duty-free access to all imports from Least Developed Countries (as defined by the UN).

New Zealand signed a Closer Economic Partnership Agreement (CEP) with Singapore, which came into effect on 1 January 2001. In terms of trade in agricultural products, tariffs on all goods traded between the countries fell to zero on that day. In addition, the CEP provides for a built-in agenda for food products to be covered by mutual recognition, unilateral recognition or harmonisation to address technical, sanitary and phytosanitary barriers.

Legislation that the previous government had enacted for phased reductions in tariff levels to zero was repealed. Tariffs (except for beer, pulp and paper products) have been frozen since July 1999.

The government has announced a broad level policy decision to introduce provisions for various export credit guarantees. Work is proceeding with a view to implementation in the first half of 2001.

The country was a party to several WTO ***dispute settlement procedures*** involving livestock products (Part II.2).

Overall evaluation

Agriculture in New Zealand is export-oriented. The level of support to agriculture in New Zealand continued to be the lowest among OECD countries in 2000. After rounding, the %PSE was zero in 2000 and no positive market price support was recorded for any one of the PSE commodities. In the mid-1980s, gross farm receipts were 13% greater than what they would have been without any support, by 2000 this gap was reduced to zero. Although consumer prices were slightly above world market prices in the mid-80s, by 2000 there was no implicit tax on consumers (Tables III.32-33, Figure III.11).

Of the support provided, most consists of payments for general services and natural disasters. Some of the reforms to the previous statutory arrangements for marketing and export go in the direction of deregulation, although the implementation of proposed changes aimed at removing the Dairy Board's statutory export monopoly has been delayed.

The agricultural sector in New Zealand is highly market-oriented and domestic producer prices are aligned with world market prices. The policy developments overall have resulted in a dramatic reduction in market distortions and support to agriculture.

Norway

Main policy instruments

Major objectives of Norwegian agricultural policy are to promote long-term food security, enhance rural development, and protect the environment. To achieve these objectives, market price support, in the form of wholesale target prices (or guaranteed producer prices in the case of grains), is provided for most commodities. Production quotas to control milk output were introduced in 1983. TRQs and high tariffs limit import competition, although there is a system of "open periods" for imports at reduced tariff rates when domestic prices rise above threshold levels.

Market price support is supplemented by a variety of direct payment measures, including area, headage, and deficiency payments. A significant proportion of these payments is differentiated by region and farm size. Agri-environmental payments have been increasing in recent years. Export subsidies for livestock products are financed through levies at the producer level, while exports of processed and horticultural products are financed directly by the government. Support prices and payment levels are negotiated between the government and producer representatives in the annual Agricultural Agreement.

Developments in domestic policies

In 2000, the Norwegian Parliament endorsed White Paper No.19 (1999-2000) *On Norwegian Agriculture and Food Production*, replacing its 1992-93 predecessor. Paper No.19 sets out the direction for Norwegian agriculture policy over the coming years, emphasising increased consumer orientation, food safety and the multifunctional character of agriculture. This has already been reflected in some adjustments to the main support measures and several new policy initiatives.

On 1 July 2000, the Norwegian Agricultural Authority (NAA) was created under the authority of the Ministry of Agriculture as the central body for the implementation of agricultural policy. The NAA was formed through the merging of several administrative authorities including the Norwegian National Grain Administration, the Agricultural Marketing Board (AMB), the Meat Transport Funding Office, the Agricultural Price Reporting Office and parts of the State Bank of Agriculture.

Grains and oilseed producers are supported by a system of ***guaranteed prices***, with all product being purchased by the NAA. All guaranteed prices were reduced by NOK 140 (USD 16) per tonne in 2000, representing reductions of between 3% and 8% (Table II.20). The support system for grains and oilseeds will be replaced on 1 July 2001 with the more market orientated ***target price*** system currently used for other commodities. All target prices were reduced for 2000, except for sheepmeat, potatoes, fruits and other vegetables, which remained the same. The target price for pigmeat was lowered by 12%, poultry by 11%, eggs by 8% and beef by 7%. Overall, the reduction in these support prices is estimated to reduce the total value of farm gate production by NOK 900 million (USD 102 million), or around 5%. Producer levies ("marketing fees") remained fairly stable during 2000, except for the levies on sheepmeat, which rose by 50%.

Table II.20. **Norway: Administered prices**

Product	1999/2000 (July to June)		2000/01 (July to June)		Change in NKR price 1999/2000 to 2000/01 %
	NKR/t	USD/t	NKR/t	USD/t	
	Producer level (excluding value-added tax)				
Food grains					
Wheat	2 310	296	2 170	247	–6.1
Rye	2 150	276	2 010	228	–6.5
Barley[1]	1 920	246	1 780	202	–7.3
Oats[1]	1 730	222	1 590	181	–8.1
Feed grains					
Wheat	1 980	254	1 840	209	–7.1
Rye	1 930	248	1 790	203	–7.3
Oilseeds	4 440	569	4 300	489	–3.2
	Wholesale level (excluding value-added tax)				
Beef, bull[2]	36 450	4 675	33 950	3 859	–6.9
Pigmeat[3]	26 870	3 446	23 770	2 702	–11.5
Sheepmeat, lamb[2]	41 440	5 315	41 440	4 711	0.0
Eggs[4]	15 680	2 011	14 480	1 646	–7.7
Poultry	30 550	3 918	27 250	3 098	–10.8
Milk[5, 6]	5 048	647	4 952	563	–1.9

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 E; carcasses.
4. Class A, weighing more than 53 grammes.
5. Converted from litres, assuming 1 litre equals 1.032 kilogrammes of milk.
6. Previously reported at the Wholesale Level for flavoured milk products.

Source: Ministry of Agriculture, Oslo, 2000.

Milk production quotas were made tradable in 1997, and the government has used this system in recent years to reduce production in response to lower domestic consumption and the WTO limits on subsidised exports. In 1998, half of the quota purchased by the AMB from producers was permanently withdrawn from the market and in 1999 all of the quota purchased by the AMB was withdrawn. In 2000, the NAA purchased and removed from the market 93 million litres, or 5.5% of total production at an estimated cost of NOK 659 million (USD 74 million). Further measures are being considered to reduce milk production.

The Acreage and Cultural Landscape Programme accounts for one quarter of total budgetary support. ***Area payment*** rates decline with the number of hectares and are differentiated by region. Some of the payments are only provided up to a limited area per farm. While total programme expenditure has been reduced slightly by 1% to NOK 3.3 billion (USD 375 million) for 2000/01, changes have been made to the area payment rates to encourage some structural adjustment. Direct support to larger farms increased relative to smaller farms, and to favourable farming regions relative to less favourable regions.

The cereal payment rate for the first 40 hectares in the three most favourable farming regions increased by 13% to 16% (NOK 330 (USD 38) per hectare), while those in the remaining four regions received only a 5% increase (NOK 200 (USD 23) per hectare). For land above 40 hectares in all regions, the payment rate increased by 30% (NOK 550 (USD 63) per hectare) to NOK 2 370 (USD 269) per hectare. The area payment for potatoes was changed by a fixed amount for each size category in all seven regions. For the first six hectares farmed, the payment decreased by NOK 40 (USD 5) per hectare; for the next six hectares the payment rate increased by NOK 107 (USD 12) per hectare; above 12 hectares the payment rate increased by NOK 180 (USD 20) per hectare. These changes have equalised the potato area payment at NOK 2 800 (USD 318) per hectare for all farm sizes in the five most favourable zones. The payment for vegetables was reduced by between 7% and 10% for the first three hectares, and increased by up to 14% for the next three hectares and by up to 53% above six hectares. The payment for the first three hectares of fruits and berries fell by between 8% and 18%. More significantly, the payment rate of NOK 3 000 (USD 341) per hectare for the next three hectares was extended to all land above six hectares, the size at which the payment previously stopped. Changes made to payment rates for grassland showed a similar pattern and reduced the number of size categories from four to two. The grassland acreage payment limit remains at 40 hectares.

Total support provided in the form of ***headage payments*** under the Production Subsidy to Livestock Programme increased by 10% in 2000/01 to NOK 2.3 billion (USD 261 million). Headage payment rates decrease with the number of animals up to a certain size limit, beyond which no payment is made. In contrast to the area payment programme, a regional distinction is only made for laying hens. A number of changes were made in 2000 to increase support for larger farms relative to smaller farms.

For most livestock classes including milking cows, male cattle, milking goats, sheep and suckling goats, breeding pigs, slaughter hogs, and laying hens in the southern region, the headage rate for the first size category was reduced by between 8% and 33%. For the remaining three classes of livestock, laying hens in the northern region and suckling cow on or not on dairy farms, the headage payment remained the same for the first size category. Rates per head for all other size categories were increased for all classes of livestock except sheep and suckling goats. More significantly, the upper size category for which headage payments are made was extended for milking cows, male cattle, milking goats, breeding pigs, slaughter hogs and laying hens. For example, the upper size category for milking cows was previously 26-40 cows, for which farmers received NOK 800 (USD 91) per head. The upper category has now been extended to 26-50 cows, with farmers receiving NOK 1 000 (USD 114) per head. Changes to area and headage payments will offset most of the price reductions for larger farms.

Support provided through ***agri-environmental measures*** continues to increase. Assistance to organic farming increased by 10% to NOK 58.8 million (USD 6.7 million) for 2000/01. The policy target is to increase the organic area from 2% to 10% of total agricultural land by 2010. Subsidies are provided directly to farmers on a per hectare basis, and to support research, advisory and certification organisations. Funding to support specific landscape maintenance and development, including the maintenance of ancient buildings, increased by 13% in 2000/01 to NOK 118.2 million (USD 13.4 million).

A comprehensive environment plan for agriculture has been adopted, requiring environmental planning and documentation at the individual farm level. A pilot project will be implemented in 2001, with the scheme becoming mandatory for all farmers from 2003.

No changes were made to the ***base deficiency payment*** per unit of output for the products covered by the programme (milk, beef and veal, sheepmeat, pigmeat and wool). T***he regional deficiency payments*** also remained the same, except for poultry where coverage has been expanded to include eggs sold locally. Expenditure on the ***early retirement*** programme introduced in 1999 increased by 163% in 2000/01 to NOK 78 million (USD 9 million).

Other policy changes included the introduction of a new ***tax deduction*** which will, for small farms, offset most of the income loss resulting from lower guaranteed and target prices, and reduced acreage and headage payments. Farmers with a positive income can deduct from their total income up to NOK 36 000 (USD 4 092), providing a maximum tax saving of NOK 10 000 (USD 1 137) per farm. The ***interest rate*** charged on farm development loans from the Norwegian Industrial and Regional Development Fund (formerly administered by the State Bank for Agriculture) increased marginally from 6.3% to 6.4%. This increase was less than the market interest rate, which rose from 6.8% to 7.7%. ***Value Added Tax*** (VAT) was increased to 24% on 1 January 2001, but VAT applying to food will be reduced on 1 July 2001 to 12%. This change was made as part of the government's policy objective to lower food prices, and to reduce the price differential with neighbouring countries.

A plan of action has been developed by the government to give higher priority to consumer interests in food policy. The plan includes consumer participation and representation in formulating policy, surveillance of food prices and improving the availability of information on food and food safety. A separate plan of action was adopted in 2000 to deal with the problem of antibiotic resistance in the food chain. Another programme has been developed with the aim of increasing the profitability of the agricultural sector through better focus on market opportunities.

It is normal practice for Norway to implement European Union legislation in the area of public and animal health after adoption by the EEA Joint Committee. However, in response to the latest **BSE *crisis***, Norway has implemented all the regulation changes made by the European Union in advance of their adoption by the Joint Committee, with the exception of testing healthy animals older than 30 months. In Norway, ruminant protein (bone meal, blood meal, etc.) has been banned in feed for ruminants since 1991. The ban on imports of cattle and beef products from the United Kingdom and Ireland has not been extended to include other European Union members.

Developments in trade policy

There have been no major developments in Norwegian trade policy. Tariff-rate quota access has been expanding where required by the URAA, although some tariff-quotas remain under-utilised. Export subsidies are used for the promotion of branded cheese exports and to dispose of surplus meat, eggs, dairy and processed agricultural products. In 1999, subsidised exports of beef, pork, butter, cheese and whey powder exceeded Norway's URAA annual commitment levels but Norway remains within its URAA commitments through the roll-over provisions of the URAA.

Bilateral negotiations with the European Union are still continuing over a reduction in trade barriers for basic and processed agricultural products within the EEA Agreement. The EFTA is involved in broader free trade agreement negotiations with a number of countries, which include processed agricultural products and on a bilateral basis some basic agricultural products. An agreement was signed with the former Yugoslav Republic of Macedonia in June 2000. Negotiations continued with Canada, Tunisia, Cyprus, Jordan and Egypt, and negotiations commenced with Mexico and Croatia.

Overall evaluation

Norwegian agriculture is characterised by a low level of market orientation with producers remaining heavily protected from world markets and strongly supported through payments linked to production. The level of support, as measured by the PSE, has changed little between the 1986-88

and 1998-2000 periods, and remains among the highest of the OECD countries at almost twice the OECD average. The %PSE shows that two-thirds of Norwegian farm revenue is derived from policy measures that support agriculture. Transfers to general services provided to agriculture have increased between 1986-88 and 1998-2000, from 4.3% to 6.8% of total support. However, total support to agriculture as a percentage of GDP has halved between the periods and is now 1.5% of GDP (Tables III.34-35, Figure III.12).

While support to producers, as measured by the PSE, has remained relatively constant there has been some change in the composition of support. The combined share of market price support and payments based on output has fallen from 70% of the PSE in 1986-88 to 60% in 1998-2000, with a particularly large drop in 2000. This is also shown by the fall in both the producer and consumer NPCs. However, prices received by Norwegian farmers in 2000 were still on average 153% higher than those received in the world market, with Norwegian consumers still paying on average twice the world price for agricultural commodities. Furthermore, the benefit to consumers from declining prices has often been offset by a reduction in consumer food subsidies, leading to a relatively stable implicit tax on consumers as measured by the %CSE.

Over the review period, producers have generally been compensated for the reduction in market price support and payments based on output with an increase in acreage or headage payments and payments based on input use. In 2000, the reduction in market price support has been offset to a large extent by payments based on overall farm income, provided through the new income tax deduction provisions. As a result, the producer NAC has remained fairly stable at a very high level over the last 15 years, with total farm receipts around 200% higher than if they had been generated in the world market. Overall, while the composition of support is developing in line with OECD recommendations, there has been little progress towards the long-term principle of a progressive reduction in support.

Poland

Main policy instruments

Subsidies to reduce interest for short-term and long-term credits and other production inputs, production quotas, price supplements, intervention purchases, border tariffs, and export subsidies are important agricultural policy instruments in Poland. Budgetary support is mainly provided in the form of price supplements for grains, as well as input subsidies for concessionary credits, breeding-animals, seeds, and fertilisers. The government intervenes in some agricultural markets *via* the Agricultural Markets Agency (AMA) to buy, store and sell agricultural products. If storing turns out to be structural, export subsidies are used to sell domestic production surpluses on the world market.

There has been a tendency over the past years to align agricultural policy institutions and instruments in Poland with corresponding European Union policies in anticipation of a possible future accession to the Union. For example, the production quota system that has operated in the sugar sector since 1994/95, shares many features with the sugar market organisation in the European Union, such as the differentiation in price support between A-quota and B-quota and the mandatory disposal of above quota sugar on the world market. Subsequently, the intervention time-table for grain purchases by the AMA was harmonised with intervention practices in the European Union, and milk quality standards have been tightened to prohibit from sale on the domestic market milk that does not meet European Union minimum requirements. Significant progress was made in adjusting Poland's law with the European Union's *acquis communitaire*. Laws on fertilisers and fertilisation, seeds, marketing standards, market organisations for fruits, vegetables, hops, raw tobacco and dried fodder, and the creation of producers' associations were brought into line with corresponding European Union law. Moreover, laws in other policy areas, such as veterinary inspection, arable crop protection, market regimes for meat and some arable crops, organic farming, market surveying, and early retirement, are under consideration by Poland's Parliament for harmonisation with legislation in the European Union.

Developments in domestic policies

Intervention measures on the domestic grain market in 2000 continued to be related exclusively to bread-wheat and bread-rye. There were no direct purchases of grain by the AMA during the year, but the agency signed contracts with handling companies to purchase about 3.5 million tonnes of grain (3.221 million tonnes of wheat and 0.266 million tonnes of rye). Farmers who delivered their grain to AMA-contracted grain handlers received (at least) PLN 480 (USD 108) per tonne of standard quality wheat and PLN 330 (USD 74) per tonne of standard quality rye (Table II.21). In addition, farmers received a per tonne payment, with the payment rate varying according to the type of grain and the date of delivery. For wheat, these payments amounted to PLN 70 (USD 16) per tonne in July/August, increasing to PLN 100 (USD 23) per tonne in October. The corresponding payments for rye amounted to PLN 45 (USD 10) and PLN 80 (USD 18), respectively. The gradual increase of payment rates was supposed to encourage private storage after harvest. The payment rates were reduced, if the price received by the farmer exceeded the minimum price by more than PLN 15 (USD 3.5) per tonne of wheat or by more than PLN 10 (USD 2.3) per tonne of rye.

The Government adjusted the level of ***sugar production quotas*** and the corresponding minimum price. The A-quota, which corresponds to the quantity of sugar intended for domestic consumption and which is set for the marketing year, was reduced from 1.63 million tonnes in 1999/2000 to 1.52 million tonnes in 2000/01. However, the B-quota, which covers sugar that is intended for export and is set for the calendar year, was left unchanged at a level of 104 400 tonnes. The minimum price for white sugar was increased from its 1999/2000 level of PLN 1 710 (USD 431) per tonne to PLN 1 920 (USD 442) per tonne in 2000/01.

Concerning ***livestock and livestock products***, the AMA bought 1 400 tonnes of butter during 2000. The processors producing this butter received minimum prices, but were in turn required to pay farmers at least PLN 700 (USD 161) per tonne of milk. For pigmeat, the AMA sold about 19 700 tonnes of half carcasses from its stocks during the first half of the year, bought about 8 500 tonnes from the market during the summer months, and sold about 7 200 tonnes towards the end of the year. In the honey market, the AMA purchased 1 586 tonnes during the period from July to October at prices ranging from PLN 6 000 (USD 1 381) to PLN 8 800 (USD 2 025) per tonne of honey, and later sold 1 770 tonnes.

Total ***budgetary outlays for agriculture*** amounted to PLN 18.8 billion (USD 4.3 billion), which represented a 10.9% increase compared to 1999. More than 75% of total expenditure was devoted to farmers' pension and health insurance funds, and 6% consisted of funds provided by the European Union and the World Bank, as well as budgetary reserves. The remaining 19% (PLN 3.53 billion, or USD 0.81 billion) were provided for support to agricultural producers and general services.

Table II.21. **Poland: Administered prices**

Product	1999/2000		2000/01		Change in nominal PLN price, 1999/2000 to 2000/01 %
	PLN/t	USD/t	PLN/t	USD/t	
Wheat[1, 2]	450	114	480	108	6.7
Rye[1, 2]	320	81	330	74	3.1
Milk[2, 3]	660	166	700	158	6.1
Pigmeat[2, 4]	4 750	1 198	5 000	1 127	5.3
Honey[5]	8 800	2 220	8 800	1 984	0.0

1. Minimum prices for the period August to October; without supplementary deficiency payments.
2. Including VAT; minimum price in order to be eligible for export subsidies.
3. Minimum purchasing prices per 1 000 litres of milk of "extra-grade"quality during the period May to October.
4. Minimum procurement prices for live pigs of grade E and U.
5. Maximum price; in 2000/01 a minimum price was fixed at PLN 6 000 per tonne.
   There are minimum prices for sugar, but no market intervention by public agencies.

Source: Ministry of Agriculture and Rural Development, Warsaw, 2000.

Expenditure on ***interest subsidies*** *via* the Agency for Restructuring and Modernisation (ARMA) amounted to PLN 1.52 billion (USD 0.35 billion), including PLN 937 million (USD 216 million) for investment credits. Financial assistance for the relief of damage caused by the flood in 1997 was continued. A total of PLN 44.4 million (USD 10.2 million) was allocated for concessionary credits to subsidise short-term expenses or investments in the areas affected by the natural disaster. In addition, three new sectoral credit programmes were launched in 2000, covering fisheries, potato processing and meat processing.

Budgetary ***support for lime and lime-magnesium fertilisers*** was continued. The price of lime (CaO) was, for example, reduced by PLN 45 (USD 10) per tonne, with total expenditure amounting to PLN 75 million (USD 17 million). The handling of the lime subsidy was transferred from the Ministry of Finance to agro-chemical stations. The latter also conduct soil quality tests, so that a decentralised administration of the lime fertiliser subsidy programme should have led to a more efficient use of funds.

Funds in the agricultural budget allocated for measures ***to promote biological progress in plant and animal production*** increased from their 1999-level by 8.8% (to PLN 109.4 million, or USD 25.2 million in 2000) and 10.9% (to PLN 147.9 million, or USD 34 million) respectively. The funds for plant production were used mainly to lower the costs of plant breeding, seed certification, and seed purchases by farms. Expenditure on biological progress in animal production was devoted mostly to measures supporting selective breeding processes, financing the assessment of the breeding value of animals, and protecting genetic resources.

In July/September, agricultural producers became subject to ***value-added taxes*** (VAT), with the VAT rate for agricultural products being set at 3%. Farmers with revenues of more than PLN 3.2 million (USD 0.74 million) are obliged to maintain accounts and to participate in the general scheme. Others can participate in the simplified scheme where they get a VAT refund corresponding to 3% of their agricultural sales revenues. However, farmers with returns exceeding PLN 20 000 (USD 4 600) can choose whether to participate in the general or the simplified scheme.

Also in September, a law was passed that creates the framework for the establishment of ***farmers' producer groups and marketing organisations***. If certain conditions are met, the creation of such associations can be supported by public funds.

In July, an ***agreement between the Polish Government and the World Bank*** on a credit of USD 120 million to foster rural development was signed, and in October, the programme was launched. The initiative, which is co-financed by the Polish Government, has three objectives: to increase off-farm employment in rural areas; support the decentralisation of government and regional development; and foster the development of an institutional framework for administering accession and structural funds obtained from the European Union.

In November, the European Commission committed euro 168.7 million (USD 155 million) to Poland for the ***rural development programme*** **SAPARD**. Poland's Agency for Restructuring and Modernisation of Agriculture (ARMA) is supposed to act as the paying and implementation agency to distribute European Union and national funds. Implementation of SAPARD will start in 2001. Projects within the SAPARD framework are intended to foster improvements in the competitiveness of Polish agro-food production on the domestic and international markets; to facilitate the adjustment of the agro-food sector to European Union standards of quality, hygiene, food security, and environmental protection; and to stimulate the development of technical infrastructure and the creation of business and employment opportunities outside the farming sector.

Developments in trade policy

Import tariffs for agro-food products were reduced in line with Poland's WTO commitments. However, for some processed products (including flour, malt, and maize and wheat bran), applied tariff rates were increased up to the level allowed by Poland's international commitments with the aim of encouraging domestic processing. Moreover, in order to stabilise the domestic market, additional

import quotas at reduced tariff rates were established for several agricultural products, including wheat, rye, maize, and raw tobacco. Also, the allocation of quotas on a quarterly basis and the regulations on the maximum lot size for imports of agricultural commodities under tariff rate quotas were extended to additional agricultural commodities.

Poland used ***export subsidies*** within the scope of its WTO commitments to sell domestic surpluses of sugar, skimmed milk powder, potato starch, and rapeseed on the world market. Subsidised sugar exports amounted to 104 400 tonnes (a quantity corresponding to the B-quota), with the subsidies amounting to about PLN 46.1 million (USD 10.6 million). About PLN 16.6 million (USD 3.8 million) was spent to subsidise exports of 36 600 tonnes of skimmed milk powder, PLN 12.5 million (USD 2.9 million) were devoted to subsidised exports of 25 200 tonnes of potato starch, and PLN 3.8 million (USD 0.9 million) were spent on exports of 26 700 tonnes of rapeseed.

Import restrictions relating to **BSE-*related risks for food safety*** were continued and expanded. The bans on imports of live cattle, beef meat, beef backbone and processed beef meat from Ireland, Switzerland, the United Kingdom (first introduced in July 1998), and Portugal (first introduced in March 1999) were maintained. Moreover, import bans were introduced for cattle, beef and beef products from France, and since November, for cattle, beef and beef products imported from Belgium, Denmark, Germany, the Netherlands, and Spain.

In May, a ***preferential trade agreement with* Turkey** came into force. The agreement allows for imports of limited quantities of Turkish agro-food products at reduced tariff rates. In October, trade barriers for agro-food imports from Estonia were further reduced, as scheduled under the existing free trade agreement.

In September, a ***trade agreement between* Poland *and the* European Union** was signed that lowered mutual trade barriers for agro-food products in preparation for Poland's prospective accession to the Union. About 75% of bilateral agro-food trade is affected by the liberalisation accord. Trade in products that are of low sensitivity for either one of the parties, such as horsemeat, cherries, processed berries, citrus fruit, vanilla, and olives, were fully liberalised when the agreement came into force in January 2001. In the case of products that are sensitive to both parties, including pork and poultry products, cheese, butter, wheat, flour and bran, quotas with zero in-quota tariff rates were established. These quotas will be expanded by 10% every year. Both parties agreed to refrain from using subsidies to expand exports of certain agricultural products (specified in list 2 of the agreement) to each other's markets. Negotiations on a further liberalisation of bilateral trade in processed agricultural products are already under way.

O*verall evaluation*

After increasing throughout most of the 1990s, support to agricultural producers had levelled off by the end of the decade and fell in 2000, with the %PSE declining from 21% in 1999 to 20%. The gap between domestic and world market prices remained virtually unchanged and, as indicated by a NPC for producers of 1.25, domestic prices in 2000 were on average 25% above those on the world market. The composition of support to producers remained virtually unchanged with market price support accounting for about 78% and direct payments for 22% of the total. Payments based on input use,[11] which consist mainly of concessionary credits and constitute the most important form of direct payments, fell by 16%, triggering an overall drop in direct budgetary assistance to farmers of about 11%. The producer NAC of 1.25 indicates that gross farm receipts (including support) were 25% greater than what they would have been without any support (Tables III.36-37, Figure III.13).

Support for general services accounted for 6.4% of TSE, with total GSSE-expenditure virtually unchanged from 1999. The %CSE fell slightly from 18% to 17% with consumers being implicitly taxed, and as indicated by the consumer NPC, paying, on average, 23% more than they would have if world market prices had prevailed. The TSE amounted to PLN 10.4 billion (USD 2.5 billion), or 1.5% of Poland's GDP.

Efforts to align agricultural policies and institutions in Poland with those in the European Union continued during 2000. In several areas, legislation on quality standards in crop and livestock production and processing was harmonised with European Union law, which is likely to facilitate trade and a prospective future accession to the Union. Similarly, the trade agreement with the European

Union paves the way for more intensive trade in agricultural products. Further efforts to consolidate and modernise Polish agriculture seem necessary to enable agro-food producers to maintain their domestic and international market share. With a %PSE below the OECD average, agricultural producers in Poland appear relatively competitive. However, many of the medium-scale farmers that currently sell their produce on the domestic market and do not yet meet international levels of quality and efficiency, may find it difficult to compete in the more liberal market environment.

Slovak Republic

Box II.3. **Slovak Republic**[1]

Slovak agriculture

During the 1990s, Slovakia has undergone substantial economic reforms and has established the basis of a legal and institutional framework for an open, market economy. Slovakia is one of the ten associated countries in Central and Eastern Europe[2] negotiating accession to the European Union and became the 30th Member country of the OECD in December 2000.

The share of ***agriculture in the economy*** is 4% of GDP and 5% of total employment. Agricultural output dropped by 35% between 1990 and 1999 (crop production declined by 30%, livestock production by almost 40%) as economic reforms got underway. While crop output declined mainly in the first years of the decade, the downward trend in livestock production is still continuing. The total agricultural area is 2.44 million hectares of which 60% is arable land, 35% permanent grassland and 5% permanent crops.

In 1999, ***crop production*** accounted for 46% of total agricultural production. Grains (wheat, maize and barley) are cultivated on 50% of the arable land and account for one third of the total value of crop production. Other crops of importance are fruit and vegetables, and oilseeds (sunflower and rapeseed). ***Livestock production*** accounted for 54% of total agricultural production, the most important products being pigmeat and milk with respectively 35% and 25% of total livestock production, followed by beef, poultry and eggs.

During the reform period, Slovak agriculture underwent a process of ***privatisation*** and transformation. The emerging ***farm structure*** is dominated by production co-operatives and other forms of corporate farms with an average area of 1 400 hectares, operating almost 80% of the agricultural land. Individual farmers operate on less than 10% of agricultural land, with an average area of 10 hectares. Almost half of the area operated by individual farmers is on farms of more than 100 hectares (average farm size 271 hectares). Privatisation of the upstream and downstream industries has been completed, partly through foreign investment.

Since its creation in 1993, Slovakia has been a net importer of agro-food products, and the general trend has been towards an increase in both ***imports and exports***. Between 1993 and 1999 imports more than doubled and exports increased by 60% (at current prices). In 1999, total agro-food imports accounted for 7% of total imports, the main imported products being fruits and vegetables, tropical beverages (coffee, tea, cocoa), grains, animal feed (other than grain), other beverages (beer, soft drinks) and tobacco. Agro-food exports, in particular grains, milk, dairy products and tobacco, accounted for 5% of total exports. A large majority (70%) of Slovak agro-food trade takes place with the European Union and with the Czech Republic.[3] In 1999 exports to the European Union and Czech Republic represented 43% and 29% respectively of total exports, and 34% and 35% of total imports.

Agricultural policy developments from 1997 to 2000

Domestic policies combine market regulation and direct payments. Up to 1997, ***State interventions*** on domestic markets was limited to grains (mainly wheat and maize) and milk. From 1997, interventions were extended to sugar/sugar beet, beef and pigmeat, for which the government set minimum, guaranteed prices. In 2000, new market orders were set for grains, sugar, potatoes, beef and pigmeat. In these market orders, minimum prices are linked to a production quota and for some products producers receive a direct payment per unit of "high quality" product. There have been no substantial changes in the milk regime where, since 1994, a production quota has been combined with a fixed administrative price. From 1997 to 1999, the milk quota has been set at 927 000 tonnes (900 million litres) and for 2000, the quota was increased to 960 000 tonnes (930 million litres). Direct payments are provided to milk producers for high quality milk.

Box II.3. **Slovak Republic** (*cont.*)

Overall, in 2000, ***payments based on output*** represented SKK 1.2 billion (USD 27 million) from which SKK 1 billion was for milk. Farmers in less favoured areas (LFAs) receive direct payments per hectare of agricultural land. In the years 1997-2000, the total amount of these payments was stable at around SKK 3.3 billion a year. Farmers in LFAs were also entitled to ***headage payments*** for sheep and goats, and, from 1997, also for suckler cows. From 1997 to 2000, headage payments more than doubled to reach SKK 300 million (USD 6.7 million). Investment grants are available on up to 90% of farm investments (including the purchase of breeding animals). Direct payments were provided to partly finance (30% to 50%) inputs for crop production. In 1999, the payments financing the use of inputs for crops were replaced by a payment per hectare of agricultural land, and from 2000, they have been paid only per hectare of specific arable crops (grains, oilseeds, leguminous) or per hectare of permanent grassland. Irrigation is supported by water subsidies and payments to partly compensate for the use of energy and irrigation facilities. From 1996, a part of the fuel tax is refunded to farmers. Overall, ***payments related to input use*** reached SKK 4.2 billion (USD 91 million) in 2000.

Slovakia is a WTO member and its ***trade policies*** are applied in accordance with the URAA. Slovakia has been lowering import tariffs. Minimum and current ***market access*** is granted through TRQs. ***Export subsidies*** are used mainly for milk products and malt. For all commodities, export subsidies remained within the limits of the WTO URAA. In order to control export of some agro-food products, the government continued to maintain its system of non-automatic ***export licences***. In 1999, some commodities (such as live cattle, SMP and condensed milk, maize and barley) were removed from the non-automatic export licence system.

Agri-environmental payments are provided for arable land transformed into permanent grassland (SKK 50 Million in 2000) and to support organic farming (SKK 90 million). Regulatory measures, including ***food safety measures***, have been revised as part of the process of harmonising legislation between the European Union and Slovakia, in preparation for accession. During 1999 and 2000, the government agreed a Plan for agriculture and ***rural development***, which was agreed by the European Commission and will be co-financed from the European Union budget within the framework of the Special Accession Programme for Agriculture and Rural Development (SAPARD).

Evaluation of support to agriculture

During the period 1986-2000, the Slovak %PSE declined from 55% in 1986-88 to 24% in 1998-2000. In the most recent years, the direct payments have been the single largest category of support to agriculture. In 2000, the overall PSE is estimated to have fallen by 9% mainly due to the decline in market price support for pigmeat, sugar and eggs. The %PSE is estimated at 22%, which is 2 percentage points lower than in 1999 and below the OECD average (close to the level of other Central European OECD countries). The decline in the market price support resulted in a reduction in the implicit tax on consumers in 2000, as measured by the overall and %CSE. The support to general services provided to agriculture (GSSE) concentrates on infrastructure, research and development, and inspection services. The total support to agriculture (TSE) was at 1.7% of GDP in 2000, which is above the OECD average (Tables III.38-39, Figure III.14).

1. The OECD *Review of Agricultural Policies: Slovak Republic*, Paris 1997, provided information on development of agricultural policies and support to agriculture for the period 1986-1996. This box provides a short overview of Slovak agriculture and a brief summary of policy developments in Slovakia for the period 1997-2000. More detailed information on the developments of agricultural policies in Slovakia for years 1997,1998 and 1999 is available in the annual OECD publications on *Agricultural Policies in Emerging and Transition Economies*.
2. Bulgaria, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, Slovakia.
3. In 1993, a Customs Union was established between Slovakia and the Czech Republic.

Switzerland

Main policy instruments

Switzerland uses border tariffs, production quotas, and deficiency as well as other direct payments as its most important agricultural policy instruments. Imports of all agro-food products into the country

are subject to tariffs that are generally higher than the OECD average. Export subsidies are used to sell dairy products on the world market. Milk production is limited through production quotas. Dairy farmers receive deficiency payments if their milk is processed into cheese, and they benefit from additional premia if they refrain from feeding silage to their cows. All other budgetary payments, which are mainly granted in the form of area and headage payments, payments based on input constraints ("ecological payments"), and payments based on historical entitlements, are granted only if farmers comply with a set of environmental standards and farm-management practice requirements ("*production intégrée/prestations écologiques requises*").

A comprehensive agricultural reform programme ("AP 2002") was launched in 1999 and will be fully implemented by 2002. The reforms concern the organisation of the internal market, the design of direct payment programmes, and the allocation of concessionary credits. In particular, all agricultural price guarantees and state-guaranteed processing margins that existed until 1998 will be eliminated by 2001. The four separate elements of the previous complementary direct payment programme have been consolidated into a uniform area payment, and other direct payments have been reformed in terms of their eligibility criteria and payment rates. Interest-free investment credits are now allocated on the basis of fixed amounts per unit of eligible investment, instead of covering a share of farmers' investment costs, as under the previous system.

D*evelopments in domestic policies*

The year 2000 was the second year of implementation of the "AP 2002" reforms. State agencies continued to provide support through ***guaranteed minimum prices*** to producers of bread-wheat and bread-rye. In July 2001, these price guarantees will be discontinued and the previously separate markets for bread cereals and feed cereals will be merged. It is expected that the farm-level price for bread-wheat will fall to CHF 500-550 (USD 296-326) per tonne as a result of the market deregulation, a drop of 40% from the guaranteed prices received by farmers in 1999.

In conformity with the new policy framework, the Government in 2000 paid a lump sum of CHF 45 million (USD 27 million) to Switzerland's ***sugarbeet*** processor as it met the requirement that aggregate sugar output fall within the range of 120 000 tonnes to 185 000 tonnes, thereby ensuring the desired degree of self-sufficiency. Moreover, since the border reference price for sugar was lower in 1999 than the minimum price of CHF 35 (USD 21) per tonne set in "AP 2002", the sugar firm received an additional lump sum transfer of CHF 1.8 million (USD 1.1 million), compensating it for revenue losses.

A ***new market organisation for oilseeds*** came into force. The existing price and marketing guarantees were abolished and an area payment was introduced. Moreover, supplementary payments for the growing of oilseeds for non-food purposes and for oilseed crushing using the "pure press" process were granted to farmers and processors, respectively.

State-guaranteed processing margins and price guarantees for most agricultural products had already been abolished during 1999. The Government now publishes only a non-binding target price for ***milk*** (CHF 770 per tonne, USD 458 per tonne), which is supposed to provide guidance for the price-setting behaviour of raw milk buyers and sellers. During 2000, farm-gate prices for raw milk were generally slightly above the target price. However, in December, the Swiss Parliament decided to devote CHF 30 million (USD 17.8 million), which had originally been earmarked in the medium term budget for direct payments, towards additional market support measures in the dairy market. The scheduled reduction of market price support for dairy products for 2001 now amounts to CHF 50 million (USD 30 million) instead of CHF 80 million (USD 47 million).

With the introduction of AP 2002, the transfer of ***milk quotas*** (allowed only within lowland and mountainous areas) need no longer be associated with transfers of farmland ownership. This new opportunity for quota trading has been welcomed by farmers, and quotas for about 386 000 tonnes of milk, *i.e.* about 12% of production, were transferred between dairy farmers during the marketing year 1999/2000. The average sales price was estimated as CHF 1 380 (USD 820) per tonne, and the average annual rental price was CHF 100 (USD 60) per tonne.

Since January 2000, ***quality-classification of cattle and sheep*** in public markets and in slaughterhouses with a capacity of more than 1 200 cattle units per year has been carried out by a private company on behalf of the Federal Office of Agriculture. Since January 2001, the same company has been charged with the monitoring of public markets for slaughter cattle and sheep, the implementing of market intervention programmes in these markets, and administrating the tariff-rate quotas for cattle and sheep.

There were only minor changes to existing ***direct payment programmes*** during 2000, so that eligibility conditions and payment rates remained largely unchanged (Table II.22). Exceptions concerned "crop cultivation payments", where the range of payment rates was changed from CHF 770-1500 (USD 512-998) per hectare in 1999 to CHF 400-2000 (USD 237-1 185) per hectare in 2000, and payments for summer pasturing, where the conditions were modified to make the payment less dependent on the number of animals held on alpine pastures.

In January 2001, the Government introduced a ***new area payment*** of CHF 400 (USD 237) per hectare for all arable and permanent cropland. This payment is intended to remunerate farmers for the production of non-food outputs and to compensate them for a reduction in border protection that is scheduled for July 2001. Moreover, payments for organic farming, for animal friendly barn systems, and for regularly keeping animals outdoors, were increased.

Table II.22. **Switzerland: Budgetary payment rates**

Type of payment	Basis for payment	1999		2000	
		CHF	USD	CHF	USD
Area payments	Per hectare	1 200	799	1 200	711
Payments in difficult production locations					
– Holding of livestock under difficult conditions	Per animal-unit	260-1 190	173-792	260-1 190	154-705
– Farming on steep slopes[2]	Per hectare	370-510	246-339	370-510	219-302
– Wine cultivation on steep slopes[3]	Per hectare	1 500-5 000	998-3 327	1 500-5 000	889-2 962
Ecological payments					
– Ecological compensation:					
• Extensive meadows, hedges, litter areas[1]	Per hectare	450-1 500	299-998	450-1 500	267-889
• Floral fallow land	Per hectare	3 000	1 996	3 000	1 777
• Rotational set-aside	Per hectare	2 500	1 664	2 500	1 481
• Low-intensity meadows[3]	Per hectare	300-650	200-433	300-650	178-385
• Extensive area strips	Per hectare	1 000	665	1 000	592
• Tall fruit trees	Per tree	15	10	15	9
– Organic farming[4]	Per hectare	100-1 000	67-665	100-1 000	59-592
– Regularly keeping animals outdoors[3]	Per animal-unit	135-180	90-120	135-180	80-107
– Animal welfare through housing systems[3]	Per animal-unit	70-180	47-120	70-180	41-107
– Extensive cereal and rapeseed farming	Per hectare	400	266	400	237
– Summer pasturing[3]	Per animal-unit[6]	10-300	7-200	120-300	71-178
Production directing payments					
– Crop cultivation[3]	Per hectare	770-1 500	512-998	400-2 000	237-1 185
– Holding of roughage-eating animals[3]	Per animal-unit	400-900	266-599	400-900	237-533
Deficiency payments					
– Non-silage premium for milk	Per tonne of milk	40	27	40	24
– Price supplement for milk	Per tonne of milk	120	80	120	71
Social payments					
– Child allowance for farmers[1]	Per child	1 920-2 160	1 278-1 437	1 920-2 160	1 137-1 280
– Household allowance for farm workers	Per household	1 200	799	1 200	711

Notes: The names under which these programmes appear are those given to them by the Swiss Government. They do not necessarily relate to any agreed OECD-wide classification system.

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 animal or plant species.
4. Payment rate varies by land use (meadow, cropland, orchard).
5. Payment rate varies with herd size.
6. Refers since 2000 to average historical animal density on alpine meadows.

Source: Federal Office of Agriculture, Bern, 2001.

Table II.23. **Switzerland: Outlays for direct payments**

Type of payment	1999		2000p		Change in CHF price 1999 to 2000p %
	mn CHF	mn USD	mn CHF	mn USD	
Area payments	**1 163.1**	**774.0**	**1 190.0**	**705.0**	**2.3**
Payments for farming in difficult production locations	**361.1**	**240.3**	**379.0**	**224.5**	**5.0**
of which:	255.9	170.3	267.0	158.2	4.3
– Holding of livestock under difficult conditions					
– Farming on steep slopes	95.9	63.8	102.0	60.4	6.4
– Wine cultivation on steep slopes	9.3	6.2	10.0	5.9	7.5
Ecological payments	**327.1**	**217.7**	**372.9**	**220.9**	**14.0**
of which:	119.1	79.3	134.0	79.4	12.5
– Ecological compensation					
– Organic farming	11.6	7.7	16.9	10.0	45.7
– Regularly keeping animals outdoors	72.7	48.4	69.8	41.4	–4.0
– Animal welfare through housing systems	21.0	14.0	26.2	15.5	24.8
– Extensive cereal and rapeseed farming	35.1	23.4	36.0	21.3	2.6
– Summer pasturing	67.6	45.0	90.0	53.3	33.1
Production directing payments	**311.7**	**207.4**	**339.8**	**201.3**	**9.0**
of which:	53.0	35.3	63.4	37.6	19.6
– Crop cultivation					
– Oilseed cultivation	3.2	2.1	30.0	17.8	837.5
– Production of renewable raw material	0.9	0.6	1.4	0.8	55.6
– Holding of roughage eating animals	254.6	169.4	245.0	145.1	–3.8
Deficiency payments	**260.7**	**173.5**	**296.8**	**175.8**	**13.8**
of which:	68.9	45.8	51.2	30.3	–25.7
– Non-silage premium					
– Price supplement for milk for cheese production	191.8	127.6	245.6	145.5	28.1
Social payments (child and household allowances)	**135.2**	**90.0**	**133.0**	**78.8**	**–1.6**
Total	**2 558.9**	**1 702.8**	**2 711.5**	**1 606.4**	**6.0**

p Provisional
Notes: As part of the AP 2002 reforms, all direct payments (except deficiency payments) became subject to restrictions of environmental and farm management practices.
Source: Federal Office of Agriculture, Bern, 2001.

Total budgetary outlays for deficiency as well as other direct payments to farmers increased from CHF 2 559 million (USD 1 703 million) in 1999 to CHF 2 712 million (USD 1 606 million) in 2000 (Table II.23). As in the previous year, about 10% of all budgetary payments were granted in the form of deficiency payments. The remaining 90% were allocated through measures that are subject to compliance with a set of environmental standards and farm-management practice requirements ("*production intégrée/ prestations écologiques requises*"). These cross-compliance provisions are verified by cantonal inspectors, who, in 1999, investigated a total of about 30 000 farms, or about 40% of all Swiss farms. Of the farms inspected, about 4 000 were found not to be in compliance with the requirements and were sanctioned by cut-backs in the direct payments paid.

Government outlays for concessionary credits and investment aid increased in 2000. The stock of interest-free credits to restructure the debts of heavily leveraged farms increased from CHF 109 million (USD 73 million) in 1999 to about CHF 115 million (USD 68 million) in 2000. In order to boost participation in the programme, the Government decided in January 2001 to reduce the share that is co-financed by the cantons from 40-100% to 20-80%, depending on the financial situation of a canton. Moreover, investment credits, which are now allocated on the basis of fixed amounts per unit of eligible investment, increased from CHF 1 594 million (USD 1063 million) in 1999 to about CHF 1 700 million (USD 1 007 million) in 2000. Concessionary credit for improvements in rural infrastructure increased from CHF 75 million (USD 50 million) in 1999 to about CHF 80 million (USD 47 million) in 2000.

The Federal Office of Agriculture treated 28 requests for protection of ***labels-of-origin and geographical indications*** during 2000. Only three of these cases were finally settled, including a particular maize variety ("Rheintaler Ribel"), speciality meat ("Bündnerfleisch") and speciality cheese ("L'Etivaz"). Before publication, the Federal Office evaluates whether an applicant-product meets the basic requirements for labels-of-origin or geographical indications, and, if no justified complaint is received within the three months following publication (*i.e.* if the case is settled), the product's name benefits from legal protection.

In November 2000, the first ***comprehensive annual review of agricultural policy*** was published. The report describes the economic, social, and environmental situation of agriculture in Switzerland, and provides a detailed overview of agricultural policy measures and their implementation. The main results of the evaluation indicate that the deregulation of pricing and processing arrangements on the internal market under "AP 2002" has not resulted in market disruptions or adverse developments for farm incomes. Moreover, the partial shift from market price support to direct payments, including agri-environmental payments, during the 1990s has led to a reduction in the use of production-enhancing agro-chemicals and environmental quality has improved, as measured, for example, by agri-environmental indicators for nutrient balances or pesticide use.

Developments in trade policy

Since the first BSE-case, Switzerland has applied increasingly stringent ***food safety and border control measures***. In 1990, Switzerland prohibited the feeding of animal and bone meal to ruminants, and since 1996 imports of meat products from countries that do not destroy specified risk material have been banned. In January 2000, Switzerland prohibited imports of cattle from all BSE-affected countries that had not yet banned the use of animal and bone meal as feed for ruminants.

In January 2000, ***new labelling regulations*** for imports of fresh meat and eggs, produced using methods that are not allowed in Switzerland, came into force. According to these regulations, meat produced with hormones or anti-biotic growth stimulators, and eggs laid by battery-hens, have to be labelled as such. In June 2000, a new law on seed imports was implemented. This law establishes a tolerance level of 0.5% GMO-content in conventional seed shipments. If the share of GMOs exceeds this threshold, the shipments have to be labelled as containing GMO seeds.

Seven ***bilateral agreements between Switzerland and the European Union***, one of which concerns agriculture, were scheduled to come into force in January 2001. But implementation was delayed by a slow parliamentary ratification process in several European Union member states. The agricultural agreement calls for the mutual recognition of technical norms, certifications and labels of origin, and leads to duty-free tariff rate quotas for fruit and vegetables, flowers, speciality wines, speciality meats, and dairy products. Bilateral trade in cheese is scheduled to be completely liberalised five years after the agreement comes into force.

Overall evaluation

Agriculture in Switzerland is characterised by high support levels and limited market orientation. The composition of support has changed since the mid-80s as the share of market price support has decreased and budgetary payments increased. Price guarantees were abolished in 2000 and the difference between domestic and world prices was reduced. Although the producer NPC has fallen by about 25% since the 1986-88 period to 2.93 in 2000, domestic producer prices remain on average nearly three times the world market prices. Payments to compensate farmers for the loss of market revenue and to remunerate them for the provision of non-food outputs increased. The share of budgetary payments in total producer support increased from 18% during the period 1986-88 to 39% in 1999 and 41% in 2000. The strongest increases during 2000 occurred for payments based on output, input use, and input constraints. Over the longer term, the structure of budgetary payments has changed markedly, with the share of payments based on input use declining from 44% during the period 1986-88 to 14% in 2000, while payments based on historical entitlements, which were first introduced in 1993, had increased to 39% of all payments by 2000. Overall, the %PSE fell slightly from 73% in 1986-88 to 71% in 2000, but the level of support to farmers remains among the highest in the OECD. Gross farm receipts

(including support) in 2000 were nearly three and half times what they would have been without any support (Tables III.40-41, Figure III.15).

Support for general services increased by 4% between 1999 and 2000, due to increases in expenditure on research and development, infrastructure, and marketing and promotion. As a result, the share of GSSE in TSE increased to 6.2%. The gap between domestic consumer and world market prices narrowed slightly with the %CSE reducing to 59% in 2000 and the consumer NPC to 2.76. Nevertheless, as indicated by the consumer NAC, consumers were still implicitly taxed to a considerable extent, and paid on average almost 150% more than they would have in the absence of any market price support to producers or consumer subsidies. The TSE amounted to CHF 8.3 billion (USD 4.9 billion), which corresponds to 2.1% of Switzerland's GDP. This %TSE is one of the highest among OECD countries.

Most budgetary payments to agricultural producers under "AP 2002" are subject to environmental cross-compliance provisions, and agri-environmental payments with restrictions on farming practices ("ecological payments") increased particularly strongly in recent years. The gradual shift from market price support to agri-environmental and other payments has the potential to lead to a more market-oriented and more sustainable agricultural sector. However, parliamentary and governmental decisions taken in late 2000 and early 2001 to re-allocate funds towards supporting prices on the domestic dairy market, and to introduce a new area payment for all arable and permanent cropland, give rise to concerns that the envisaged reduction of production-linked support under "AP 2002" may be at risk. Moreover, support to farmers in Switzerland remains considerably above the OECD average, so that renewed reform efforts seem necessary to increase the exposure of Swiss agriculture to world market prices.

Turkey

Main policy instruments

Support to agriculture has mainly been provided through price support and payments based on input use, with the government heavily involved in the marketing of crops. Import tariffs,

Box II.4. **The Agricultural Reform Implementation Project (ARIP)**

In the context of the agreement signed with the IMF in December 1999, the government developed the ARIP to phase out current production-oriented support and to replace it by income support payments during the 2001-2004 period. The project seeks a restructuring of government institutions and encouragement of sectoral investment, with emphasis on harmonisation of Turkey's regulations and procedures in preparation for European Union accession. Partly financed by the World Bank through its Economic Reform Loan to Turkey, the project is expected to proceed as follows:

- Implementation commenced in 2000 with a pilot programme of income support payments applied to four selected regions. An important part of the pilot programme is the preparation of a farm registry and the testing of the eligibility conditions. A payment of USD 50 per hectare of agricultural land was made to all agricultural land users up to a maximum of 20 hectares per farmer. The programme will be extended nation-wide in 2001-2002 on the basis of the results of the pilot programme.
- In parallel, price supports and input subsidies will be phased out. For example, the rate of the fertiliser subsidy will continue to be reduced, as it has been since 1997, and price support for grains will also be reduced with the aim of eliminating it by 2002. At the same time, import tariffs will be gradually reduced.
- In the longer run, most agricultural state enterprises will be privatised. The Agricultural Sales Co-operatives Unions will be restructured. The legal framework for privatising the processing facilities of TEKEL (tobacco) will be established, and the privatisation of the tea factories of Caykur and the sugar plants of TSFAS will be initiated in 2001. Some firms will be liquidated, such as TZDAS, the state firm responsible for input supply.

complemented by administered prices in the case of cereals, sugar and tobacco provide support for domestic production. A ban on imports of livestock has been applied for sanitary purposes. Export subsidies are applied to a number of products, including fresh and processed fruit and vegetables and derived food products, poultry meat and eggs. Sugar beet production is controlled by a system of contracting. Interest concessions and other input subsidies, particularly for fertilisers, are significant. State Economic Enterprises (SEEs) are used to implement agricultural market support policies for cereals, sugar and tobacco (TEKEL), and benefit from government support in the form of debt write-offs, coverage of duty losses, and equity injections. The government also controls, and provides special privileges to, Agricultural Sales Co -operatives Unions (ASCUs) and plays a large role in investment in infrastructure, especially irrigation works. Most farmers are exempt from income tax. Following the stand-by arrangements with the IMF to reduce inflation to a single digit level by 2002, the government developed the Agricultural Reform Implementation Project, aiming at progressively replacing the above support policies with income support payments (Box II.4).

Developments in domestic policies

Support prices, set in a context of an inflation rate of over 45%, were fixed well above prices at the border (Table II.24). Nonetheless, in its efforts to progressively eliminate market price support policies, the government fixed the support prices for ***cereals*** for 2000 at a level no greater than 35% above the projected c.i.f. import prices, with two-monthly increments to compensate for depreciation of the Turkish lire. In 2000, support prices increased by around 27% for wheat and rye and by about 36% for barley, oats and maize, leading once again to the purchase of a large volume of grains by the Turkish Grain Board (TMO). The support price for ***sugar beet*** was increased by 25%, while the production quota was reduced by 22% to 12.5 million tonnes of sugar beet. The maximum over-quota quantity permitted (without penalty) was reduced from 25% to 15% of a farmer's individual quota. The price premium to encourage sugar production in five provinces was increased by 20%. The %PSE declined for all these crops, but at 67% the rate of support for sugar was over the double of the rate for cereals and has remained by far the highest rate of commodity support in Turkey.

In 2000, ***compensatory payments*** for pruning used to compensate producers for production quota constraints were increased five-fold for ***tea***. Deficiency payments increased by 100% for ***cotton*** together with a rise in the purchasing prices of the ASCUs of about 60%. Support prices for ***tobacco*** were increased by around 25% on average, but the production quota was reduced by 10%. However, domestic market prices for tobacco and cotton have tended to be below world prices in recent years. This results in an implicit tax on producers, although the main purchasers of these two commodities (TEKEL and ASCUs) benefit from government support. Deficiency payments were paid for the first time to ***sunflower*** and ***soybeans*** harvested in 1999. A new credit line of over TRL 200 trillion (USD 325 million) was opened at a rate of interest of 25% under the **Price Support and Stabilisation Fund** (PSSF) to help Agricultural Co-operatives to purchase selected commodities, in particular ***hazelnuts***, ***cotton*** and ***oilseeds***, from producers.

The ***milk*** premium per litre remained at the 1998 level, but as the producer price increased more than the world market price, market price support for milk producers has increased in 2000. The sanitary ban on imports of ***live animals*** (dairy and beef cattle, sheep and goats) and ***meat*** (from cattle, sheep and goats), enforced since August 1996, remained in place for feeder and slaughter cattle, and beef imports. However, breeding cattle import licenses have been granted to farms importing at least 100 head, and about 7 000 head have been imported since mid 1999. In 2000, about TRL 956 billion (USD 1.5 million) was provided to farmers for animal losses due to natural disasters. A regulation fixing the initial targets of the Livestock Development Programme was officially published in June 2000. Some TRL 34 trillion (USD 55 million) was spent for the first year of the programme to provide incentives for fodder crop production; purchases and artificial insemination of pedigree cattle; and establishing new artificial insemination enterprises. Although producer prices are estimated to have increased more than world market prices for milk and beef, support to producers decreased to a %PSE of 42% and 47% respectively due to a reduction in input subsidies in 2000.

Table II.24. **Turkey: Administered floor prices for cereals, sugar and tobacco**

Product	1999		2000		Change in TRL price 1999 to 2000
	TRL mn/t	USD/t	TRL mn/t	USD/t	%
Wheat					
Durum, Anatolian[1]	92	220	117	188	27.5
Durum, other[1]	84	200	107	171	27.5
Hard, white[1]	80	191	102	163	27.5
Hard, red Anatolian[1]	80	191	102	163	27.5
White barley[2]	60	143	82	131	36.0
Rye[2]	56	134	71	114	27.5
Oats[2]	56	134	76	122	36.6
Maize[3]	68	162	92	147	35.0
Sugar beet[4]	27	64	34	54	24.8
Tobacco, Aegean A	1 400	3 341	1 750	2 803	25.0

1. Base prices raised by two-montly increments of TRL 1 mn (USD2) per tonne for grain purchased from 1 July to 31 October 2000.
2. Base prices raised by two-monthly increments of TRL 0.75 mn (USD1) per tonne for grain purchased from 1 July to 31 October 2000.
3. Base prices raised by TRL 1.75 mn (USD3) per tonne in October and November 2000.
4. Base prices for 16% polar sugar: each additional (or lower) polar level is compensated by a payment (or deduction) of TRL 1.7 mn (USD3) per tonne.

Source: Government of Turkey, *Resmi Gazete* [Official Gazette], Ankara, 2000.

Farmers continued to benefit from ***interest concessions***. In 2000, subsidised interest rates on operational loans for crops and livestock production, which were respectively 54% and 65%, were reduced to an average of 43%, the interest rate for commercial loans. Since March 2000 no credit subsidy has been granted. The rate of ***subsidy on fertilisers*** continued to be reduced and has been fixed at 19% of purchase prices. The total amount of the subsidy paid to fertiliser manufacturers and importers to cover rebates on farmers' bills fell by about 4% to TRL 99 trillion (USD 161 million). The ***subsidy on pesticides*** (and veterinary medicines) remained at 30% of the purchase price for products identified as the most environmentally benign and the associated expenditure increased by 46% to TRL 15 trillion (USD 24 million). While expenditure on ***seed subsidies*** remained stable, expenditure on ***artificial insemination*** and on-farm veterinary services increased substantially. Overall, total government expenditure on variable input subsidies declined by nearly a third to TRL 464 trillion (USD 754 million), but it is still the second highest form of support after market price support.

Privatisation of* SEEs** in the agro-food sector has not progressed in the past few years, but developments could result from the introduction of the reform and investment programme (Box II.4). By the end of 2000, approximately 86% of the 1.9 million hectares covered by ***irrigation schemes operated by DSI had been transferred to farmers' co-operatives and water users associations. It was decided to privatise ten of the 37 ***state-owned* TIGEM *farms*** and to allow joint ventures with private industry in order to improve their efficiency. These farms intended to be a model for modern dairy production, account for less than 1% of the total dairy herd. ***Foreign investment*** in agriculture increased ten fold to reach to USD 59 million in 2000.

Work on the Southeastern Anatolia Project for the construction of 22 dams, 19 electric power plants, and the irrigation of 1.7 million hectares will radically change the ***environment*** of the upper Dicle (Tigris) and Firat (Euphrates) watersheds. However, the project includes specific measures to prevent erosion through reforestation and restoration of pastureland. Turkey signed the Biosafety Protocol under the Convention on Biological Diversity in May 2000, and a national plan for conservation of biological diversity is being prepared. The area under ***organic farming*** increased from 6 790 hectares in 1996 to 46 523 hectares in 1999, without any specific public incentive other then some research activities on organic and ecological farming systems. In 2000, as in the previous two years, about TRL 2 trillion (USD 3 million) was spent on three ***rural development*** projects.

Trade policy developments

The sanitary ban on imports of livestock and meat products remained in place, but a number of ***import approvals*** were issued to importers of breeding cattle. *ad valorem* ***import tariffs*** above 50%

Table II.25. **Turkey: Import tariffs**

Commodity	Import tariff (*ad valorem*)	
	End 1999	2000
Wheat	50	50
Barley	85	85
Maize	50	50
Live cattle and sheep	142	141
Meat	237	235
Milk	130	150

Note: Tariffs are expressed as a percentage of c.i.f. value.
Source: Government of Turkey, Resmi Gazete, [Official Gazette] various issues, Ankara, 2000.

continued to apply to a number of agricultural commodities, including grains, livestock and livestock products. Throughout 2000, these tariffs remained at the levels established at the end of 1999, while the tariff for milk increased (Table II.25). ***Export subsidies***, limited to a maximum of 10% to 20% of the export values and 30% to 100% of quantities exported, continued to be provided for processed fruit and vegetables, fruit juices, olive oil and derived food products, poultry meat, and eggs. In 2000, the announced rates of export subsidy and related quantity limits remained around the 1999 levels. In 1999, subsidised export quantities reached the maximum permitted levels under the Turkey's URAA commitments for a number of products, including cut flowers, dehydrated vegetables and eggs.

Overall evaluation

Since 1986-88, when the %PSE averaged around 14%, support to agricultural producers has varied considerably, reflecting the government's frequent changes to policy (made in a climate of high inflation and volatile exchange rates). The %PSE peaked at 25% in 1998, but has decreased since then to 13% in 2000,[12] among the lowest rates of support within the OECD. Such a reduction is consistent with the long-term reform principle of a progressive reduction of support. However, government expenditure to support SEEs and ASCUs involved in marketing and implementing market support policies continued to be significant and increasing. This expenditure represents almost the totality of the transfers in favour of general services provided to agriculture, as measured by the GSSE, while transfers in favour of other general services, such as research, education, extension and training only represented 4% of the GSSE in 2000. The transfers associated with all these policies continue to impose a heavy burden on the economy, as indicated by the 3.5% share of the TSE in GDP,[13] one of the highest shares in the OECD (Tables III.42-43, Figure III.16).

With a combined share of 78% of total support to producers in 2000, market price support and payments based on output remained the most important categories. These are the categories of support that potentially have the greatest effects on production and trade. However, the Nominal Protection Coefficient (NPC) for producers declined from 1.30 in 1998 to 1.13 in 2000, about the level of Turkey's average in the 1986-88 period. In other words the prices received by farmers were on average 13% higher than those in world markets. On the other hand, the consumer NPC that estimates the rate of import protection was 16% in 2000.

Payments based on input use are the only other category of support to producers. This category, which also has potentially significant effects on production and trade, decreased in 2000. The producer NAC indicated that total farm receipts were 15% higher than those generated in the market at world prices in 2000, compared with 34% higher in 1998. This is a clear increase in market orientation that may reflect the recent efforts to progressively replace market price support and input subsidies by income support payments. However, the latter payments have, up to now, taken the form of increases in output-linked payments, which benefit mainly larger farms and have direct production and trade effects. Overall, these effects will be further reduced if current support is replaced, as expected, by income

support payments, which are currently being evaluated in a pilot project under the Agricultural Reform and Investment Programme. Furthermore, the expected restructuring and privatisation of the heavily supported agric ultural state trading enterprises could also contribute to the reduction in support and to the allocation of the available budgetary resources more effectively to increase productivity and reduce poverty in agriculture.

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, although additional *ad hoc* and *ex-post* policy measures have been implemented. 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 support-price provisions operating through non-recourse marketing loans. The price of sugar is supported by a tariff-rate quota, together with provisions for non-recourse loans. Milk and dairy products are supported by minimum prices and government purchases of dairy products, as well as by tariffs, tariff-rate quotas and export subsidies. Other livestock industries are supported only through border measures, including tariff-rate quotas for beef and sheep meat, and occasionally export subsidies for poultry and eggs. Input subsidies, including interest concessions, fuel tax reductions and subsidies for grazing and irrigation, are also provided. Environmental programmes form an increasingly important dimension of agricultural policy, focusing on measures to convert highly erodible cropland to approved conservation uses (including long-term retirement), to re-convert farmland back into wetlands, and to encourage crop and livestock producers to adopt practices that reduce environmental problems, on a cost-sharing basis. Research and advice are increasingly focused on promoting sustainable farming practices.

Developments in domestic policies

Total annual PFC payments for ***contract crops*** (based on historically enrolled contract area but not related to current plantings) decreased by 7%, to USD 5 billion in 2000, and are scheduled to continue to be reduced progressively by 2002 as specified in the 1996 FAIR Act. However, as in 1999, these payments were supplemented by an additional USD 5.5 billion "market loss assistance payment" (provided in proportion to the annual PFC payments), compared to USD 2.8 billion paid for market losses in 1998. Also, some USD 8 billion were authorised for crop insurance subsidies to be provided over 5 years from 2001. The administrative fee paid by producers for minimal catastrophic insurance coverage was increased by two-thirds to USD 100 per crop.

In addition, "emergency assistance" legislation provided USD 1 billion for payments to compensate producers of crops not covered by PFC payments, including oilseeds, peanuts, tobacco and apples, for market losses. Under this emergency assistance, USD 62 million in payments were made available to ***peanut*** producers, USD 100 for ***apple*** producers, USD 400 million for ***cotton*** producers, and USD 500 million for producers planting ***oilseeds*** in 2000, based on the highest of the individual producer's area and yields in the last three years. Only producers who planted oilseeds for the first time in 2000 will be paid on their current area and yields.

Loan rates, which provide price support for "contract crops", oilseeds, tobacco and sugar, remained at their 1999 level for most crops, but were increased by around 2% for barley and 3% for oats, and were reduced by about 2% for sorghum (Table II.26). The loan rate for burley ***tobacco*** was increased by 2% together with a reduction by 29% in the marketing quota. Some USD 340 million were granted to tobacco producers as a compensatory payment related to marketing quota reductions. A loan rate was announced for the first time for ***sesame*** with the decision that it would be considered in the list of oilseed crops.

Overall, the loan deficiency payments for "programme crops"("contract crops"and oilseeds) decreased by 9% to USD 5.6 billion in 2000, as market prices recovered from the low levels in 1999. Marketing loan gains decreased by 35% to about USD 1.1 billion. Moreover, the payment limitation for "loan deficiency payments" and "marketing loan gains", which was doubled and fixed at USD 150 000 to be applicable only to the 1999 crop year was extended to the 2000 crop. Support to producers of contract crops and oilseeds in 2000 remained at 1999 levels as measured by the PSE (Tables III.44-45).

The loan rate for ***sugar*** and the sugar marketing assessment rates (levies on all processed sugar) have not changed since 1996. The assessments are suspended for fiscal years (FY) 2000 and 2001 at an annual cost to the government of about USD 44 million. The tariff-rate quota (TRQ) initially established for imports decreased by 14.8% to 1.397 million tonnes in FY 2000 and by 2.6% to 1.361 million tonnes in 2001. The TRQ actually allocated to imports in FY 2000 was 1.170 million tonnes, 16% less than the quota established initially for the year. (The minimum TRQ that was agreed to in the URAA is 1.139 million tonnes). Sugar loans were non-recourse (processors could repay the loan by forfeiting sugar to the CCC) for marketing years 1999 to 2001. Some 809 667 tonnes of sugar were forfeited in 2000 and, in order to reduce the cost of loan forfeitures and support sugar producers, a sugar supply control programme was introduced. Farmers have the choice of not harvesting part of their crop in exchange for a payment in the form of sugar held in government stocks. The payment is limited to a maximum of USD 20 000 per farmer (the equivalent to 50 tonnes valued at the loan rate) and, overall, to the estimated 1 million tonnes government stock. Domestic prices for sugar increased in 2000 but, as world prices for sugar increased much more, market price support decreased significantly. The level of support to producers decreased by 32 percentage points to a PSE of 47%, but it is still the second highest level of support by commodity in the United States in 2000.

For ***livestock***, some USD 200 million was authorised in October 1999 to fund a Livestock Indemnity Program (LIP) to provide relief to producers for livestock losses due to natural disasters. In October 2000, an additional USD 10 million was authorised for the LIP together with USD 490 million for the Livestock Assistance Program that provides assistance to producers who suffered losses in feed crops and forage. Support to beef producers, as measured by the % PSE, remained at around 4% of gross farm receipts.

The minimum price for ***milk*** in 2000 remained at USD 218 per tonne (Table II.26). However, the expiry of the Dairy Price Support Purchase Program, originally scheduled for the end of 1999, was initially postponed until the end of 2000, and then for a second time until the end of 2001. In addition, a deficiency payment programme was authorised in October 2000 to provide payments in FY 2001. At a rate of about USD 15 per tonne of milk, the payment covers 35% of the difference between the previous

Table II.26. **United States: Loan rates for crop years 1999 and 2000**

Commodity	Loan rates USD/t		Change in loan rate 1999 to 2000 %
	1999	2000	
Wheat	94.8	94.8	0.0
Maize	74.4	74.4	0.0
Sorghum	68.5	67.3	–1.7
Barley	73.0	74.4	1.9
Oats	77.9	79.9	2.7
Rice	143.3	143.3	0.0
Upland cotton	1 144.6	1 144.6	0.0
Soybeans	193.3	193.3	0.0
Other oilseeds	205.0	205.0	0.0
Sugar	396.8	396.8	0.0
Milk[1]	218.3	218.3	0.0

Notes: Crop year periods vary between different commodities. Complete documentation is provided in the Electronic Data Product, OECD PSE/CSE Database, Paris 2000.

1. Minimum price, calendar years.

Source: United States Department of Agriculture, Washington D.C., 2000.

5-year average milk price and the price forecast for 2000. Total expenditure for the programme is expected to increase 5-fold to at least USD 650 million of payments limited to a maximum of USD 25 225 per farmer or 1 769 tonnes of milk in order to target small and medium-sized producers. Milk producers also received USD 123 million in FY 2000 in the form of market loss payments approved in 1999 (see the 2000 edition of this report). The quantities sold under the Dairy Export Incentive Program were 30% below 1999 sales, and the average export subsidy decreased by 23% to USD 826 per tonne of milk. While the world reference price for milk in 2000 remained stable, the milk producer price is estimated to have fallen by 14%, and the %PSE for milk fell to 50% the highest rate of support for any commodity in the United States in 2000.

There were no export subsidies for ***pork***, but the quantity of ***frozen poultry*** benefiting from export subsidies increased by 3% to 2 529 tonnes (about 1% of total poultry exports) in 2000. The unit subsidy increased by 13% to about USD 650 per tonne. Over USD 4 million was granted for marketing promotion for poultry. The level of support in 2000 remained stable at around 4% for both pork and poultry.

As a result of import increases, an emergency safeguard action has been taken to assist the domestic sheep and lamb industry. A 3-year TRQ of 31 851 tonnes (product weight equivalent) was imposed in July 1999 for imports of ***lamb meat***, with a tariff of 40% on over-quota imports and a 9% tariff on imports within the quota (see 2000 edition of this report). At the same time, a 3-year programme of USD 100 million was introduced to assist the sheep and lamb sector to increase its competitiveness relative to imports. Payments are provided to assist marketing and promotion to help increase sales of US lamb, as well to improve production practices and the quality of meat from small and medium sized sheep producers. Some USD 2.4 million were provided to Vermont sheep producers for losses due to public health reasons. Payments to ***wool*** and mohair producers were about USD 10 million in FY 2000 and are expected to reach USD 20 million in FY 2001. Support to sheep meat, which up to 1998 was stable around 5%, increased to a %PSE at around 15% in 1999 and 2000.

Loan programmes were initiated in 2000 offering ***interest subsidies*** for storage facilities and for apple producers and seed producers. Under the storage facility programme farmers receive a 7-year fixed interest rate loan to build or improve commodity storage and handling facilities for certain cereals and oilseeds. A total of USD 60 million of loans, limited to a maximum of USD 100 000 per farmer, was lent in 2000. To assist apple producers facing low prices, a total of USD 99 million was made available for a special loan for a maximum period of three years, with an interest rate equivalent to that for US securities of comparable maturity. To assist seed producers, who were not paid by a seed company that went into bankruptcy, a total of USD 35 million was made available for an interest free special loan for up to 18 months, which may be converted to a 7-year fixed interest rate loan.

Although the PFC Program is still the main regular source of budgetary payments to farmers, payments for conservation purposes are also significant. Appropriations for ***conservation programmes*** were increased by 2% to USD 3.4 billion in 2000. But while rental and easement (purchase of development rights) payments for the Conservation and Wetland Reserves increased 14%, the cost-share payments, primarily the Conservation Reserve Program (CRP) and the Environmental Quality Incentives Program (EQIP), decreased by 27%. In terms of funding, the CRP remains the largest conservation programme, for which the expenditure increased by 6% and area enrolled increased by 7% to respectively USD 1.5 billion and 13.6 million hectares in 2000.

There were 378 389 hectares enrolled in the Wetlands Reserve Program in 2000, and the overall area limit under the programme was increased by 10% to 435 000 hectares in 2001. The area purchased as permanent floodplain easements under the Emergency Watershed Protection Program increased by 15% to 79 400 hectares in 2000, and USD 30 million was approved to purchase additional floodplain easements in 2001. In 2000, some USD 35 million was spent under the Farmland Protection Program to acquire 20 263 hectares with an easement value estimated at USD 86 million on 244 farms. Spending for the EQIP increased 13% to USD 161 million. The EQIP was set up to encourage farmers to adopt practices that reduce environmental problems through 5-10 year contracts providing education, and technical and financial assistance.

Domestic sales of ***organic food*** have increased by over 20% annually since 1990, and reached about USD 6 billion in 1999. In the light of the importance of this niche market, the Federal government, at the end of 2000, adopted the first national standards for the labelling and processing of organic food in the United States. The new standards ban synthetic pesticides and fertilisers in the growing of organic food, and antibiotics in meat labelled as organic, as well as the use of irradiation, biotechnology and sewer-sludge fertiliser for producing any food labelled organic. The regulations divide organic labelling into four categories: "100% organic", "organic" (95%), "made with organic ingredients" (70%), and organic ingredients may be listed (below 70%). A "USDA seal" may appear on products in the two first categories and in their advertisements, but not on products in the two others.

Some USD 500 000 was granted to a number of State Universities to provide ***technical assistance*** to small farmers to market their products, including through developing agri-tourism, pick-your-own schemes and direct selling to restaurants and institutions. Government technical assistance is also offered to help small farms form co-operatives to export crops and livestock in international markets. In addition, USD 600 000 was granted under the Federal-State Marketing Improvement Program to ***improve marketing systems*** for food and agricultural products or to identify new market opportunities for farm products. Funding of about USD 1.8 billion was appropriated for research, including USD 113 million awarded in competitive ***agricultural research*** grants, under the Initiative for Future Agriculture and Food Systems to find science-based solutions to emerging challenges in fields such as genomics, biotechnology, and natural resource management.

In respect of ***measures affecting demand***, tax concessions on ethanol for gasoline blending increases the demand and supply of maize. The 1.4 cents per litre tax break given to gasoline blended with ethanol, which was to have been abolished by the end of 2000, has been extended for further seven years. The tax rebate is to be gradually reduced to 1.3 cents per litre by 2005 and fixed at this level until 2007. In the 1999/00 crop year, an estimated record 14 million tonnes of maize were converted into ethanol, and the quantity is expected to continue at this level in the next season. Expenditures for ***domestic food assistance*** programmes decreased by about 2% to over USD 32 billion in FY 2000, the fourth-consecutive year of expenditures decline. This mainly reflects the continuing decline in expenditures for the Food Stamp Program which fell by about 4% to USD 17 billion in FY 2000 due to reduced programme participation.

USDA expenditures to support programmes for ***rural development*** remained stable at about USD 2 billion. Among the programmes supported were: a combination of grants and loans to projects for improving basic rural infrastructure, including the distribution of safe drinking water; grants and loan guarantees to boost rural businesses, including assistance to farmers and other rural residents in organising new co-operatives; grants to assist farm workers in declared disaster areas; and loans and grants for the construction of rental housing units for domestic farm workers.

Trade policy developments

In FY 2000, total expenditure on ***export subsidies*** under the Export Enhancement Program (EEP) increased by 17% to USD 1.6 million and was again entirely for frozen poultry. Total expenditure on export subsidies under the Dairy Export Incentive Program decreased by 46% to USD 79 million. The total value of ***export credit guarantees*** to help foreign countries finance purchases of US farm goods under the Export Credit Guarantee Program increased by 1% to about USD 3 billion. Planned total commodity shipments under all ***food-aid*** programmes, if fully realised, would fall, in volume, by 30% to 6.6 million tonnes and, in value, by 37% to USD 1.3 billion. Some USD 300 million was committed for FY2001 to support a new food aid initiative – the Global Food for Education Initiative – on school feeding and nutrition projects in developing countries. Total expenditure for ***foreign market promotion*** authorised under the Market Access Program and the Foreign Market Development co-operation Program to US trade organisations for export promotion activities in foreign markets remained at the 1999 levels, respectively USD 90 million and USD 33 million.

During FY 1998 and calendar year 1999, there was an under-utilisation of all ***tariff quotas*** under the URAA, except five products for which the TRQ was filled, including peanuts and mandarin oranges

(satsumas). The TRQ for sheep meat introduced in 1999 at the level of 1998 imports was increased by the first of the two scheduled annual increases of 3% (see previous edition). In the context of the additional European outbreaks of **BSE**, the US has prohibited imports of products containing ruminant animal protein from BSE infected countries since 1989. This prohibition was extended in 1997 to all Europe. In the light of recent findings regarding cross-contamination of non-ruminant feed with BSE, as of December 2000, the US had prohibited imports from Europe of all products containing animal proteins, regardless of the species. No case of BSE has ever been diagnosed in the US. In 2000, the United States was involved in a number of WTO ***dispute settlement procedures*** involving agriculture (Part II.2).

Overall evaluation

Agricultural policy in the United States continued to be implemented under the 1996 FAIR Act, the provisions of which were intended to reduce support over time, and to bring about a significant movement towards greater market orientation for crops. However, such movement has been hampered by the *ad hoc* payments granted in the last three years. In 2000, the overall PSE is estimated to have fallen by 11%, mainly due to a decline in market price support for sugar and milk. At 22%, the %PSE was below the 1986-88 average and the OECD average. However, the %PSE, increased from an average low of 14% in 1994-96 to 23% in 1998-2000. The combined changes in market price support and budgetary support to food consumption (through Food Stamps and other programmes) has resulted, in recent years, in a reduction in the implicit tax on consumers and, in 2000, a net subsidy to consumption, as measured by the CSE was indicated. Support to general services provided to agriculture increased, but the total support to agriculture remained at about 1% of GDP (Tables III.44-45, Figure III.17).

The combined share of market price support and payments based on output (loan deficiency payments and marketing loan gains) was 51% of total support. It is these forms of support that potentially have the greatest effects on production and trade. Output-linked support of this magnitude is significant and may well have played a role in depressing prices, in both domestic and world markets. Although the producer NPC declined to 1.17 in 2000, it is still more than double its 1995 level, before the introduction of the FAIR Act. In other words, the prices received by farmers were on average 17% higher than those in the world market. However, the NPC for consumers, which estimates the rate of import protection is lower as output payments do not affect consumer prices. The introduction of national standards for labelling organic food is a market-based way of helping farmers to supply a niche market without specific protection. The increase in purchases of development rights for conservation purposes is also a market-based approach to environmental concerns.

While transfers under other categories of support to farmers remained relatively stable, declining payments based on historical entitlements (PFC payments) were, for the third consecutive year, supplemented by large additional *ad hoc* and *ex post* payments introduced to compensate for low agricultural prices and market losses due to weather. These latter payments may affect production decisions, in as much as they lead producers to expect that they will receive extra support in times of low prices. These payments, which have supplemented the 1996 FAIR Act, are not consistent with the principle that the market should have a greater influence on farmers' production decisions. While in 1995, the producer NAC indicated that total farm receipts were only 13% higher than those generated in the market at world prices, by 2000 they were 28% higher. This is a clear reduction in market orientation. Overall, by replacing payments based on current plantings with declining payments based on historical entitlements the 1996 FAIR Act had the potential to decrease the impact of policy on production and trade. The doubling of these payments in 1999 and 2000 may well have increased those production and trade impacts. However, the reduction in support and protection in 2000 can be seen as a development in the right direction, especially if it marks a reversal in the upward trends in recent years.

2. DEVELOPMENTS IN WTO AND NAFTA TRADE DISPUTE SETTLEMENT PROCEDURES INVOLVING AGRICULTURAL PRODUCTS

Recent developments in the WTO

Of the 14 new panels established by the WTO Dispute Settlement Body (DSB) in 2000, not one directly involved agricultural products. Although the number of new cases put forward to the DSB was considerably lower than in the previous year, there were nevertheless over a hundred cases pending final resolutions. A particular salient point for 2000 is the authorisation granted by the DSB to impose retaliatory measures against other country members for failing to comply with DSB rulings. Retaliation was authorised by Ecuador in respect of European Union import policies affecting bananas and by Canada in respect of the Brazilian export-financing programme for aircraft. Retaliatory authorisation was granted for the first time in 1999 by the DSB in respect of two disputes involving agricultural products.

Throughout 2000, the Sanitary and Phytosanitary (SPS) Committee reviewed various issues concerning the implementation of the Agreement and adopted a set of guidelines, as mandated under the SPS Agreement. These guidelines are designed to assist national regulatory officials to avoid arbitrary or unjustifiable distinctions in the level of health risk they determine to be appropriate in different situations, if these differences result in discrimination or a disguised restriction on trade. The guidelines address the application of the concept of the appropriate level of protection and its practical implementation. It was also agreed to review the guidelines periodically and to revise them as necessary.

In the 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 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. Panel reports are adopted 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 for not adopting 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 into 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.

WTO trade dispute developments

The following paragraphs summarise the nature of the trade disputes involving agricultural products and OECD Member countries that were submitted to the Dispute Settlement Body of the WTO, and the efforts made to solve them in 2000 and as of early March 2001. In several cases, consultations or panel processes were pending or still proceeding. For more up-to-date information, consult the WTO's web site, at *http://www.wto.org/wto/dispute/bulletin.htm*.

Requests for consultations

Belgium: customs duties on rice imports. In October 2000, the United States requested consultations with Belgium regarding regulations establishing the customs duties applicable to rice imports. The United States claims that Belgium did not use transaction prices in the assessment of duties for rice transactions that took place in 1997 and 1998. It further claims that these measures appear inconsistent several provisions of the Customs Valuation Agreement, the Technical Barriers to Trade Agreement (TBT) and the GATT 1994. Further to consultation procedures that were found unsatisfactory, the United States requested the establishment of a panel in January 2001. At its 1st February meeting, the DSB deferred the implementation of a panel.

Brazil: minimum import prices on certain agricultural products. In May 2000, the United States requested consultations with Brazil regarding the use of minimum import prices on various products in conjunction with non-automatic import licensing procedures. The United States claims that these measures are inconsistent with several provisions of the Customs Valuation Agreement, the Agreement on Agriculture and the Agreement on Import Licensing Procedures. In October 1999, the European Union had requested consultations with Brazil on the same issues. Consultations are pending.

Chile: safeguards measures applied to certain agricultural products. In October 2000 and January 2001, Argentina and Guatemala respectively requested consultations with Chile regarding the imposition of definite safeguard measures on imports of various products, including wheat, wheat flour and edible vegetal oils. Both countries claim that the measures are inconsistent with the Safeguards Agreement. Consultations are pending.

European Union: differentiated treatment for soluble coffee. In October 2000, Brazil requested consultations with the European Union regarding duty-free preferential treatment granted under the European Union'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 European Union. Consultations are pending.

Mexico: anti-dumping measures on live swine. In July 2000, the United States requested consultations with Mexico regarding the determination of the threat of material injury and of definitive anti-dumping measures on live swine for slaughter. The United States also sought consultations on other measures regarding import restrictions and inspection measures applied on swine exceeding 110 kilograms. The United States claims that these measures are inconsistent with several provisions of the SPS agreement, the Agreement on Agriculture and the TBT Agreement. Consultations were held in September 2000.

Romania: minimum import prices on certain agricultural products. In May 2000, the United States requested consultations with Romania regarding the establishment of arbitrary minimum import prices on various products, including meat, eggs, fruits and vegetables. The United States claims that these measures are inconsistent with several provisions of the Customs Valuation Agreement and the Agreement on Agriculture. Consultations are pending.

Panel reports, appeals, and requests for the establishment of a panel

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 found that the measures were inconsistent with the Canadian obligations under several provisions of the Agreement on Agriculture by providing export subsidies. Following an appeal of the panel's findings, the Appellate Body reversed some of the panel's findings but upheld the panel's findings that Canada was violating several provisions of the Agreement on Agriculture in respect of export subsidies. In October 1999, the DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report. The duration of the reasonable period of time for the implementation process was initially agreed to expire no later than 31 December 2000 and was subsequently extended to 31 January 2001. Following the introduction of the new Canadian dairy export mechanisms, the applicants argued that the new mechanisms continued to violate WTO disciplines on export subsidies. In mid-February 2001, they requested the DSB to pursue the matter under the compliance review procedures and to suspend equivalent concessions, which would be delayed until the compliance review panel's final determination.

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 European Union regulations on the Common Market Organisation for bananas with several provisions of the GATT and other WTO obligations. The panel found that the European Union banana import regime was 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. Following an appeal of the panel's findings, 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. The reasonable period of time for implementation of the recommendations of the DSB was determined by arbitration to expire on 1 January 1999. In July 1998, the European Union Council adopted the 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. In January 1999, the United States request authorisation from the DSB to suspend concessions to the European Union on trade of about USD 520 million. The level of suspension was subsequently determined by arbitrators to equal USD 191.4 million. In the meantime, the original panel was reconvened, at the request of Ecuador, to examine the WTO consistency of the European Union measures taken in implementation of the DSB recommendations. The reconvened panel found that the European Union implementation measures were *not* fully compatible with its WTO obligations. In April 1999, the DSB authorised the United States to suspend concessions to the European Union and, in May 1999, it adopted the panel report requested by Ecuador. In November 1999, Ecuador requested the DSB authorisation to suspend concessions to the European Union for an amount of USD 450 million. The European Commission requested arbitration on the level of suspension and DSB referred the issue to the original panel. Subsequently, the arbitrator determined that the level of nullification and impairment suffered by Ecuador amounted to USD 201.6 million per year and in May 2000, Ecuador was authorised by the DSB to suspend equivalent concessions to the European Union. In October 2000, the European Commission informed the DSB of its proposal to reform its banana regime, which envisages a two-stage process, including the establishment of a tariff-rate quotas to be allocated on a "first-come, first–served" basis to be replaced by a tariff-only regime as of 1 January 2006.

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, textile and industrial products. Several other member countries also requested consultations with India regarding these quantitative restrictions. The panel report issued in April 1999 found that the measures at issue were inconsistent with India's obligations under several Articles of the GATT 1994 and the Agreement on Agriculture. In May, India notified its intention to appeal certain issues of law and legal interpretations developed in the panel report. The Appellate Body upheld the findings of the panel, and the DSB adopted the panel and

Appellate Body reports. In December 1999, the parties informed the DSB that they had reached an understanding for the duration of the reasonable period of time for an implementation process to expire no later than April 2000 and April 2001 for some tariff items.

***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 products 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. Following an appeal of the panel's findings, the Appellate Body upheld the basic finding that Japan's varietal testing of apples, cherries, nectarines and walnuts was without scientific basis. In March 1999, the DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report. In a joint communication, the two parties informed the DSB that they had agreed on an implementation period ending on 31 December 1999. On that date, Japan abolished the varietal testing requirement as well as the "Experimental Guide" in accordance with the DSB's rulings. At the February 2001 meeting of the DSB, Japan noted that it expected to reach a mutual agreement with the United States regarding a new quarantine methodology for products subject to import prohibitions because they are hosts of codling moth (*Cydia pomonella*).

***Korea*:** dairy products (requested by the *European Union*). A panel was established in July 1998 to examine the imposition of a definitive safeguard measure on imports of certain dairy products. The European Union claims that the imposition of an import quota for these products is inconsistent with several provisions of the Safeguards Agreement and the GATT 1994. The panel found that the Korean determination of serious injury has not been carried out in accordance with the Safeguards Agreement. Following an appeal of the panel's findings, the Appellate Body concluded that Korea violated the notification and consultation provisions of the Safeguards Agreement and reversed certain other panel's findings. The DSB adopted the Appellate Body Report and the Panel Report, as modified by the Appellate Body Report, in January 2000. Subsequently, the parties informed the DSB that they had reached an understanding for the duration of the reasonable period of time for an implementation process to expire no later than 20 May 2000.

***Korea*:** beef (requested by the *United States* and *Australia*). Further to consultation procedures that were found unsatisfactory by the United States and Australia, the DSB established two panels – in May and one in July 1999 – to examine certain Korean regulatory measures that are alleged to discriminate against imported beef. At the request of Korea, the DSB agreed that the same panel would examine the two complaints. It is claimed that the regulations are confining sales of imported beef to specialised stores and that Korea provides domestic support to the Korean cattle industry which exceeds its aggregate measure of support (AMS) as provided in the Korean Schedule of commitments. It is argued that these measures are inconsistent with several provisions of the Agreement on Agriculture and the GATT 1994. The panel found that the dual retailing system violates national treatment obligations and that Korea incorrectly calculated its domestic support and thus exceeded its domestic support commitments. Following an appeal of the panel's findings, the Appellate Body confirmed the panel's finding that the dual retailing system reduced the commercial opportunity for imported beefs but rejected in part the panel's findings concerning the Korean domestic support commitments. The DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report, in January 2001.

***Mexico*:** high-fructose corn syrup (requested by the *United States*). Further to consultation procedures that were found unsatisfactory by the United States, the DSB established a panel in November 1998 to examine the conformity of the Mexican imposition of definitive anti-dumping measures on imports of high-fructose corn syrup (HFCS) with the provisions of the Anti-Dumping Agreement. The panel found that Mexico's imposition of the definitive anti-dumping measure was inconsistent with several provisions of the Anti-Dumping Agreement. In April 2000, the parties informed the DSB that they had reached an understanding for the duration of the reasonable period of time for an implementation process to expire no later 22 September 2000. Just before the deadline, Mexico published a revised final determination on the anti-dumping investigation and argued that it had complied with the panel's

findings. In October 2000, pursuant to a request by the United States, the DSB agreed to refer the matter to the original panel.

***United States*:** banana retaliation measures (requested by the *European Union*). Further to a process of consultation that was found unsatisfactory by the European Union, the DSB established a panel in June 1999 to examine the bonding requirements imposed by US Customs Service on a series of imported products from the European Union. The European Union alleges that these bonding requirements are equivalent to 100% duties on respective products and exceed the bound rates of duty of respective products in the US Schedule of commitments. It is claimed that these measures are inconsistent with several provisions of the Dispute Settlement Understanding (DSU) and the GATT 1994. The panel found that these bonding requirements were put into place prior to the date at which the DSB authorised the suspension of concessions to the European Union and accordingly found the measures inconsistent with the DSU and GATT provisions. Following an appeal of the panel's findings, the Appellate Body reversed the panel's findings that these bonding requirements were inconsistent with the provisions of the DSU and the GATT 1994. The DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report, in January 2001.

***United States*:** safeguard measures on wheat gluten imports (requested by the *European Union*). Further to a process of consultation that was found unsatisfactory by the European Union, the DSB established a panel in July 1999 to examine the imposition of definitive safeguard measures in the form of a quantitative limitation on imports of wheat gluten from the European Union. It is claimed that these measures are inconsistent with the several provisions of the Agreement on Safeguards, the Agreement on Agriculture and the GATT 1994. The panel found that the determination of serious injury has not been carried out in accordance with the Safeguards Agreement and that the US failed to notify the initiation of the investigation and the finding of serious injury in a timely fashion. Following an appeal of the panel's findings, the Appellate Body released its report in December 2000. It upheld the panel's findings that three measures were inconsistently with the Safeguards Agreement: the determination of serious injury, the notification of initiation and finding of serious injury, and the opportunity for prior consultations. The Appellate Body however reversed certain other panel's findings. The DSB adopted the Appellate Body report and the panel report, as modified by the Appellate Body report, on 19 January 2001. Few days later, the European Union imposed a compensatory tariff of 5 euro per tonne on United States exports of corn gluten feed in the absence of the removal by the United States of its WTO-incompatible safeguard measures.

***United States*:** safeguard measures on lamb meat imports (requested by *Australia* and *New Zealand*). In November 1999, the DSB established two panels to examine the imposition of definitive safeguard measures in the form of a tariff-rate quota on imports of fresh, chilled and frozen lamb meat from Australia and from New Zealand. It is claimed that these measures are inconsistent with several provisions of the Safeguards Agreement and the GATT 1994. The DSB agreed that the same panel would examine the two complaints. The panel concluded that the United States failed to demonstrate the required causal link between increased imports and the threat of serious injury for the domestic industry and the safeguard measures violated United States obligations under the Safeguards Agreement. In January 2001, the United States notified the DSB of its intention to appeal certain issues developed in the panel report.

***United States*:** tax treatment for "Foreign Sales Corporations" (requested by the *European Union*). Further to consultation procedures that were found unsatisfactory by the European Union, the DSB established a panel in September 1998 to examine the conformity of Sections 921-927 of the United States Internal Revenue Code and related measures, establishing special tax treatment for "Foreign Sales Corporations" (FSCs). The European Union claims that these provisions are inconsistent with several provisions of the Subsidies Agreement, and the Agreement on Agriculture. The panel found that, through the FSC scheme, the United States has acted inconsistently with its obligations under the investigation provision of the Subsidies Agreement and the export competition commitments provision of the Agreement on Agriculture. Following an appeal of the panel's findings, the Appellate Body upheld the panel's finding that the FSC measures constituted a prohibited subsidy

under the Subsidies Agreement and reversed certain other findings. It also found that the United States acted inconsistently with its obligations under the Agreement on Agriculture for the prevention of circumvention of export subsidy commitments. Following the adoption of the FSC Repeal and Extraterritorial Income Exclusion Act by the United States in November 2000, the European Union requested authorisation from the DSB to take appropriate countermeasures and suspend concessions. Concurrently, the United States requested that the matter be referred to arbitration. In December 2000, the DSB agreed to refer the matter to the original panel and the parties jointly agreed to suspend the arbitration proceeding until the adoption of the panel report.

NAFTA dispute settlement procedures

The North American Free Trade Agreement (NAFTA) 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. One request was put forward to the Free Trade Commission to rule on disputes with respect to agricultural products in early 2001 and it is summarised below.

***United States*:** restrictions on Prince Edwards Island (PEI) potatoes (requested by Canada). In January 2001, Canada requested consultations with the United States under NAFTA procedures regarding the import restrictions imposed on all PEI potatoes after potato wart disease was found in one PEI field. Canada claims that the restrictions have no scientific justification and constitute an unjustified barrier to trade.

3. 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, June 2000

The OECD Council at Ministerial Level met on 26-27 June 2000. The communiqué issued at the conclusion of that meeting included the following text related to agricultural policy:[14]

(21.) Ministers strongly regretted the failure of the Participants to the Export Credit Arrangement to reach agreement on an Understanding covering agriculture as mandated in the Uruguay Round. They called for the negotiations to be resumed and successfully concluded by end of July if possible and by the end of 2000 at the latest. The work on the financing issues of the Export Credit Arrangement should examine its disciplines in relation to commercial practices and to their consistent application, taking into account, *inter alia*, recent developments in the WTO. Good progress has been made in the OECD's Export Credit Group on strengthening common approaches on environment and export credits. Ministers urged completion of the Work Plan by the end of 2001, and requested a report on progress at their next meeting. The Export Credit Group should also strengthen measures towards ensuring that export credit support to Heavily Indebted Poor Countries (HIPCs) is not used for unproductive purposes.

(23.) Support to farmers in the OECD area as a whole, as measured by the Producer Support Estimate, has returned to the high levels of a decade ago. Low world commodity prices and the resulting pressure on farm incomes have led many countries to introduce new measures or to provide additional support to farmers. In many cases measures have been implemented in ways inconsistent with the principles of agricultural policy reform, whereas in some other cases countries have introduced decoupled support measures consistent with these principles. Ministers reaffirmed, in conformity with Article 20 of the Uruguay Round Agreement on Agriculture, their commitment to the long-term objective of substantial, progressive reductions in support and protection, resulting in fundamental reform. Ministers agreed to continue their efforts to implement the broad set of shared goals and policy principles for agricultural policy reform, and recognised: the multifunctional characteristics of agriculture, and the need to ensure that policies should be targeted, transparent and cost-effective, maximise benefits, and avoid distorting production and trade. Food safety, food security, viability of rural areas and protection of the environment, as well as the economic efficiency of the agro-food sector, are common concerns. Policies to address these concerns need to respect the principles and criteria, noted above, as agreed in OECD. OECD work is of great value for the reform of agricultural policies and as support for on-going WTO trade negotiations.

(36.) Biotechnology is of growing importance to our societies because of its far-reaching consequences for, *inter alia*, human health and healthcare, agro-food production and sustainable development. Deepened international understanding and co-operation in managing the benefits and risks are necessary if the potential economic, environmental and social benefits are to be realised and new regulatory issues resolved. Public confidence, in particular, needs to be retained and enhanced through transparent policies. OECD will continue to contribute to this process of understanding across the broad range of biotechnology issues, and will seek to engage countries outside its membership in

this work. Ministers invited OECD to consider holding a conference in 2001 to address the environmental impacts of genetically modified organisms.

(37.) Food safety is a fundamental objective for all governments. Ministers affirmed their commitment to a science-based and rules-based approach. How precaution should be applied to food safety in circumstances of scientific uncertainty is being discussed to promote understanding of the various view points on the subject and to achieve greater global consensus on this issue, in particular in the Codex Alimentarius Commission. OECD has undertaken substantial work on biotechnology and other aspects of food safety, including work requested by the G8, contributing to international understanding on different policy approaches. Consultation with interested parties, notably with NGOs and the Edinburgh Conference on GM foods in February this year, has been very successful. The OECD will continue to undertake analytical work and to play an effective role in international policy dialogue on food safety, maintaining its engagement with civil society and seeking to share its work in this area with countries outside the Organisation's membership. Drawing on its comparative advantages, the work of the OECD will effectively complement, without duplication, the activities of other international organisations, in particular the FAO and WHO.

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)[15] 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% of the value of production in 1986-88 to an estimated 35% in 1997. During the same period, total transfers from consumers and taxpayers due to agricultural policies decreased from a share of 2.2% of GDP to 1.3%, reaching a level of USD280 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 signals, 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 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:[16]

The 1987 OECD Ministerial Principles for agricultural policy reform

(19.) "The joint report of the Trade and Agricultural Committees[17] 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,[18] 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."

4. MEASUREMENT OF SUPPORT AND METHOD OF POLICY EVALUATION

Introduction

The OECD has, since 1987, measured support to agriculture using the Producer Support Estimate (PSE) and Consumer Support Estimate (CSE).[19] With the reform of agricultural policies in OECD countries, the number and complexity of policy measures has increased significantly. A given objective may be achieved through different measures and the economic impacts depend on the way they are implemented. A comprehensive evaluation of recent measures requires grouping policies according to their implementation criteria – independently of their objectives and effects. This is the basis of the OECD classification system presented here.

This chapter explains the coverage, definitions, criteria of classification and methods of calculating the OECD indicators of support associated with agricultural policies. It elaborates on the meaning and interpretation of the concept of market price support and the main indicators of support. It also elaborates on the way the PSE and related indicators are used for policy evaluation. It presents the method of decomposing the annual variations in the PSE and CSE to calculate the contribution of each component to the country PSE or CSE, definitions for full-time farmer equivalents and for agricultural land are also provided.

The work on implementing the current classification system, presented for the first time in the 1999 edition of this report, was undertaken by the Secretariat in close co-operation with Member countries. It provided not only the opportunity to "reclassify" policy measures, but also to "clean up" the databases and calculations for each country to ensure consistency. A description of the policies covered, and the detailed results for all countries, as well as the documentation of the data sources, are available in the Electronic Data Product, OECD PSE/CSE D*atabase*.

Although the Secretariat has made an effort to ensure consistency in 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. 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.

Classification and definitions

The current 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.5.

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

The PSE measures support arising from policies targeted at agriculture relative to a situation without such policies, *i.e.* one in which producers are subject only to general policies (including economic, social, environmental and tax policies) of the country. Although the PSE is measured **net** of producer contributions to help to finance a support policy (*e.g.* through a levy on production) it is fundamentally a **gross** concept because any costs associated with those policies, and incurred by individual producers, are not deducted[20]. It is also a measure of **nominal assistance** in the sense that increased costs associated with import duties on inputs are not deducted. The PSE includes both implicit and explicit payments, such as price gaps on outputs or inputs, tax exemptions and budgetary

payments, including those for remunerating non-marketed goods and services. The indicator measures, therefore, more than just the "subsidy element". Although **farm receipts** (revenue)[21] are increased (or farm expenditure reduced) by the amount of support, the PSE is not in itself an estimate of the impact on farm production or income. The following paragraphs describe the main components of the PSE.

A. Market Price Support (MPS): an indicator of the annual monetary value of gross transfers from consumers and taxpayers[22] to agricultural producers arising from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm-gate level.

The MPS, which is conditional on the production of a specific commodity, includes the transfer to producers associated with both production for domestic use and export. It is measured by the price gap applied to current unlimited production (a. B*ased on unlimited output*); or, where restrictions on output apply, to current limited production (b. B*ased on limited output*). The MPS is **net** of financial contributions from individual producers through producer levies on sales of the specific commodity or penalties for not respecting regulations such as production quotas (c. P*rice levies*). In the case of livestock production, it is net of the market price support on domestically produced coarse grains and oilseeds used as animal feed (d. E*xcess feed cos*t).

B. Payments based on output: 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.

These payments, which are conditional on producing a specific commodity, or a specific group of commodities, include payments per tonne, per hectare or per animal on current unlimited production (a. B*ased on unlimited output*), or limited production (b. B*ased on limited output*).

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, in respect of a specific agricultural commodity or a specific group of agricultural commodities.

These payments, which are conditional on planting a specific crop or crops, or maintaining particular number of livestock, include payment per hectare, or per head, to current unlimited (a. B*ased on unlimited area or animal numbers*), or limited (b. B*ased 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 production of a specific agricultural commodity, or a specific group of agricultural commodities, without obligation to continue planting or producing such commodities.

These payments are conditional on being a producer of a specific commodity or a specific group of commodities at the time of the introduction of the payment. The measure includes payments based on historical plantings/animal numbers or production of such commodities (a. B*ased on plantings/animal numbers or productio*n) and payments based on historical support programmes for such commodities (*b.* B*ased on historical support programme*s).[23]

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.

These payments, which are conditional on the on-farm use of specific fixed or variable inputs, include explicit, and implicit, payments affecting specific variable input costs (a. B*ased on use of variable input*s); the cost of on-farm technical, sanitary and phytosanitary services (b. B*ased on use of on-farm service*s); or affecting specific fixed input costs, including investment costs (c. B*ased 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.

These payments are conditional on the application of certain constraints (reduction, replacement, or withdrawal) on the on-farm use of specific variable inputs (a. B*ased on constraints on variable input*s); or fixed inputs (b. B*ased on constraints on fixed input*s); 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 (c. B*ased on constraints on a set of input*s).[24]

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.

These payments, which are conditional on being an eligible farming enterprise or farmer, compensate for farm income fluctuations or losses (a. B*ased on farm income level*), or for guaranteeing a minimum income (b. B*ased on an established minimum income*).[25]

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.

These are payments to producers which cannot be disaggregated due, for example, to a lack of information, and include payments funded by national governments (a. N*ational payments*), or state, regional, prefectural or provincial governments (b. S*ub-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.

These payments to eligible private or public general service are provided to agriculture generally and not individually to farms. They include payments for collective agri-environmental action and taxpayer's transfers for the following purposes : improving agricultural production **(I. R*esearch and development*)**; agricultural training and education **(J. A*gricultural schools*)**; control of quality and safety of food, agricultural inputs and the environment **(K. I*nspection services*)**; improvement of off-farm collective infrastructures, including downstream and upstream industry **(L. I*nfrastructures*)**; assistance to marketing and promotion **(M. M*arketing and promotion*)**; meeting the costs of depreciation and disposal of public storage of agricultural products **(N. P*ublic stockholding*)** and other general services that cannot be disagreggated and allocated to the above categories due, for example, to a lack of information **(O. M*iscellaneous*)**. Unlike the PSE and CSE transfers, these transfers are not received by producers or consumers individually, and do not directly affect **farm receipts** (revenue) or **consumption expenditure**, 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.

The CSE includes explicit and implicit consumer transfers to producers of agricultural commodities, measured at the farm-gate (first consumer) level and associated with the following market price support on domestically produced consumption **(P. T*ransfers to producers from consumer*s)**; transfers to the budget or to importers, or to both, on the share of consumption that is imported **(Q. O*ther transfers from consumer*s)**; **net** of any payment to consumers that offsets their contribution to market price support of a specific commodity **(R. T*ransfers 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. E*xcess feed cos*t)**. When negative, this indicates transfers from consumers and measures 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 impact 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 that 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 following; the explicit and implicit gross transfers from consumers of agricultural commodities to agricultural producers net of producer financial contributions (which appear in MPS and CSE); the gross transfers from taxpayers to agricultural producers (in the 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 the 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 consumer*s)** and taxpayers **(U. *Transfers from taxpayer*s)** net of import receipts **(V. *Budget revenue*s).**

Criteria for classification

Defining measures to be included in the PSE, CSE *or* GSSE

The general criterion to determine whether to include policy measures in the 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 (adjusted to exclude double-accounting).

In the case of the 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 farming enterprise, or farmer, to receive a transfer. The actions change gross farm receipts (revenue) by the amount of the transfer. In the case of the CSE (transfers to/or from consumers), it is also necessary for consumers to take decisions or actions to consume agricultural commodities to provide (or receive) a transfer. These decisions change gross consumer expenditure by the amount of the transfer. The 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.

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 it does not, proceed to the next 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 farming enterprise or farmer? If yes, consider it under PSE. If not, proceed to the next question;
- ***Third***, does the policy measure create a transfer to general services provided to agriculture collectively? If yes, consider it under the GSSE. If not, do not consider it in the TSE calculation.

Classifying 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

Box II.5. **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*

a. Based on unlimited output
b. Based on limited output
c. Price levies
d. Excess feed cost

B. *Payments based on output*

a. Based on unlimited output
b. Based on limited output

C. *Payments based on area planted/animal numbers*

a. Based on unlimited area or animal numbers
b. Based on limited area or animal numbers

D. *Payments based on historical entitlements*

a. Based on historical plantings/animal numbers or production
b. Based on historical support programmes

E. *Payments based on input use*

a. Based on use of variable inputs
b. Based on use of on-farm services
c. Based on use of fixed inputs

F. *Payments based on input constraints*

a. Based on constraints on variable inputs
b. Based on constraints on fixed inputs
c. Based on constraints on a set of inputs

G. *Payments based on overall farming income*

a. Based on farm income level
b. Based on established minimum income

H. *Miscellaneous payments*

a. National payments
b. 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*

producers are 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 impact (on, for example, production, consumption, income, employment and the environment) through, for example, the policy models 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. Payments with *cross-compliance* conditions are defined as measures to support specific agricultural commodities conditional in respect of some environmental constraints. C*ost-sharing* payments are defined as measures to support specific environmental activities, or outcomes, through constraints on agricultural production or pollution. Although, in both cases, the payments may be provided per farm, per hectare or per animal, their main implementation criteria are not the same These payments should not be considered, therefore, under the same category.[26]

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:

- **F*irst***, does the policy measure provide an implicit or explicit payment to individual producers on the basis of their overall farming receipts or income and is this independent of the commodities they produce or the fixed and variable inputs they use? If yes, consider it under G. P*ayments based on overall farming income*; if not, proceed to the following question;
- **S*econd***, does the policy measure affect the domestic market price (to consumers and producers) of a specific commodity? If yes, consider it under A. M*arket price suppor*t; if not, proceed to the following question;
- **T*hird***, 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. P*ayments based on output*; if not, proceed to the following question;
- **F*ourth***, does the policy measure provide a payment to agricultural producers conditional on planting a specific crop or maintaining a herd of livestock or a specific group of crops (or animals)? If yes, consider it under C. P*ayments based on area planted/animal numbers*; if not, proceed to the following question;
- **F*ifth***, does the policy measure provide a payment to agricultural producers based on historical support, on area, on animal numbers or on 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. P*ayments based on historical entitlements*; if not, proceed to the following question;
- **S*ixth*,** 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. P*ayments based on input use*; if not, proceed to the following question;
- **S*eventh***, does the policy measure provide an explicit or implicit payment to individual producers conditional on the application of certain constraints (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 limiting the choice of production techniques, including remuneration for farm inputs used to produce non-market goods and services? If yes, consider it under F. P*ayments based on input constraints*; if not, consider it under G. P*ayments based on overall farming incom*e The latter includes transfers to individual producers conditional on being an eligible farming enterprise, or farmer, 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 order set out above.[27] 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

Classifying 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 gap between domestic and border prices.[28] Transfers to producers (from consumers), created by a situation in which domestic prices for commodities are maintained at a higher level than border prices (*price gap*), are included (+) under the PSE, and (–) under the CSE. Transfers to producers (from taxpayers) through **export subsidies** (the same price gap) are included in the PSE (see section on MPS).

While transfers from taxpayers for **on-farm stockholding** are transfers to producers, and are included in the PSE, transfers from taxpayers for the operational costs of public purchasing agencies and the depreciation and disposal costs associated with **public stocks** are *not* in themselves transfers to producers. Such transfers are, therefore, included in the GSSE. **Transfers to processors** (first consumers) to compensate them for paying domestic prices higher than border prices, and **consumption subsidies** in cash or in kind to support 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 (Box II.6).

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 category 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, quarantine) or the control of environmental quality in agriculture.

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), which are 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 prices fully reflecting depreciation and operational costs, there are neither input subsidies (in the PSE) nor transfers for infrastructure (in the GSSE). **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.[29]

However, public expenditure is sometimes also used with the intention of 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 that Regulation 355/77 (replaced by Regulations 866/90 and 867/90) is designed to improve the infrastructure related to processing and marketing of agricultural products in the European Union. Such transfers are not received as such by farmers and are included in **Infrastructures** in the GSSE. They are also included in the PSE to estimate the overall support to agriculture (TSE).

Box II.6. **Transfers associated with market price support**

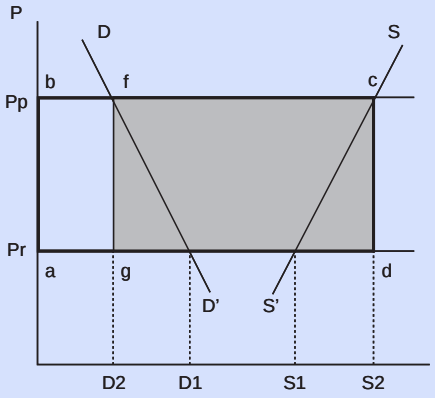
Consider the case of a country where there are border measures and government purchasing agencies (GPAs) importing, and buying and selling in the domestic market, in order to maintain the domestic price close to an administered domestic price higher than the border price (world reference price).

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

As, in a given year, domestic consumers and GPAs purchase all domestic production at an average price (P*p*) that is higher than the price at which the GPAs export the commodity (P*r*), the transfer to producers associated with MPS to the commodity is measured by the area *abcd* = (P*p*-P*r*)•S2 and considered under **I.A. *Market Price Support***. The area *abfg* = (P*p*-P*r*)•D2 measures the share of MPS financed by consumers and is considered under **I.A MPS** in the PSE and **III.P. *Transfers to producers from consumers*** in the CSE. The area *gfcd* = (P*p*-P*r*)•(S2-D2) measures transfers to producers from taxpayers The share of MPS financed by taxpayers is 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 consumers [area *abfg* = (P*p*-P*r*)•D2] minus consumption subsidies, in cash or in kind, and price compensating aids paid 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* = (P*p*-P*r*)•S2], transfers under marketing and stockholding in the GSSE, consumption subsidies in cash and price compensation in the CSE.

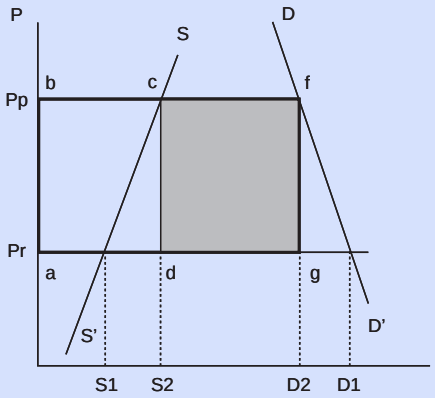
Figure 1. **Export commodities**



In the case of imported commodities (Figure 2), both domestic production (S2) and imports (D2-S2) are sold in the domestic market at the average producer price (P*p*). But in both cases, price compensation is provided by Government to processors (first consumers) to help them to stay competitive in the world market for 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 P*p*. T*hey are also* offered as domestic food aid at the opportunity cost of P*p*. as foreign food aid at the opportunity cost of P*r* or kept in public storage for later sale.

Box II.6. **Transfers associated with market price support** (*cont.*)

Figure 2. **Import commodities**



Under these conditions, the transfer to producers associated with MPS for a particular commodity is measured by the area *abcd* = (P*p*-P*r*)•S2. T*his is* 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* = (P*p*-P*r*)•(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. O*ther transfers from consumers or* IV.V. B*udget revenues***).

The CSE is measured by the area *abfg* = (P*p*-P*r*)•D2 (**III.P. *Transfers to producers from consumers and* III.Q. O*ther 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 transfer associated with MPS is therefore obtained by adding to the MPS in the PSE [area *abcd* =(P*p*-P*r*)•S2], those transfers 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 importers, or to both.

In both cases – exported and imported commodities – to provide such transfers to producers through MPS, other transfers are generated These are mainly in the form of operational costs of GPAs and the 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) These are considered in most cases to be 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 as for any other input – the question is whether the price for water paid by farmers covers all the industry costs or not.[30] 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. On the other hand, public expenditure for maintaining or improving collective infrastructure related to the input, processing and marketing industries is considered in the GSSE.

Treatment of taxes and levies

The PSE and CSE are defined as net of producer contributions which help finance policy measures providing support to them. This is one of the reasons why the **excess feed cost** is calculated and deducted from the market transfers 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 in the CSE for crops. This avoids double counting when aggregating the PSE and CSE for crops and livestock.[31]

In the same way, the receipts from **production taxes and levies** which 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 is because the PSE is a "nominal assistance" concept, meaning that increased costs associated with import duties on inputs are not deducted The PSE is also a "gross" concept, meaning that increased costs to farmers associated with the policy measure are not deducted. Achieving the level of environmental quality (through good agricultural practices) as required by regulations should be, therefore, at the expense of farmers and a payment for reducing pollution is considered as a support to help farmers to reach the required environmental quality (Box II.7).

Main indicators: meaning, calculation and interpretation

What does the PSE/TSE *cover?*

The PSE is a static measure of support provided to agricultural producers in a given time period (*e.g.* one year or season) and defined by the general macro-economic conditions in the context of the general economy-wide policies. A situation of zero support to agriculture would occur when there are only general economy-wide policies in place with no policies specifically altering the transmission of

Box II.7. **The case of negative support**

The concept of the PSE as a "gross" measure allows for cases of negative support. This is the case of agricultural policy measures that act as a tax on producers relative to the situation 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 the world price.

Under the concept of the PSE as a "nominal assistance" measure, taxes on 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. This is the case unless the rates applied to agricultural producers differ from those resulting from the general tax, or from social and environmental policies, in a manner that does not reflect sound technical differences. In such a case, the difference between a lower rate for producers and the general rate would mean positive 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 taxation and on social and environmental policies.

Therefore, a producer, who 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 who pays a pollution tax, which represents the social cost of the pollution. But if a payment is received to compensate for the costs incurred in eliminating pollution, which the producer has caused, such a payment is considered as support.

the general macroeconomic conditions for agriculture. In such a situation, current total farm receipts would entirely be generated in the market without any policy-linked transfer to farmers. This can be seen as an extreme situation. To improve welfare or to address market failure, however, it can be appropriate to have policies although their efficiency depends on associated transfers and effects on production, consumption, trade, incomes and the environment. Such transfers, and their effects, depend on the way policies are implemented. This is the criterion used to group transfers under the PSE, CSE, GSSE and TSE, and the basis for any cost/benefit analysis of policies.

For example, to protect the natural habitat, one country applies SPS measures to avoid infestation with pests or diseases that do not exist in the country. A second country grants a payment to farmers to share the costs of changing farming practices, and a third country finances collective actions in favour of such protection. All these cases involve costs and benefits. In the first case, SPS measures may create transfers from consumers to producers through, for example, a domestic price higher than the export price, and is included in MPS under the PSE. In the second case, the transfers are also included in the PSE, but under payments based on input constraints while, in the third case, the transfers are included under the GSSE.

The PSE identifies policies which specifically alter for agriculture the transmission of general macro-economic conditions (for example, changes in exchange rates) and measures the associated transfers. For example, a "double price" occurs when the f.o.b./c.i.f. border price is adjusted for the exchange rate variation, while the domestic price is not adjusted. This can happen only if a specific policy exists for allowing it. There are two main categories of policies affecting price transmission to farmers directly. These are payments based on current output ("deficiency payments") and MPS and are included in the PSE. While deficiency payments do not affect domestic consumers and are explicit transfers included in the budget, MPS includes a wide range of measures generating implicit transfers paid by consumers, which are included in the PSE and CSE.

Calculating the MPS

Market price support is only calculated where there are policies that affect the transmission of the general macro-economic conditions to agricultural producers and create a "price gap" with transfers from consumers to producers. There is a range of policies that create transfers from consumers to producers. For example, MPS should be calculated for a country that has no border measures for imports and exports of a commodity, but has State (or monopoly) marketing structures that control the domestic market, or applies sanitary barriers. Although MPS policies are usually easy to identify, when applied simultaneously their individual contribution to the price change might be difficult to calculate.

It is also important to recognise that a price gap (positive or negative) can exist in the absence of any policy measures that affect the transmission of prices. This may occur in the short term due to the inability of the domestic marketing structures to adjust and profit from foreign market conditions by importing or exporting. However, over the medium or long term, in the absence of policy constraints, it is expected that domestic or foreign enterprises would raise profits by increasing their imports or exports.

The types of MPS transfers are identified in Box II.6, but the method of calculating these transfers varies depending on the country's trade position and the type of policies in place. ***In a net exporting country,*** with no policy specifically affecting the imports or exports of a given commodity, domestically produced commodities are exported at an f.o.b. price, which is also the domestic price, *i.e.* the producer price plus marketing margins, or the wholesale price plus internal transportation costs (Diagram II.1). This corresponds to the case of zero MPS.

However, when a country applies explicit export subsidies it creates a "double price", with the export price lower than the domestic price, and the (average) export subsidy (*i.e.* total expenditure on export subsidies divided by total exports) providing a measurement of the price gap. If other policy measures (for example, import tariffs, export credits, foreign food aid, public stockholding, sanitary barriers, state-trading enterprises) are in place alone, or in a package, they create implicit (or explicit) export subsidies. This can only be measured by comparing the effective export and domestic prices. A

positive difference means an implicit tax on consumption financing exports through an implicit export subsidy, while a negative difference means an implicit consumption subsidy.[32]

I*n a net importing country,* where there is no policy specifically affecting the imports or exports of a given commodity, domestically produced commodities and imports are consumed at a c.i.f. price, which is the domestic price, *i.e.* the producer price plus marketing margins or the wholesale price plus internal transportation costs (Diagram II.1). This corresponds to the case of zero MPS, *i.e.* the price paid by consumers for the quantities imported and produced domestically is the same with both quantities defined at the same marketing and geographical level.

However, when, for example, a country applies import tariffs, it creates a "double price" with the c.i.f. import price lower than the domestic price. The applied tariff rate average (*i.e.* total receipts from import tariffs divided by total imports) measures the price gap. If other policy measures (for example, tariff import quotas, public stockholding, sanitary barriers, state-trading enterprises) are in place, alone or in a package, they may create an implicit import tax. This can also be measured only by comparing the effective import and domestic prices.

Comparing prices for the price gap

The method for calculating the price gap varies depending on the policies in place. In all cases, the accuracy of the calculation depends on the data quality and availability and the definition of the prices compared. Diagram II.1 helps to clarify the relationships between the prices that can be used to calculate the MPS. The prices are adjusted to take in to account different marketing and geographical levels of the prices in order to compare "like with like". This is to ensure that the price gap covers only policies specifically affecting the price paid by domestic consumers to domestic producers and does not include factors such as:

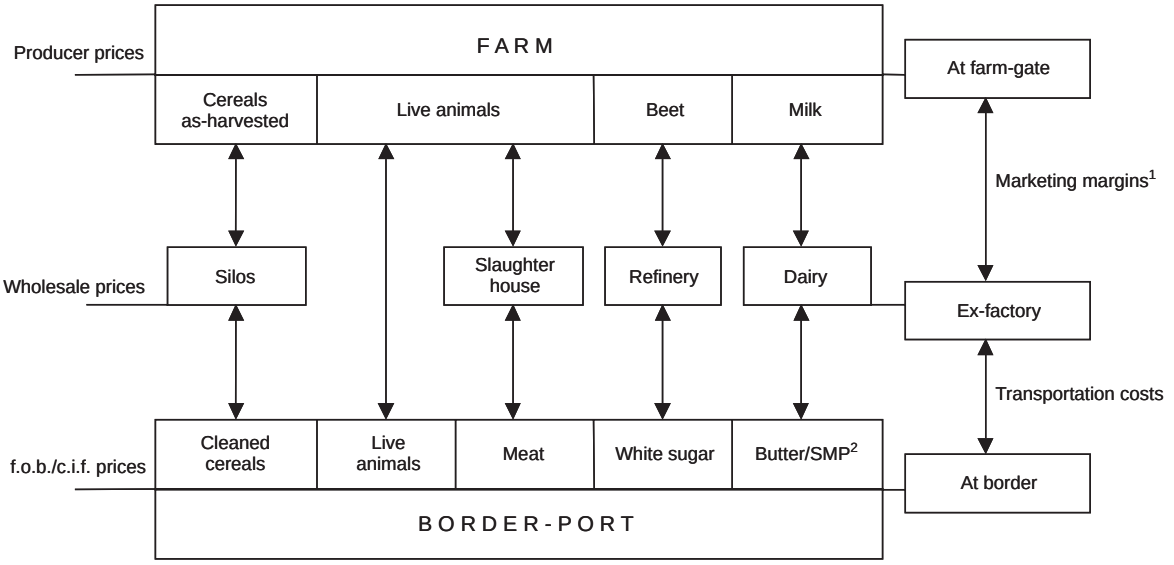
- **N*atural P*rotection** – This results in higher (lower) producer prices in the importing (exporting) country in comparison to those in the supplier (purchaser) country due to the transportation costs between the two countries. As the international transportation costs are (not) included in the c.i.f. (f.o.b.) prices with which the producer prices are compared, the resulting price gap excludes natural protection (handicap) as a positive (negative) support to producers of the country.

- **Q*uality differences*** – While, for a net exporter, the f.o.b. price for a commodity generally corresponds to the quality of the commodity produced domestically, this may be not the case of a c.i.f. price for a commodity imported by a net importer country. In this case, the c.i.f. price has to be adjusted to avoid a price gap that included quality differences.

- ***Marketing margins and internal transportation costs*** – These costs may vary significantly between countries and are much higher in countries with poor transportation, processing and marketing infrastructures. So it is important to deduct the marketing margins and internal transportation costs of the country importing or exporting the commodity and not the costs reflecting marketing structures of another country.

Potential for error in the MPS calculation can arise from failing to compare "like with like". A lack of information for some commodities means that, sometimes, second best solutions have to be found. The MPS is calculated at the farm gate level, when there is inadequate information on the marketing margins In this case, the domestic wholesale price can be compared with the f.o.b. (or c.i.f.) price as both prices are at a similar marketing level with the only difference being in terms of the internal transportation costs. Internal transportation costs refer to the costs from the factory to the port in the case of the f.o.b. price and, in the case of a c.i.f. price, they refer to the costs from the port to the place of domestic consumption. Because, in both cases, transportation costs also exist between the factory and the place of domestic consumption, it is considered in some of the current MPS calculations that the costs offset each other.

Figure II.1. **MPS Calculation: Marketing and geographical levels of commodity prices**



1. Marketing margins = handling margin + processing margin + transaction margin + transportation costs.
2. Skim Milk Powder.

Main indicators: methods of calculation

PSE *and* TSE *by country*

To calculate the PSE and the TSE for a given country, the only component that has to be calculated for each commodity is that part of market price support which is financed by consumers. This is because all the other PSE and TSE components are recorded, explicitly or implicitly, as budgetary expenditure. Input subsidies in the form of interest concessions and tax rebates are budget revenue forgone that have also to calculated, but an estimate often appears in the budget.

In calculating Total Transfers, the OECD method of calculation starts with the actual total budget transfers associated with agricultural policies. Market price support is calculated for a number of commodities, and the MPS average for these commodities is then applied 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.[33] This method, even when consistently applied across countries, may over-estimate or under-estimate the MPS for particular countries. The larger the share of production covered by the MPS calculation, the smaller the risk of error. Thus, error can be reduced by increasing the commodities specifically covered by MPS calculations – the "MPS commodities" as referredin this report.

The share of MPS commodities in the total value of production varies across countries (Table II.27). To reduce potential error, efforts have been made to extend the MPS calculation for countries where MPS commodities represent less than 70% of the total value of agricultural production for the past three years. Table II.28 shows the MPS commodities by country for the period 1986-2000, commodities that are included for the first time are in bold. These additional commodities were chosen on the basis of their contribution to the total value of agricultural production.

Table II.27. **Coverage of MPS as a percentage of the total value of production in 2000**

Country	% coverage	Country	% coverage
Australia	74	Mexico	67
Canada	77	New Zealand	73
Czech Republic	76	Norway	84
European Union	68	Poland	73
Hungary	65	Slovak Republic	74
Iceland	75	Switzerland	80
Japan	54	Turkey	66
Korea	62	United States	66

Table II.28. **List of "MPS commodities" by country**

Australia	Wheat, Barley, Oats, Sorghum, Rice, Soyabean, Rapeseed, Sunflower, Sugar, Milk, Beef and Veal, Sheepmeat, Wool, Pigmeat, Poultry, Eggs, **Cotton**
Canada	Wheat, Maize, Barley, Rice, Soyabean, Rapeseed, Milk, Beef and Veal, Pigmeat, Poultry, Eggs
Czech Republic	Wheat, Maize, Barley, Rapeseed, Sugar, Milk, Beef and Veal, Pigmeat, Poultry, Eggs
European Union	Common Wheat, Durum Wheat, Maize, Barley, Oats, Rice, Soyabean, Rapeseed, Sunflower, Sugar, Milk, Beef and Veal, Sheepmeat, Pigmeat, Poultry, Eggs
Hungary	Wheat, Maize, Barley, Sunflower, Sugar, Milk, Beef and Veal, Sheepmeat, Pigmeat, Poultry, Eggs
Iceland	Milk, Beef and Veal, Sheepmeat, Pigmeat, Poultry, Eggs
Japan	Wheat, Barley, Rice, Soyabean, Sugar, Milk, Beef and Veal, Pigmeat, Poultry, Eggs
Korea	Barley, Rice, Soyabean, Milk, Beef and Veal, Pigmeat, Poultry, Eggs, **Red pepper, Garlic**
Mexico	Wheat, Maize, Barley, Sorghum, Rice, Soyabean, Sugar, Milk, Beef and Veal, Pigmeat, Poultry, Eggs, **Tomatoes, Beans, Coffee**
New Zealand	Wheat, Maize, Barley, Oats, Milk, Beef and Veal, Sheepmeat, Wool, Pigmeat, Poultry, Eggs
Norway	Wheat, Barley, Oats, Milk, Beef and Veal, Sheepmeat, Wool, Pigmeat, Poultry, Eggs
Poland	Wheat, Maize, Barley, Oats, Rapeseed, Sugar, Milk, Beef and Veal, Sheepmeat, Pigmeat, Poultry, Eggs
Slovakia	Wheat, Maize, Barley, Oats, Rye, Sunflower, Rapeseed, Sugar, Milk, Beef and Veal, Pigmeat, Poultry, Eggs
Switzerland	Wheat, Maize, Barley, Oats, Rapeseed, Sugar, Milk, Beef and Veal, Sheepmeat, Pigmeat, Poultry, Eggs
Turkey	Wheat, Maize, Barley, Sunflower, Sugar, Milk, Beef and Veal, Sheepmeat, Poultry, Eggs, **Potatoes, Tomatoes, Tobacco, Grapes, Apples, Cotton**
United States	Wheat, Maize, Barley, Sorghum, Rice, Soyabean, Sugar, Milk, Beef and Veal, Sheepmeat, Wool, Pigmeat, Poultry, Eggs

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 and affects, to some extent, commodity production or consumption. This is the case for transfers in the PSE and CSE, but not for transfers in the GSSE and the TSE. 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 relating to 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. Some of these transfers influence overall farming receipts across many or all commodities and have to be allocated across commodities. Such allocations are made on a case-by-

case basis according to the specific implementation criteria of the policy measure in question. In general, the allocation coefficients are the shares of each commodity in the total value, area, or animal number of all relevant commodities.

Market price support, *Payments based on output* and *Payments based on planted area or 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 particular livestock or crops, and by farm.

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. However, by increasing overall farm receipts, they also influence farmers' decisions to stay in the sector. As most of the programmes in this category are, in practice, region-specific in their basic conditions or implementation requirements, they are, as far as possible, allocated to the relevant commodities.

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, for more than any other group of payments in the PSE by commodity, 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 relating to 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.

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 of the value of total gross farm receipts,[34] measured by the value of total production (at farm-gate prices), plus budgetary support – the **percentage PSE**; or a ratio between the value of total gross farm receipts including support, and production valued at world market prices without support – the **producer NAC** (Nominal Assistance Coefficient).

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

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

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

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

Where,

PP = Payments to producers = PSE – *Market Price Support* = Σ I.B *to* I.H (see Box II.5)

Q•Pp = value of production at producer prices (not including output payments)

Q•Pb = value of production at border prices

For example, a %PSE of 60%, 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% of gross farm receipts is derived from the market without any support [equation (2)]. The value of gross farm receipts is two and a half times (or 150% higher than) what they would be if entirely obtained at world prices without any budgetary support [equation (3)] – a producer NAC of 2.50.

When the producer NAC is equal to one, this means that gross farm receipts are entirely derived from the market without any support. Therefore, the higher the producer NAC, the lower (greater) the share of gross farm receipts derived from the market (support). This can be seen as an indicator of ***market orientation***, *i.e.* the degree of influence of market signals (relative to those from government intervention) on the orientation of agricultural production.

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

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

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

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

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

Where,

TC = taxpayer transfers to consumers = III.R. T*ransfers to consumers from taxpayers* (Box II.3)

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

Qc•Pb = value of consumption at border prices

For example, a %CSE of –60% indicates that 60% of total consumption expenditure on agricultural commodities represents a transfer from consumers to producers or the share of the consumption expenditure created by policies [equation (4)]. A consumer NAC of 2.50 indicates that expenditure by primary consumers is two-and-a-half times, or 150%, higher than it would have been if it had been conducted entirely at world market prices without any budgetary support to consumers [equation (6)].

When the consumer NAC is equal to one, this means that total consumer expenditure on agricultural commodities is at market prices, without any support to producers and consumers. Therefore, the higher the consumer NAC, the less (more) the share of consumer expenditure reflects the market. The NAC can be seen as an indicator of ***market orientation***, *i.e.* the degree of influence of market signals (relative to those from government intervention) on the orientation of consumption of agricultural commodities.

Producer/Consumer Nominal Protection Coefficient (NPC)

The **producer NPC** measures the ratio between the average price received by producers (at farm gate), including payments based on output (PO/tonne), and the border price (at the farm gate). In algebraic form this can be expressed as follows:

$$NPCp = (Pp + PO/tonne)/Pb = [(Pp - Pb) + PO/tonne]/Pb + 1 \quad (7)$$

For example, an NPCp of 2 shows that the price received by farmers is twice the border price. The **producer NPC** can be seen, therefore, as an estimate of the ***nominal rate of market protection*** for producers, or the rate of the implicit export subsidy necessary to export any quantity produced.

The **consumer NPC** measures the ratio between the domestic price paid by consumer (at the farm gate) and the border price (at the farm gate). In algebraic form this can be expressed as follows:

$$NPCc = (Pd/Pb) = (Pp - Pb)/Pb + 1 \quad (8)$$

For example, an NPCc of 2 shows that the price paid by consumers is twice the border price. The **consumer NPC** can be seen, therefore, as an estimate of the ***nominal rate of market protection*** for consumers, or the average rate of the implicit import tax applied in the domestic market.

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.[35] Moreover, as percentage indicators take account of the effect of inflation on both the numerator and the denominator, this effect is eliminated. As a result, percentage indicators are more representative and more 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 includes transfers from taxpayers (which are a component of the total current government expenditure) and transfers from consumers (which are a component of the total domestic consumption expenditure). 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.

Main indicators: general interpretation

Highlighting the use of some other well-known economic indicators in policy analysis may assist a better understanding of the general interpretation given to the PSE and related indicators in evaluating agricultural policy developments. For example, while the annual variation in gross domestic product (GDP) gives an indication of a country's economic performance, by itself, it does not show the causes and consequences of the economic situation. Other related indicators, such as the rates of inflation and of economic growth help in understanding the economy better, although each of these related indicators measures a particular trend in the economy. Thus, it is the joint analysis of all these indicators combined that allows a comprehensive evaluation of the economic situation of the country.

Like the PSE and CSE, the GDP price index measures inflation in a production perspective, while the CPI measures inflation in a consumption perspective. The analysis of the components of the GDP price index, and those of the CPI, can help to identify distortions in production and consumption and the need to adjust certain policies. The analysis of the effects of factors, such as the effects of exchange rates on the rate of inflation, may help to evaluate policies. The analysis is not concerned, however, with eliminating the effects of exchanges rate variations on the inflation indicators to make them more appropriate for policy analysis. On the contrary, this would result in the loss of a major source of information needed for assessing the effects of inflation.

Do these indicators help to assess the need for, and progress in, policy reform?

While, with a low rate of inflation, there is a continuing need to manage the economy to keep inflation and associated distortions low, a high rate of inflation indicates the need to find ways to reduce inflation and associated distortions. In this sense, the inflation rate can be seen as an indicator of the need for policy reform. The annual variation in inflation does not necessarily measure progress in reform. However, after a period of policy reform, a sustained and significant reduction in the average rate of inflation could indicate the progress in reform. The same could not be said if the average inflation rate remains unchanged or higher. Any judgement on the effects of inflation changes on production, consumption and wealth of the country needs the use of other economic indicators and tools.

The PSE/CSE and related indicators provide measures of the level of support, and the degree of protection and market orientation. Together with the analysis of their components, these help to identify the associated production, consumption and trade effects (or distortions). The joint analysis of these indicators provides an assessment of the need for, and progress in, policy reform. Although these

indicators do not measure, by themselves, the levels of the associated effects or distortions, they provide the necessary data and information for the quantification of such effects. The calculation of the "subsidy element or equivalent" of each policy measure is achieved through the use of other economic tools, such as those used for establishing the OECD Policy Evaluation Matrix (see evaluation method in Chapter B).

Finally, it is sometimes argued that the PSE/CSE, and particularly the MPS, concepts and their interpretation should be adjusted for developing countries or for countries in the process transition towards a market economy. Among the reasons proposed for this are the high rates of inflation and exchange rate volatility, as well as the poor quality of data used for calculating the indicators. The same arguments could be applied to the inflation and economic growth indicators, which are linked far more closely to price developments and are far more data-intensive. As the quality of the policy analysis increases with the quality of data, the objective should be to improve the quality of the data rather than to adjust the inflation or support concepts for these countries.

Method of policy evaluation

Since 1987, the PSE and related indicators have been used as the principal tools to monitor and evaluate agricultural policy developments in the light of the policy reform principles. The PSE and related indicators are estimates of the costs (monetary transfers) for consumers and taxpayers of support arising from agricultural policies, but do not themselves quantify the impacts of policy measures on such variables as production, consumption, trade, farm income or the environment. Those impacts depend on the ***level of support***, the ***nature of support*** in terms of the way policy measures are implemented, and the ***responsiveness*** of those variables to changes in support. Moreover, policy measures are rarely applied in isolation and their impacts depend also on the policy mix or ***composition of support***. The production and trade distortions associated with agricultural support are also the result of different ***rates of support*** among agricultural commodities and between commodity and non-commodity based support. Finally, the extent of such impacts and distortions may be limited through constraints imposed on production, on factors of production or on farming methods and technologies, which are also important to identify. The quantification of these impacts (distortions) requires economic models such as the ***Policy Evaluation Matrix*** (PEM) developed by OECD.

Although PSE and related indicators do not quantify the impacts or distortions of policies, they provide the information necessary for such quantification and can illustrate in qualitative terms the relative impacts of policies on production, consumption and trade. To contribute to a better evaluation of these impacts, the policy measures included in the PSE and TSE are grouped according to the conditions under which the associated transfers are provided.

Moreover, the classification of policy measures included in the PSE is based on two key assumptions, all other things being equal. First, policies within a given category have the same eligibility criteria, with the same potential impacts on production, consumption and trade. Second, the relative importance of the potential impacts of a policy measure(s) on production, consumption and trade depend primarily on the degree to which the measure(s) is linked to a specific commodity or input necessary to produce the commodity. This information allows the ranking of the categories of measures according to their relative potential impacts on production, consumption and trade (Box II.8).

Although transfers in the GSSE have in general the same objectives of the transfers in the PSE, they are implemented differently. The GSSE transfers are collectively provided to the sector as a whole, while the PSE/CSE transfers are provided to individual farmers/consumers. Contrary to the PSE transfers, GSSE transfers do not depend on any individual framers' decisions or actions to produce goods or services, or use factors of production, and do not affect farm receipts directly. Therefore, all other things equal, although GSSE transfers can in the long run contribute to improve or expand the sectoral production capacity of the country, their production and trade impacts are lower than those associated with PSE transfers.

Box II.8. **Relative impacts of policy measures on production and trade**

The impacts of a policy measure on production and trade of a commodity depend on both, the degree to which extra resources are attracted to produce that commodity and the degree it affects consumption of the commodity. In general, the more a policy measure provides specific support to a commodity, the greater the impacts on production and trade of that commodity, although restrictions or constraints on providing support may limit these impacts. All other things being equal, the main categories of PSE measures can be ranked* according to their relative impacts on production and trade as follows:

Market Price Support (MPS) is by definition commodity specific. Support is provided through the higher price received by producers and paid by consumers for the commodity in the domestic market compared with the border price. The more the commodity is produced, the higher will be the total support paid. MPS is the only form of support that simultaneously affects production and consumption of a commodity and as such has the greatest impacts on production, consumption and trade.

Payments based on output are financed from government budgets and raise the price received by producers, thus have the same impact on current production as MPS, but with no impact on consumption. Thus they have a smaller impact on trade than MPS. This is why a USD1 of MPS and a USD1 payment per tonne have the same effect on production and on the Nominal Protection Coefficient (NPC) for producers, but not on consumption and on the NPC for consumers.

Payments based on use of inputs are budget financed and reduce the cost of inputs used by producers. An input payment may have a higher, the same, or a lower effect on production and trade than an output payment depending on the type of input. The more the payment is specific to a variable input necessary to obtain a given commodity the greater the incentive for production intensification and the impacts on production and trade of the commodity. With limited resources the production impacts of payments based on *fixed* inputs are potentially lower than those based on *variable* inputs, because of the mobility of the latter.

Payments based on area planted/animal numbers are budget financed and based on current plantings or animal numbers. Although producers have to plant specific crops or own specific animals, they are not encouraged to produce as intensively or sell the commodity, as they are with the others forms of support outlined above. Therefore the production and trade impacts are lower than the previous forms of support.

Payments based on historical entitlements (*i.e.* past support, area, animal numbers, production, or income associated with specific commodities) are budget financed but based on historical parameters. As producers are not obliged to plant, own animals, or produce any particular commodities in order to receive the payments, their impacts are lower than the previous forms of support.

Payments based on input constraints are budget financed and paid on the condition that farmers respect certain constraints (reduction, replacement or withdrawal) on the use of inputs, including changing farm practices (for example for environmental purposes). These payments may be targeted to specific situations and reduce production or have impacts on production and trade lower than the previous forms of support, depending on the type of constraint.

Payments based on overall farming income are budget financed and are paid on the condition that the overall farm income is below a pre-defined level. These payments can be targeted to the situation of specific farmers, and although they have the potential to retain resources in the sector and thus the capacity to produce, their production and trade impacts are the least compared with other forms of support to producers.

* This ranking is consistent with the results of the work on A *matrix approach to evaluating policy: preliminary findings from* PEM *pilot studies of crops policy in the* EU, *the* US, *Canada and Mexico*, OECD 2000 and on *Decoupling: a conceptual overview*, OECD 2001

"Market protection" and "market orientation"

A key reform principle is to reduce market protection and improve market orientation through policy measures that result in lower support delivered in less distorting ways. Market protection measures the degree to which domestic markets are insulated from world markets. Market orientation is a more comprehensive concept and refers to the degree to which the signals guiding production,

consumption and trade come from the market (relative to those from policy intervention). Market protection is measured by the prices received by farmers and those paid by consumers at farm gate in relation to world (border) prices. Market orientation is associated not only with such "price gaps", but also with other forms of government intervention influencing production and consumption decisions and therefore the levels of production, consumption and trade of agricultural commodities.

If a country produces a commodity that is entirely bought by a government agency, which fixes the quantities to be produced and the purchase prices, and forbids any import or export, but there is no other form of government intervention, then this is an example of a fully protected market with no market orientation. On the other hand, if a country produces the same commodity, but where the quantities to be produced, consumed and traded are entirely the result of market prices free of any government intervention, then this is an example of a non-protected market with full market-orientation. This latter example can be seen as an extreme situation where there is no specific policy for taking into account any market imperfection or failure that may reduce welfare. To improve welfare it can be appropriate to have policies, but beyond the well-founded goals of any policy, its efficiency depends on its effects on production consumption and trade of agricultural commodities. Such effects depend on the way policies are implemented, which is the criterion used to group transfers under the PSE/CSE and the GSSE, and the basis for any evaluation of the policies.

Therefore, the above extreme examples define the upper and lower degrees of market protection and market orientation within which any other policy package may be situated. The degree of market protection may be estimated through the ***nominal rate of protection***, as measured by the NPC, while the degree of market orientation may be expressed through the ***nominal rate of assistance***, as measured by the NAC. The higher the rates of (explicit or implicit) export subsidies or import duties, the greater the NPC and the producer or market protection. And the higher the share of farm receipts resulting from government intervention, the more the producer NAC is above one and the lower the degree of market orientation.

The combination of these two indicators deepens the evaluation based on the level of support as measured by the PSE, GSSE and TSE. All other things being equal, the higher the market protection (and the NPC) the greater the impacts on production and trade. With the same level of market protection, the lower the degree of market orientation (the higher the NAC) the greater are those impacts. In summary, there is no single indicator to evaluate a policy change. The PSE/CSE, NPC, NAC, GSSE and TSE are interrelated indicators of the main elements that determine the impacts of policies on production, consumption and trade, which can be used in any quantitative or qualitative evaluation of policies.

H*ow are support indicators used to evaluate policy changes*?

The **TSE** in percentage measures the share of total support to agriculture in the GDP of a country, or the share of the country's wealth used to support agriculture. Although the percentage TSE is influenced by the size of agriculture in the economy, the higher it is the higher the cost of agricultural policy to the economy. The **GSSE** in percentage measures the share of transfers to general services provided to agriculture in the total support to agriculture (TSE), and therefore gives a measure of the relative importance of PSE and GSSE transfers in each country. All other things equal, the lower the percentage GSSE, the greater the share of PSE transfers in the total support to agriculture and the associated impacts on production and trade. In other words, all other things being equal, to pursue a given policy objective through transfers to individual producers has potentially greater production and trade effects than through transfers to general services provided to agriculture.

The **PSE/CSE** and the producer/consumer **NPC** and **NAC** provide the specific information that is used to evaluate changes in agricultural policies that have the most direct impacts on production/consumption decisions and therefore on trade of agricultural commodities. On the basis of these indicators, the following guidelines are used to evaluate policy changes in relation to the principles and actions agreed by OECD Ministers for agricultural policy reform:

- A lasting reduction in the rate of support (% PSE) with no change in the policy composition is a step in the direction of policy reform – lower costs for consumers (%CSE) and/or taxpayers and potentially less production and trade distorting;
- No change in the rate of support (% PSE) with a change in the policy composition to a smaller share of MPS and payments based on output is a step in the direction of policy reform – lower costs for consumers (%CSE) although more costly for taxpayers, but reduction in the most production and trade distorting measures (lower NPC), thus potentially less production and trade distorting;
- An increase in the rate of support (% PSE) with no change in the policy composition is a move away from policy reform – higher costs for taxpayers and/or consumers (%CSE) and more production and trade distorting, especially if the producer/consumer NPC also increases;
- An increase in the rate of support (% PSE) with a change in the policy composition to a smaller share of MPS and payments based on output is ambiguous – higher costs for taxpayers, possibly higher costs for consumers (% CSE) depending on the rate of the PSE rise, with more or less production and trade distorting depending on the relative magnitudes of changes in the producer (consumer) NPC;
- A lasting decrease in the producer/consumer NPC is a step towards lower market protection – a closer alignment of domestic and world prices through a lower nominal rate of protection to producers/imports and implicit rate of export subsidy/import tax applied to export/import commodities, thus a reduction in the most production/consumption and trade distorting measures;
- A lasting decrease in the producer/consumer NAC is a step towards greater market orientation – higher share of farm receipts generated in the market at unsupported prices, thus and lower government intervention and risk of production/consumption distortions.

The country averages of the above indicators may in some cases hide a wide variation across commodities. In some countries, price support – through MPS or payments per tonne – exists for many commodities, while in others it only exists for a few. Therefore, it is important to complement the evaluation with a reference to the number of commodities eligible to receive price support and the range of each of the above indicators across commodities. As the OECD Ministers agreed to initiate the reform in 1987, it is appropriate to monitor and evaluate the progress in reform relative to the 1986-1988 average. Although the main objective of is to monitor and evaluate policy developments in the year under review, the evaluation should also assess the contribution of the annual policy developments to the long-term trend on the main indicators.

Decomposition of PSE and CSE annual variations

The purpose of decomposing the annual variations of total PSEs and CSEs is to facilitate the evaluation of year-to-year changes. 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 and 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*. U*nit 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, except 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* and to what extent. The presentation and interpretation of the CSE decomposition is similar to that of the PSE tree.

The derivation of the tree is 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.[36] Aggregation across countries (and commodities) is done by weighting these country (and commodity) indices for each individual PSE and CSE component. Weighted Fisher ideal indices are calculated from weighted Laspeyres and Paasche indices.[37] 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 (BP) is used for the BP 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:

$$\Delta PSE = \Delta PSeu + \Delta Q + \Delta PSeu \bullet \Delta Q \quad (9)$$

$$\Delta PSeu = Smps \bullet \Delta MPSu + Sbp \bullet \Delta Bpu \quad (10)$$

$$\Delta BPu = Spo \bullet \Delta Pou + Spn \bullet \Delta Pnu + Sph \bullet \Delta PHu + Spiu \bullet \Delta PIuu + Spic \bullet \Delta PIcu + Spfi \bullet \Delta PFiu + Spm \bullet DPmu \quad (11)$$

$$\Delta MPsu = (Spd \bullet \Delta Pd - Spwnc \bullet \Delta Pwnc - Sefc \bullet \Delta EFC)/Smps \quad (12)$$

$$\Delta Pwnc = \Delta XR + \Delta \$Pw + \Delta XR \bullet \Delta \$Pw \quad (13)$$

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);

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

P*nu* are unit budgetary payments based on area or numbers (per tonne);

P*hu* are unit budgetary payments based on historical entitlements (per tonne);

PI*uu* are unit budgetary payments based on input use (per tonne);

PI*cu* are unit budgetary payments based on input constraints (per tonne);

PF*iu* are unit budgetary payments based on overall farming income (per tonne);

P*mu* 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 USD;

$P*w* is the implicit border price in US dollars; it is calculated as the difference between domestic prices and unit market price support.[38]

Equations (10) and (11) 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 transfers per full-time farmer equivalents* (FFE). The FFE numbers are standardised to the European Union Annual Work Unit definition of 2 200 hours of working time in agriculture per year. For most countries, the FFE data is taken directly from national data. It should be noted, however, that for methodological reasons FFE numbers could not be calculated for Canada and Turkey. Where data for 2000, or for earlier years, were not available, they were estimated by the OECD Secretariat.

In the calculation of the PSE *per hectare of agricultural lan*d, the agricultural land area in each country has been measured as the sum of the area of arable land, land under permanent crops and permanent meadows and pastures (from FAO data). Where data for 2000, or for earlier years, were not available, they were estimated by the OECD Secretariat.

Notes

1. The Commonwealth Government is the national, or federal, government of Australia.
2. Statutory pricing arrangements were in place during the first half of the year 2000 and dairy farmers received structural adjustment assistance during the second half.
3. Established in 1992.
4. Before that date the minimum prices for milk to farms were to be paid only by dairies applying for export subsidies.
5. The compensations are paid by the owners of water supply basins.
6. The Czech Export Bank (CEB) and the Export Guarantee and Insurance Company (EGAP) are the two main state owned institution providing support to exports in all branches of the economy. Up to 1999 no support to agricultural exports was provided through these institutions.
7. Apart payments per hectare of agricultural land in National Parks and Protected Landscape Areas.
8. The Products Councils group agents in the commodity chain, *i.e.* farmers representatives and processors. The Council is consulted by the OAMR in the process of setting the guidance and intervention prices, and other key decisions concerning market regulation. The Products Councils use their own Funds to intervene on markets to support prices and the OAMR starts to intervene only when the Council Funds have been used up. To finance the Council' Fund the members of the Council pay a fee for each unit of the commodity sold (*e.g.* in case of grains it is 0.05% of the receipts).
9. For pigmeat the quality payments were discontinued during 2000.
10. Market Price Support was originally calculated for a set of common commodities representing about 60% of the total value of production and extrapolated to the total value of production. To reduce the potential error associated with this technique the list of commodities for which MPS is calculated was extended and now cover about 70% of the total value of production. As the average MPS for the added commodities is lower than the average for the common commodities, the PSE results in this report are each year lower than the results in the previous editions of this report. For more detail see the Electronic Data Product, OECD PSE/CSE Database, 2000.
11. In addition to credit subsidies for farmers, the figures include interest rate subsidies for the food industry and expenditure on rural job-creation programmes. The figures will be revised as disaggregated data become available.
12. Market Price Support had been calculated for a set of common commodities representing about 40% of the total value of production and extrapolated to the total value of production. To reduce the potential error associated with this technique the list of commodities for which MPS is calculated was extended and now covers about two thirds of the total value of production. As the average MPS for the added commodities is lower than the average for the common commodities, the PSE results in this report are each year lower than the results in the previous editions of this report. For more detail see the Electronic Data Product, OECD PSE/CSE Database, 2000.
13. The share of TSE in GDP decreased from 6.5% in 1999 to 3.5% in 2000 mainly due to an increase of over 60% in the GDP as the TSE decreased by 13%.
14. OECD, OECD Council at Ministerial Level, Paris 26-27 June 2000, Communiqué, "News Release" 27 May 2000, *www.oecd.org/media/release/nw00-70a.htm*.
15. Paragraph 15 of this Communiqué contains the full text of Article 20 of the URAA.
16. OECD, "Communiqué" PRESS/A(87)27, Paris, 13 May 1987.
17. OECD, *National Policies and Agricultural Trade*, Paris, 1987.
18. See paragraph 16 of the Communiqué cited in note 5 above.
19. Prior to 1999, these indicators were referred to as the Producer Subsidy Equivalent (PSE) and the Consumer Subsidy Equivalent (CSE), respectively. The method of calculation was changed at that time; see the 1999 edition of the report.

20. 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. These costs are not deducted from the amount of the payment, although they may absorb part of the payment.
21. Farm receipts (revenues) are not the same as farm income, which is farm receipts less farm costs.
22. Transfers from taxpayers occur, for example, when subsidies are used to finance exports.
23. 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 that associated with being a farmer).
24. A payment ,which subsidies farm inputs on condition that 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.
25. Unlike most of the others, these payments increase farm income directly by the amount of the payment, as producers do not have to incur any specific cost (other than those necessary to generate an eligible level of farm income).
26. This also shows that a classification exclusively based on payments per tonne, per hectare or per animal would not classify such measures in a way helpful for policy analysis.
27. 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. M*iscellaneous payments*.
28. Border prices are world market prices: f.o.b. for exported commodities and c.i.f. for imported commodities.
29. Sometimes, part of the budgetary transfer is retained by industry or the service sector (*e.g.* banks) and not transferred to farmers. 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 quality and availability .
30. 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 water prices. That is another reason why the price gap calculation would, in many cases, be the most appropriate.
31. The CSE for crops is therefore calculated net of producer contributions or, in other 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.
32. An STE is seen as any private, co-operative or public entity with monopoly, or quasi-monopoly, powers over imports, exports or domestic purchases and sales of a given commodity.
33. Tables in Part III show, for each country, the list of commodities for which MPS is explicitly calculated, the amount of the MPS for these commodities and the shares of these commodities in the total value of agricultural production.
34. Gross farm receipts are not the same as farm income, which is farm receipts less farm costs.
35. 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 is the PSE) nor a part of the total value of consumption expenditure of agricultural commodities (as is the CSE).
36. 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.
37. 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):

$$L = \frac{\sum P_1 \times Q_0}{\sum P_0 \times Q_0}$$

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):

$$P = \frac{\sum P_1 \times Q_1}{\sum P_0 \times Q_1}$$

The Fisher ideal index F is the geometric average of the Laspeyres and Paasche indices:

$$F = \sqrt{L \bullet P} = \sqrt{\left(\frac{\sum P_1 \times Q_0}{\sum P_0 \times Q_0}\right) \bullet \left(\frac{\sum P_1 \times Q_1}{\sum P_0 \times Q_1}\right)}$$

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.

38. 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.

Part III

SUMMARY TABLES ON ESTIMATES OF SUPPORT TO AGRICULTURE

Table III.1. **OECD: Estimates of support to agriculture**
(USD million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	559 152	651 004	668 305	653 148	631 558
of which share of MPS commodities (%)	67	63	63	63	62
Total value of consumption (at farm gate)	528 482	597 978	605 437	600 153	588 344
Producer Support Estimate (PSE)	236 445	257 567	253 661	273 552	245 487
Market price support	182 430	170 202	170 147	182 087	158 372
of which MPS commodities	122 394	107 250	107 703	115 406	98 763
Payments based on output	12 021	15 609	12 081	17 695	17 051
Payments based on area planted/animal numbers	15 646	29 262	30 622	29 392	27 773
Payments based on historical entitlements	515	12 557	10 579	13 508	13 582
Payments based on input use	20 136	21 273	21 789	22 386	19 643
Payments based on input constraints	3 065	6 299	6 453	6 282	6 161
Payments based on overall farming income	2 329	2 501	2 297	2 486	2 721
Miscellaneous payments	301	- 136	- 308	- 284	184
Percentage PSE	39	35	34	37	34
Producer NPC	1.61	1.46	1.44	1.51	1.43
Producer NAC	1.63	1.54	1.51	1.58	1.52
General Services Support Estimate (GSSE)	41 601	57 137	58 907	56 981	55 522
Research and development	3 951	5 206	5 608	5 209	4 800
Agricultural schools	696	1 429	1 440	1 434	1 414
Inspection services	1 097	1 695	1 697	1 674	1 714
Infrastructure	12 557	18 341	20 372	17 460	17 191
Marketing and promotion	13 418	23 374	23 045	23 969	23 108
Public stockholding	7 708	3 302	3 412	3 331	3 161
Miscellaneous	2 173	3 790	3 332	3 904	4 133
GSSE as a share of TSE (%)	13.9	16.8	17.4	16.0	17.0
Consumer Support Estimate (CSE)	- 166 892	- 158 430	- 156 485	- 171 719	- 147 085
Transfers to producers from consumers	- 184 863	- 168 397	- 168 719	- 181 834	- 154 638
Other transfers from consumers	- 14 292	- 19 399	- 18 916	- 19 731	- 19 551
Transfers to consumers from taxpayers	20 434	25 841	26 498	25 394	25 630
Excess feed cost	11 829	3 526	4 653	4 452	1 473
Percentage CSE	-33	-28	-27	-30	-26
Consumer NPC	1.61	1.46	1.45	1.51	1.42
Consumer NAC	1.49	1.38	1.37	1.43	1.35
Total Support Estimate (TSE)	298 480	340 544	339 065	355 927	326 640
Transfers from consumers	199 155	187 797	187 635	201 565	174 189
Transfers from taxpayers	113 617	172 147	170 346	174 093	172 002
Budget revenues	- 14 292	- 19 399	- 18 916	- 19 731	- 19 551
Percentage TSE (expressed as share of GDP)	2.2	1.3	1.4	1.4	1.3

Notes: See Part II.4 for detailed explanations. p: provisional. MPS commodities: See notes to country tables. MPS is net of producer levies and excess feed costs. TSE as a share of GDP for 1986-88 for the OECD excludes the Czech Republic, Hungary and Poland as GDP data is not available for this period. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.

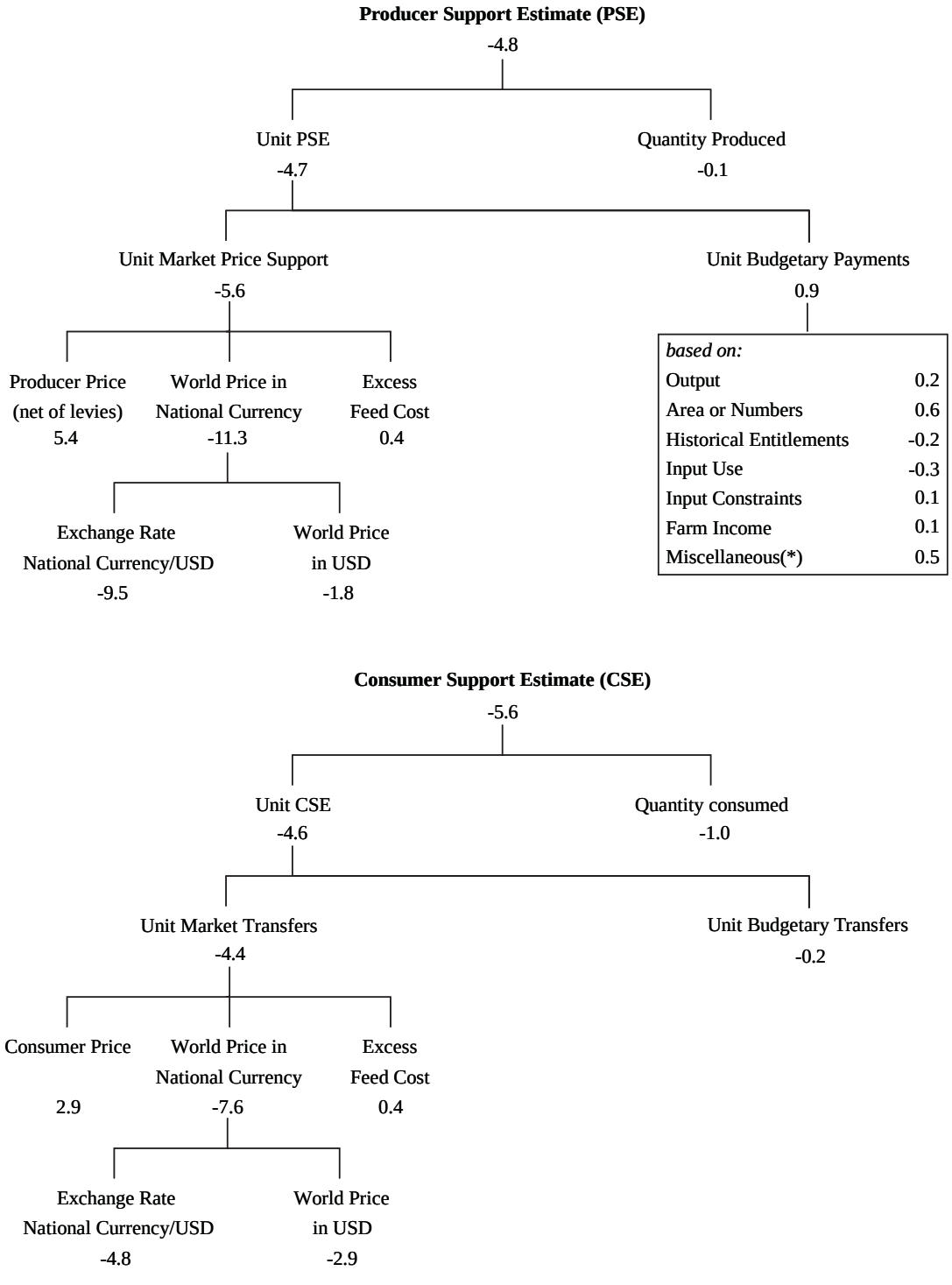
Source: OECD, PSE/CSE database 2001.

Table III.2. **OECD: Estimates of support to agriculture**
(Euro million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	506 551	631 952	597 546	613 005	685 306
of which share of MPS commodities (%)	67	63	63	63	62
Total value of consumption (at farm gate)	478 136	581 005	541 335	563 267	638 414
Producer Support Estimate (PSE)	214 848	249 974	226 804	256 739	266 379
Market price support	165 671	164 959	152 132	170 896	171 850
of which MPS commodities	111 151	103 947	96 299	108 313	107 168
Payments based on output	10 974	15 304	10 802	16 608	18 502
Payments based on area planted/animal numbers	14 245	28 367	27 380	27 585	30 136
Payments based on historical entitlements	489	12 292	9 459	12 678	14 738
Payments based on input use	18 250	20 602	19 482	21 010	21 315
Payments based on input constraints	2 784	6 117	5 770	5 896	6 686
Payments based on overall farming income	2 148	2 446	2 054	2 333	2 952
Miscellaneous payments	286	-114	-276	-267	199
Percentage PSE	39	35	34	37	34
Producer NPC	1.61	1.46	1.44	1.51	1.43
Producer NAC	1.63	1.54	1.51	1.58	1.52
General Services Support Estimate (GSSE)	37 793	55 465	52 670	53 479	60 248
Research and development	3 576	5 038	5 014	4 889	5 209
Agricultural schools	631	1 389	1 287	1 345	1 535
Inspection services	994	1 649	1 517	1 571	1 860
Infrastructure	11 457	17 752	18 215	16 387	18 654
Marketing and promotion	12 167	22 725	20 605	22 496	25 075
Public stockholding	7 003	3 203	3 051	3 127	3 430
Miscellaneous	1 964	3 709	2 979	3 664	4 485
GSSE as a share of TSE (%)	n.c.	n.c.	17	16	17
Consumer Support Estimate (CSE)	-151 434	-153 561	-139 916	-161 165	-159 603
Transfers to producers from consumers	-167 937	-163 104	-150 856	-170 658	-167 798
Other transfers from consumers	-12 886	-18 882	-16 913	-18 518	-21 215
Transfers to consumers from taxpayers	18 574	25 112	23 693	23 833	27 812
Excess feed cost	10 815	3 312	4 160	4 178	1 599
Percentage CSE	-33	-28	-27	-30	-26
Consumer NPC	1.61	1.46	1.45	1.51	1.42
Consumer NAC	1.49	1.38	1.37	1.43	1.35
Total Support Estimate (TSE)	271 215	330 552	303 166	334 051	354 438
Transfers from consumers	180 823	181 986	167 769	189 177	189 014
Transfers from taxpayers	103 278	167 447	152 310	163 393	186 640
Budget revenues	-12 886	-18 882	-16 913	-18 518	-21 215
Percentage TSE (expressed as share of GDP)	2.2	1.3	1.4	1.4	1.3

Notes: See Part II.4 for detailed explanations. p: provisional. MPS commodities: See notes to country tables. MPS is net of producer levies and excess feed costs. TSE as a share of GDP for 1986-88 for the OECD excludes the Czech Republic, Hungary and Poland as GDP data is not available for this period. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Figure III.1. **OECD: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -5.6 percentage points to the -4.8 per cent change in PSE.
See Part II.4. for detailed explanations. (*) Miscellaneous was negative in the first period, and positive in the second period.

Table III.3. **OECD: Producer Support Estimate by country**

		1986-88	1998-2000	1998	1999	2000p
Australia	USD mn	1 255	1 143	1 284	1 096	1 049
	Euro mn	1 153	1 105	1 148	1 029	1 138
	Percentage PSE	9	6	7	5	6
	Producer NPC	1.05	1.03	1.04	1.02	1.02
	Producer NAC	1.10	1.06	1.07	1.06	1.06
Canada	USD mn	5 628	3 782	3 447	3 600	4 299
	Euro mn	5 146	3 709	3 082	3 379	4 665
	Percentage PSE	33	18	17	17	19
	Producer NPC	1.42	1.15	1.15	1.15	1.16
	Producer NAC	1.51	1.22	1.20	1.21	1.24
Czech Republic	USD mn	4 562	707	838	726	556
	Euro mn	4 183	678	749	682	603
	Percentage PSE	59	19	20	20	18
	Producer NPC	2.43	1.13	1.16	1.13	1.10
	Producer NAC	2.47	1.24	1.25	1.26	1.22
European Union	USD mn	94 640	105 032	110 274	114 593	90 229
	Euro mn	85 829	101 350	98 596	107 546	97 907
	Percentage PSE	44	40	39	43	38
	Producer NPC	1.85	1.45	1.44	1.55	1.37
	Producer NAC	1.79	1.67	1.64	1.75	1.62
Hungary	USD mn	3 029	1 011	1 032	1 145	855
	Euro mn	2 779	975	923	1 075	928
	Percentage PSE	39	20	19	23	18
	Producer NPC	1.52	1.15	1.11	1.19	1.14
	Producer NAC	1.66	1.25	1.23	1.30	1.22
Iceland	USD mn	194	154	160	160	142
	Euro mn	175	149	143	151	154
	Percentage PSE	75	66	67	67	63
	Producer NPC	3.91	2.74	2.83	2.87	2.53
	Producer NAC	3.93	2.93	3.04	3.05	2.72
Japan	USD mn	53 354	55 498	50 095	56 514	59 886
	Euro mn	48 343	54 270	44 790	53 039	64 982
	Percentage PSE	67	63	62	64	64
	Producer NPC	2.87	2.87	2.73	2.91	2.97
	Producer NAC	3.00	2.72	2.61	2.78	2.78
Korea	USD mn	12 218	17 324	12 501	18 790	20 680
	Euro mn	10 970	17 084	11 177	17 634	22 440
	Percentage PSE	71	66	57	69	73
	Producer NPC	3.19	2.89	2.24	2.95	3.47
	Producer NAC	3.49	3.05	2.33	3.18	3.64
Mexico	USD mn	- 160	4 833	4 045	4 319	6 136
	Euro mn	- 138	4 776	3 616	4 053	6 658
	Percentage PSE	-1	16	14	15	18
	Producer NPC	0.98	1.26	1.20	1.24	1.33
	Producer NAC	0.99	1.19	1.16	1.17	1.23
New Zealand	USD mn	449	65	70	84	43
	Euro mn	428	74	63	79	80
	Percentage PSE	11	1	1	1	1
	Producer NPC	1.02	1.00	1.01	1.01	1.00
	Producer NAC	1.13	1.01	1.01	1.01	1.00

Table III.3. **OECD: Producer Support Estimate by country (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Norway	USD mn	2 630	2 447	2 639	2 494	2 208
	Euro mn	2 379	2 366	2 360	2 340	2 396
	Percentage PSE	66	66	67	67	66
	Producer NPC	3.60	2.83	2.93	3.02	2.53
	Producer NAC	2.96	2.98	3.00	3.03	2.91
Poland	USD mn	1 549	2 833	3 394	2 872	2 233
	Euro mn	1 379	2 718	3 034	2 696	2 423
	Percentage PSE	12	21	21	21	20
	Producer NPC	1.19	1.26	1.27	1.25	1.25
	Producer NAC	1.15	1.26	1.26	1.27	1.25
Switzerland	USD mn	5 063	4 747	5 010	4 787	4 444
	Euro mn	4 574	4 598	4 480	4 493	4 822
	Percentage PSE	73	71	70	72	71
	Producer NPC	3.86	3.06	3.06	3.19	2.93
	Producer NAC	3.66	3.45	3.28	3.58	3.49
Turkey	USD mn	2 670	7 128	9 955	7 636	3 791
	Euro mn	2 428	6 727	8 901	7 167	4 114
	Percentage PSE	14	20	25	23	13
	Producer NPC	1.22	1.72	1.81	1.78	1.56
	Producer NAC	1.16	1.26	1.34	1.30	1.15
United States	USD mn	41 859	50 884	48 935	54 762	48 957
	Euro mn	38 430	49 423	43 753	51 394	53 123
	Percentage PSE	25	23	23	25	22
	Producer NPC	1.22	1.19	1.19	1.21	1.17
	Producer NAC	1.34	1.30	1.29	1.33	1.28
OECD	USD mn	236 445	257 567	253 661	273 552	245 487
	Euro mn	214 849	249 968	226 798	256 729	266 378
	Percentage PSE	39	35	34	37	34
	Producer NPC	1.61	1.46	1.44	1.51	1.43
	Producer NAC	1.63	1.54	1.51	1.58	1.52

Notes: See Part II.4 for detailed explanations. p: provisional. NPC: Nominal Protection Coefficient.
NAC: Nominal Assistance Coefficient. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990.
Austria, Finland, and Sweden are included in the OECD totals for all years and in the EU from 1995.
Source: OECD, PSE/CSE database 2001.

Table III.4. **OECD: Producer Support Estimate by commodity**

		1986-88	1998-2000	1998	1999	2000p
Wheat						
	USD mn	18 481	18 126	18 413	19 659	16 304
	Euro mn	16 859	17 535	16 463	18 450	17 692
	Percentage PSE	48	42	40	45	40
	Producer NPC	1.68	1.18	1.19	1.24	1.11
	Producer NAC	1.93	1.72	1.67	1.83	1.66
Maize						
	USD mn	12 666	12 400	10 880	12 960	13 359
	Euro mn	11 608	12 129	9 728	12 163	14 496
	Percentage PSE	40	32	29	34	34
	Producer NPC	1.31	1.15	1.11	1.17	1.15
	Producer NAC	1.68	1.47	1.40	1.51	1.51
Other grains						
	USD mn	10 986	9 568	11 166	10 033	7 505
	Euro mn	10 039	9 181	9 983	9 416	8 144
	Percentage PSE	51	48	53	51	41
	Producer NPC	1.96	1.30	1.41	1.35	1.12
	Producer NAC	2.11	1.95	2.11	2.03	1.69
Rice						
	USD mn	26 937	26 378	22 333	27 466	29 335
	Euro mn	24 481	25 859	19 968	25 777	31 831
	Percentage PSE	81	79	74	79	82
	Producer NPC	4.91	4.52	3.64	4.50	5.43
	Producer NAC	5.23	4.78	3.86	4.78	5.69
Oilseeds						
	USD mn	5 329	5 466	4 281	5 919	6 198
	Euro mn	4 825	5 369	3 828	5 555	6 725
	Percentage PSE	26	22	17	23	25
	Producer NPC	1.27	1.14	1.07	1.17	1.18
	Producer NAC	1.36	1.28	1.20	1.31	1.33
Sugar						
	USD mn	5 750	6 732	6 848	7 560	5 788
	Euro mn	5 233	6 499	6 123	7 095	6 280
	Percentage PSE	54	54	51	61	50
	Producer NPC	2.36	2.28	2.10	2.69	2.04
	Producer NAC	2.20	2.19	2.04	2.53	1.99
Milk						
	USD mn	45 869	44 967	50 443	45 333	39 125
	Euro mn	41 823	43 367	45 101	42 545	42 454
	Percentage PSE	58	52	56	52	48
	Producer NPC	2.68	2.02	2.21	2.00	1.85
	Producer NAC	2.38	2.08	2.26	2.07	1.92
Beef and Veal						
	USD mn	23 442	28 074	28 896	29 902	25 425
	Euro mn	21 385	27 162	25 836	28 063	27 589
	Percentage PSE	33	35	37	37	32
	Producer NPC	1.44	1.35	1.36	1.36	1.31
	Producer NAC	1.49	1.55	1.59	1.58	1.48
Sheepmeat						
	USD mn	4 708	4 222	4 443	4 733	3 489
	Euro mn	4 236	4 067	3 973	4 442	3 786
	Percentage PSE	55	44	45	47	40
	Producer NPC	1.87	1.22	1.26	1.26	1.13
	Producer NAC	2.23	1.79	1.83	1.89	1.67

Table III.4. **OECD: Producer Support Estimate by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Wool						
	USD mn	276	133	137	138	125
	Euro mn	251	129	122	130	135
	Percentage PSE	6	7	8	7	6
	Producer NPC	1.00	1.02	1.03	1.02	1.02
	Producer NAC	1.07	1.08	1.08	1.08	1.07
Pigmeat						
	USD mn	6 625	10 198	7 058	13 284	10 251
	Euro mn	5 895	9 967	6 310	12 467	11 124
	Percentage PSE	14	23	16	32	22
	Producer NPC	1.23	1.29	1.16	1.46	1.25
	Producer NAC	1.17	1.31	1.18	1.46	1.29
Poultry						
	USD mn	4 051	4 928	3 059	4 905	6 819
	Euro mn	3 595	4 913	2 735	4 603	7 399
	Percentage PSE	16	13	8	13	18
	Producer NPC	1.27	1.13	1.07	1.14	1.19
	Producer NAC	1.20	1.16	1.09	1.15	1.23
Eggs						
	USD mn	2 355	1 741	1 961	1 874	1 388
	Euro mn	2 130	1 673	1 753	1 759	1 506
	Percentage PSE	15	10	12	11	9
	Producer NPC	1.20	1.10	1.12	1.11	1.07
	Producer NAC	1.18	1.12	1.13	1.13	1.09
Other Commodities						
	USD mn	68 969	84 635	83 743	89 787	80 375
	Euro mn	62 489	82 118	74 875	84 265	87 215
	Percentage PSE	34	29	28	31	29
	Producer NPC	1.45	1.34	1.32	1.37	1.33
	Producer NAC	1.51	1.41	1.39	1.44	1.41
All commodities						
	USD mn	236 445	257 567	253 661	273 552	245 487
	Euro mn	214 849	249 968	226 798	256 729	266 378
	Percentage PSE	39	35	34	37	34
	Producer NPC	1.58	1.40	1.38	1.44	1.38
	Producer NAC	1.63	1.54	1.51	1.58	1.52

Notes: See Part II.4 for detailed explanations. p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE for "other commodities" is the residual of the PSE for all commodities minus the PSE for the commodities listed above. 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 2001.

Table III.5. **OECD: Producer Support Estimate per full-time farmer equivalent**

	1986-88	1998-2000	1998	1999	2000p
USD '000					
Australia	3	3	3	3	3
Canada	n.c.	n.c.	n.c.	n.c.	n.c.
Czech Republic	8	4	4	4	3
European Union	10	16	16	17	14
Hungary	3	4	4	4	3
Iceland	25	32	32	33	31
Japan	15	25	22	25	28
Korea	8	22	16	24	26
Mexico	n.c.	1	1	1	1
New Zealand	4	0	0	0	0
Norway	24	31	32	32	29
Poland	0	1	1	1	1
Switzerland	33	31	33	31	29
Turkey	n.c.	n.c.	n.c.	n.c.	n.c.
United States	16	21	20	22	20
OECD	10	11	10	11	10
Euro '000					
Australia	3	3	3	3	3
Canada	n.c.	n.c.	n.c.	n.c.	n.c.
Czech Republic	8	4	4	4	4
European Union	9	15	15	16	15
Hungary	3	4	3	4	4
Iceland	23	31	29	31	33
Japan	13	25	20	24	30
Korea	7	21	14	22	28
Mexico	n.c.	1	1	1	1
New Zealand	3	0	0	0	0
Norway	22	30	29	30	31
Poland	0	1	1	1	1
Switzerland	30	30	29	30	32
Turkey	n.c.	n.c.	n.c.	n.c.	n.c.
United States	15	20	18	21	21
OECD	9	10	9	11	11

Notes: See Part II.4 for detailed explanations. p: provisional. n.c.: not calculated. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. 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 Canada (1986-2000), Mexico (1986-88) and Turkey (1986-2000).
Source: OECD, PSE/CSE database 2001.

Table III.6. **OECD: Producer Support Estimate per hectare of agricultural land**

	1986-88	1998-2000	1998	1999	2000p
USD					
Australia	3	2	3	2	2
Canada	75	51	46	48	58
Czech Republic	1 055	165	196	170	130
European Union	703	762	798	832	655
Hungary	465	163	167	185	138
Iceland	102	81	84	84	74
Japan	9 997	11 378	10 213	11 614	12 307
Korea	5 484	8 820	6 337	9 579	10 543
Mexico	- 2	45	37	40	57
New Zealand	32	3	4	4	2
Norway	2 685	2 322	2 516	2 362	2 089
Poland	82	153	183	155	121
Switzerland	3 205	3 005	3 171	3 030	2 813
Turkey	68	178	248	190	94
United States	98	120	116	129	116
OECD	180	198	195	210	188
Euro					
Australia	2	2	2	2	2
Canada	69	50	41	45	63
Czech Republic	968	158	175	159	141
European Union	637	735	714	781	711
Hungary	427	158	149	174	150
Iceland	92	78	75	79	81
Japan	9 056	11 129	9 131	10 900	13 354
Korea	4 924	8 699	5 666	8 990	11 440
Mexico	- 1	44	33	37	61
New Zealand	30	3	3	4	2
Norway	2 429	2 244	2 250	2 216	2 267
Poland	73	147	164	145	131
Switzerland	2 895	2 910	2 835	2 844	3 052
Turkey	62	168	222	179	102
United States	90	117	103	122	126
OECD	164	192	174	197	204

Notes: See Part II.4 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database 2001.

Table III.7. **OECD: Composition of Producer Support Estimate**
(percentage share in PSE)

	1986-88	1998-2000	1998	1999	2000p
Australia					
Market Price Support	45	31	39	28	24
Payments based on output	0	3	2	3	3
Payments based on area planted/animal numbers	0	1	0	0	2
Payments based on historical entitlements	0	2	0	0	5
Payments based on input use	33	50	44	55	50
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	22	15	14	14	16
Miscellaneous payments	0	0	0	0	0
Canada					
Market Price Support	49	57	61	58	51
Payments based on output	17	8	7	9	7
Payments based on area planted/animal numbers	17	6	5	5	8
Payments based on historical entitlements	0	4	0	0	11
Payments based on input use	15	7	8	8	6
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	0	18	19	19	16
Miscellaneous payments	2	0	0	0	0
Czech Republic					
Market Price Support	78	64	70	64	58
Payments based on output	3	1	0	0	2
Payments based on area planted/animal numbers	0	5	4	5	5
Payments based on historical entitlements	0	14	11	15	15
Payments based on input use	5	17	15	16	19
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	14	0	0	0	1
Miscellaneous payments	0	0	0	0	0
European Union					
Market Price Support	85	61	61	64	59
Payments based on output	6	5	5	4	5
Payments based on area planted/animal numbers	3	24	24	22	25
Payments based on historical entitlements	0	1	1	1	1
Payments based on input use	5	7	7	7	7
Payments based on input constraints	1	3	3	3	3
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Hungary					
Market Price Support	75	57	56	59	56
Payments based on output	0	9	10	11	7
Payments based on area planted/animal numbers	0	4	0	4	6
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	9	27	28	22	29
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	15	3	6	3	1
Miscellaneous payments	1	0	0	0	0
Iceland					
Market Price Support	87	51	52	53	48
Payments based on output	1	28	26	27	30
Payments based on area planted/animal numbers	1	0	0	0	0
Payments based on historical entitlements	0	14	13	14	15
Payments based on input use	11	7	8	6	8
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.7. **OECD: Composition of Producer Support Estimate (cont'd)**
(percentage share in PSE)

	1986-88	1998-2000	1998	1999	2000p
Japan					
Market Price Support	90	91	91	91	91
Payments based on output	3	3	2	2	3
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	95	94	96	96
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	3	4	3	2
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	0	1	1	1	2
Miscellaneous payments	0	0	0	0	0
Mexico					
Market Price Support	n.c.	64	63	59	70
Payments based on output	n.c.	0	0	0	0
Payments based on area planted/animal numbers	n.c.	2	1	2	1
Payments based on historical entitlements	n.c.	21	23	23	18
Payments based on input use	n.c.	12	11	15	9
Payments based on input constraints	n.c.	0	0	0	0
Payments based on overall farm income	n.c.	1	1	2	1
Miscellaneous payments	n.c.	0	0	0	0
New Zealand					
Market Price Support	20	68	73	76	54
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	21	0	0	0	0
Payments based on input use	49	30	27	24	40
Payments based on input constraints	0	0	0	0	0
Payments based on overall farm income	10	2	0	0	5
Miscellaneous payments	0	0	0	0	0
Norway					
Market Price Support	45	40	43	42	35
Payments based on output	25	16	16	16	16
Payments based on area planted/animal numbers	9	11	9	11	12
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	19	29	30	29	29
Payments based on input constraints	2	2	1	2	3
Payments based on overall farm income	0	2	0	0	5
Miscellaneous payments	0	0	0	0	0
Poland					
Market Price Support	15	80	83	79	78
Payments based on output	0	2	0	2	3
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	25	0	0	0	0
Payments based on input use	59	18	16	19	19
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.7. **OECD: Composition of Producer Support Estimate (cont'd)**
(percentage share in PSE)

	1986-88	1998-2000	1998	1999	2000p
Switzerland					
Market Price Support	82	61	63	61	59
Payments based on output	1	3	2	4	4
Payments based on area planted/animal numbers	6	14	19	11	11
Payments based on historical entitlements	0	12	5	16	16
Payments based on input use	8	5	7	4	6
Payments based on input constraints	0	2	2	2	2
Payments based on overall farm income	0	0	0	0	0
Miscellaneous payments	3	3	3	3	3
Turkey					
Market Price Support	65	74	80	73	68
Payments based on output	0	5	1	4	10
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	35	21	18	22	22
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	46	40	48	39	32
Payments based on output	7	15	10	18	19
Payments based on area planted/animal numbers	27	6	6	5	7
Payments based on historical entitlements	0	20	17	20	22
Payments based on input use	16	13	12	12	14
Payments based on input constraints	2	4	4	3	4
Payments based on overall farm income	2	3	3	3	3
Miscellaneous payments	0	0	0	0	0
OECD					
Market Price Support	77	66	67	67	65
Payments based on output	5	6	5	6	7
Payments based on area planted/animal numbers	7	11	12	11	11
Payments based on historical entitlements	0	5	4	5	6
Payments based on input use	9	8	9	8	8
Payments based on input constraints	1	2	3	2	3
Payments based on overall farm income	1	1	1	1	1
Miscellaneous payments	0	0	0	0	0

Notes: See Part II.4 for detailed explanations. p: provisional, n.c.: not calculated. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. 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 2001.

Table III.8. OECD: General Services Support Estimate by country

		1986-88	1998-2000	1998	1999	2000p
Australia	USD mn	389	503	501	539	469
	Euro mn	352	487	448	506	509
	Percentage of TSE	24	31	28	33	32
Canada	USD mn	1 454	1 257	1 326	1 190	1 256
	Euro mn	1 319	1 222	1 185	1 116	1 363
	Percentage of TSE	21	25	28	25	23
Czech Republic	USD mn	58	103	106	104	99
	Euro mn	53	100	94	98	108
	Percentage of TSE	1	13	11	13	15
European Union	USD mn	11 417	10 179	9 955	10 852	9 729
	Euro mn	10 317	9 881	8 901	10 185	10 557
	Percentage of TSE	10	9	8	8	9
Hungary	USD mn	83	209	171	235	222
	Euro mn	76	205	153	220	241
	Percentage of TSE	3	17	14	17	21
Iceland	USD mn	23	18	19	21	16
	Euro mn	20	18	17	20	17
	Percentage of TSE	9	11	11	12	10
Japan	USD mn	8 777	14 253	16 346	13 087	13 325
	Euro mn	7 890	13 785	14 615	12 282	14 459
	Percentage of TSE	14	21	25	19	18
Korea	USD mn	2 011	3 357	3 072	3 521	3 477
	Euro mn	1 817	3 275	2 747	3 305	3 773
	Percentage of TSE	14	17	19	16	14
Mexico	USD mn	680	441	417	454	454
	Euro mn	637	430	372	426	493
	Percentage of TSE	64	7	8	8	6
New Zealand	USD mn	104	88	91	89	83
	Euro mn	94	85	81	84	90
	Percentage of TSE	23	58	57	52	66
Norway	USD mn	129	178	175	178	181
	Euro mn	117	174	157	167	197
	Percentage of TSE	4	7	6	7	8
Poland	USD mn	192	177	208	170	153
	Euro mn	175	171	186	160	167
	Percentage of TSE	7	6	6	6	6
Switzerland	USD mn	438	339	381	331	305
	Euro mn	396	327	341	310	331
	Percentage of TSE	7	6	6	6	6
Turkey	USD mn	313	3 866	3 885	4 451	3 262
	Euro mn	281	3 730	3 473	4 177	3 540
	Percentage of TSE	11	37	28	37	46
United States	USD mn	15 233	22 172	22 258	21 763	22 495
	Euro mn	13 980	21 578	19 901	20 425	24 409
	Percentage of TSE	22	24	24	23	24
OECD	USD mn	41 601	57 137	58 907	56 981	55 522
	Euro mn	37 793	55 464	52 668	53 476	60 247
	Percentage of TSE	14	17	17	16	17

Notes: See Part II.4 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990.
Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database 2001.

Table III.9. **OECD: Composition of General Services Support Estimate**
(percentage share in GSSE)

		1986-88	1998-2000	1998	1999	2000p
Australia	Research and Development	55	72	73	72	72
	Agricultural schools	0	0	0	0	0
	Inspection services	16	6	6	7	5
	Infrastructure	12	19	18	19	20
	Marketing and promotion	9	1	1	1	1
	Public stockholding	0	0	0	0	0
	Miscellaneous	8	2	2	2	2
Canada	Research and Development	17	20	20	23	19
	Agricultural schools	15	14	14	14	13
	Inspection services	17	21	20	21	21
	Infrastructure	25	18	17	17	18
	Marketing and promotion	26	27	28	25	28
	Public stockholding	0	0	0	0	0
	Miscellaneous	0	0	0	0	0
Czech Republic	Research and Development	18	26	26	27	25
	Agricultural schools	75	45	47	45	42
	Inspection services	7	2	1	1	2
	Infrastructure	0	27	25	27	30
	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	10	15	15	16	15
	Agricultural schools	1	7	8	7	6
	Inspection services	2	2	3	2	2
	Infrastructure	11	17	17	17	18
	Marketing and promotion	29	34	35	35	33
	Public stockholding	48	17	20	16	16
	Miscellaneous	0	7	3	7	11
Hungary	Research and Development	4	8	10	7	8
	Agricultural schools	6	7	6	7	8
	Inspection services	55	70	78	67	66
	Infrastructure	36	9	3	13	10
	Marketing and promotion	0	6	3	6	8
	Public stockholding	0	0	0	0	0
	Miscellaneous	0	0	0	0	0
Iceland	Research and Development	10	14	14	13	15
	Agricultural schools	17	28	27	27	29
	Inspection services	4	11	7	12	13
	Infrastructure	30	27	31	31	21
	Marketing and promotion	1	2	2	2	2
	Public stockholding	37	18	19	16	19
	Miscellaneous	1	1	1	1	1
Japan	Research and Development	4	4	4	5	4
	Agricultural schools	2	2	1	2	3
	Inspection services	1	1	1	1	1
	Infrastructure	80	80	83	78	78
	Marketing and promotion	2	2	1	2	2
	Public stockholding	3	3	3	3	3
	Miscellaneous	9	9	7	10	9
Korea	Research and Development	3	7	7	6	7
	Agricultural schools	0	1	1	1	1
	Inspection services	1	3	2	3	3
	Infrastructure	23	59	62	59	57
	Marketing and promotion	0	1	0	1	1
	Public stockholding	72	30	28	31	31
	Miscellaneous	0	0	0	0	0
Mexico	Research and Development	9	24	25	24	24
	Agricultural schools	14	31	29	32	33
	Inspection services	0	17	16	17	18
	Infrastructure	27	13	14	12	11
	Marketing and promotion	2	7	8	8	6
	Public stockholding	48	1	2	0	0
	Miscellaneous	1	7	7	6	7

Table III.9. **OECD: Composition of General Services Support Estimate (Cont'd)**

(percentage share in GSSE)

		1986-88	1998-2000	1998	1999	2000p
New Zealand	Research and Development	44	67	67	67	68
	Agricultural schools	0	5	5	5	5
	Inspection services	30	28	28	28	27
	Infrastructure	26	0	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	36	36	37	33
	Agricultural schools	0	0	0	0	0
	Inspection services	0	2	1	3	3
	Infrastructure	15	8	6	8	9
	Marketing and promotion	28	51	55	52	46
	Public stockholding	0	1	2	1	1
	Miscellaneous	0	3	0	0	8
Poland	Research and Development	65	38	45	34	34
	Agricultural schools	2	2	2	2	3
	Inspection services	0	0	0	0	0
	Infrastructure	19	24	20	24	27
	Marketing and promotion	14	17	14	18	20
	Public stockholding	0	15	15	17	12
	Miscellaneous	0	4	4	4	5
Switzerland	Research and Development	20	18	22	16	17
	Agricultural schools	6	5	6	5	4
	Inspection services	2	2	3	2	2
	Infrastructure	20	15	14	15	16
	Marketing and promotion	7	10	6	12	12
	Public stockholding	15	12	12	12	11
	Miscellaneous	31	38	38	38	37
Turkey	Research and Development	19	1	1	1	1
	Agricultural schools	1	0	0	0	0
	Inspection services	16	2	2	2	2
	Infrastructure	2	0	0	0	0
	Marketing and promotion	28	97	96	97	96
	Public stockholding	0	0	0	0	0
	Miscellaneous	34	0	0	0	0
United States	Research and Development	10	8	9	7	7
	Agricultural schools	0	0	0	0	0
	Inspection services	3	3	3	3	3
	Infrastructure	19	12	12	13	11
	Marketing and promotion	62	69	68	70	71
	Public stockholding	0	0	0	0	0
	Miscellaneous	7	8	7	8	7
OECD	Research and Development	9	9	10	9	9
	Agricultural schools	2	3	2	3	3
	Inspection services	3	3	3	3	3
	Infrastructure	30	32	35	31	31
	Marketing and promotion	32	41	39	42	42
	Public stockholding	19	6	6	6	6
	Miscellaneous	5	7	6	7	7

Notes: See Part II.4 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.

Source: OECD, PSE/CSE database 2001.

Table III.10. OECD: Consumer Support Estimate by country

		1986-88	1998-2000	1998	1999	2000p
Australia	USD mn	-307	-168	-212	-123	-168
	Euro mn	-283	-162	-190	-115	-182
	Percentage CSE	-7	-3	-3	-2	-3
	Consumer NPC	1.08	1.02	1.04	1.02	1.02
	Consumer NAC	1.08	1.03	1.04	1.02	1.03
Canada	USD mn	-2 493	-2 181	-2 148	-2 146	-2 249
	Euro mn	-2 269	-2 125	-1 920	-2 014	-2 441
	Percentage CSE	-22	-16	-16	-16	-16
	Consumer NPC	1.32	1.19	1.19	1.19	1.19
	Consumer NAC	1.28	1.19	1.19	1.19	1.19
Czech Republic	USD mn	-2 126	-406	-489	-441	-288
	Euro mn	-1 956	-388	-438	-414	-313
	Percentage CSE	-45	-13	-14	-15	-11
	Consumer NPC	2.36	1.13	1.15	1.14	1.10
	Consumer NAC	1.87	1.15	1.16	1.18	1.13
European Union	USD mn	-70 725	-55 931	-58 843	-64 386	-44 564
	Euro mn	-64 169	-53 798	-52 612	-60 427	-48 356
	Percentage CSE	-40	-33	-32	-37	-29
	Consumer NPC	1.88	1.56	1.54	1.69	1.45
	Consumer NAC	1.67	1.49	1.47	1.60	1.41
Hungary	USD mn	-1 612	-476	-407	-608	-413
	Euro mn	-1 486	-461	-364	-570	-448
	Percentage CSE	-29	-13	-11	-16	-11
	Consumer NPC	1.52	1.13	1.09	1.17	1.12
	Consumer NAC	1.42	1.15	1.13	1.19	1.12
Iceland	USD mn	-115	-80	-83	-88	-69
	Euro mn	-104	-77	-74	-82	-75
	Percentage CSE	-67	-51	-52	-54	-47
	Consumer NPC	3.84	2.06	2.11	2.17	1.91
	Consumer NAC	3.13	2.04	2.09	2.16	1.88
Japan	USD mn	-56 288	-64 156	-59 766	-64 720	-67 982
	Euro mn	-50 846	-62 648	-53 437	-60 739	-73 768
	Percentage CSE	-59	-54	-52	-54	-54
	Consumer NPC	2.46	2.16	2.11	2.20	2.17
	Consumer NAC	2.44	2.15	2.10	2.19	2.16
Korea	USD mn	-11 917	-18 077	-12 027	-19 953	-22 250
	Euro mn	-10 715	-17 874	-10 754	-18 725	-24 144
	Percentage CSE	-67	-63	-55	-65	-69
	Consumer NPC	3.09	2.78	2.24	2.89	3.19
	Consumer NAC	3.07	2.76	2.21	2.88	3.19
Mexico	USD mn	2 323	-3 013	-2 014	-2 740	-4 285
	Euro mn	2 136	-3 007	-1 801	-2 571	-4 649
	Percentage CSE	18	-11	-8	-11	-15
	Consumer NPC	0.91	1.18	1.14	1.16	1.23
	Consumer NAC	0.85	1.13	1.09	1.12	1.18
New Zealand	USD mn	-62	-44	-49	-60	-24
	Euro mn	-57	-42	-44	-56	-26
	Percentage CSE	-6	-4	-4	-5	-2
	Consumer NPC	1.07	1.02	1.02	1.03	1.00
	Consumer NAC	1.07	1.02	1.02	1.03	1.00

Table III.10. **OECD: Consumer Support Estimate by country (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Norway	USD mn	-1 179	-1 033	-1 188	-1 088	-825
	Euro mn	-1 071	- 993	-1 062	-1 021	-895
	Percentage CSE	-49	-48	-50	-51	-44
	Consumer NPC	2.73	2.26	2.36	2.40	2.02
	Consumer NAC	1.98	1.94	2.00	2.02	1.79
Poland	USD mn	- 644	-2 305	-2 890	-2 238	-1 785
	Euro mn	- 687	-2 207	-2 584	-2 101	-1 937
	Percentage CSE	-3	-18	-19	-18	-17
	Consumer NPC	1.20	1.25	1.27	1.24	1.23
	Consumer NAC	1.05	1.22	1.24	1.22	1.20
Switzerland	USD mn	-4 629	-3 134	-3 228	-3 311	-2 863
	Euro mn	-4 177	-3 034	-2 886	-3 107	-3 107
	Percentage CSE	-69	-60	-59	-62	-59
	Consumer NPC	3.93	2.96	3.01	3.13	2.76
	Consumer NAC	3.18	2.52	2.43	2.65	2.46
Turkey	USD mn	-1 929	-5 609	-7 572	-6 118	-3 136
	Euro mn	-1 763	-5 305	-6 770	-5 742	-3 403
	Percentage CSE	-13	-20	-25	-22	-13
	Consumer NPC	1.17	1.29	1.38	1.32	1.16
	Consumer NAC	1.15	1.26	1.34	1.28	1.15
United States	USD mn	-9 142	-1 840	-5 586	-3 727	3 794
	Euro mn	-8 530	-1 458	-4 994	-3 498	4 117
	Percentage CSE	-8	-1	-4	-2	2
	Consumer NPC	1.19	1.15	1.17	1.16	1.11
	Consumer NAC	1.08	1.01	1.04	1.03	0.98
OECD	USD mn	-166 892	-158 430	-156 485	-171 719	-147 085
	Euro mn	-151 435	-153 558	-139 913	-161 158	-159 602
	Percentage CSE	-33	-28	-27	-30	-26
	Consumer NPC	1.61	1.46	1.45	1.51	1.42
	Consumer NAC	1.49	1.38	1.37	1.43	1.35

Notes: See Part II.4 for detailed explanations. p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990.
Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database 2001.

Table III.11. **OECD: Consumer Support Estimate by commodity**

		1986-88	1998-2000	1998	1999	2000p
Wheat	USD mn	-7 438	-2 773	-3 057	-3 412	-1 851
	Euro mn	-6 716	-2 648	-2 733	-3 202	-2 008
	Percentage CSE	-30	-13	-13	-16	-9
	Consumer NPC	1.85	1.25	1.27	1.32	1.17
	Consumer NAC	1.43	1.15	1.15	1.19	1.10
Maize	USD mn	175	1 754	2 021	1 508	1 735
	Euro mn	184	1 701	1 807	1 415	1 883
	Percentage CSE	1	8	9	7	8
	Consumer NPC	1.25	1.07	1.07	1.08	1.06
	Consumer NAC	0.99	0.92	0.91	0.93	0.92
Other grains	USD mn	-2 278	-661	-847	-865	-269
	Euro mn	-2 066	-621	-758	-812	-292
	Percentage CSE	-13	-5	-7	-7	-2
	Consumer NPC	1.94	1.28	1.38	1.33	1.11
	Consumer NAC	1.15	1.06	1.07	1.07	1.02
Rice	USD mn	-23 323	-24 037	-21 100	-24 682	-26 330
	Euro mn	-21 136	-23 533	-18 865	-23 164	-28 570
	Percentage CSE	-77	-79	-75	-79	-83
	Consumer NPC	4.51	4.93	4.12	4.85	5.80
	Consumer NAC	4.44	4.89	4.08	4.82	5.78
Oilseeds	USD mn	-567	-266	-233	-325	-241
	Euro mn	-510	-258	-208	-305	-261
	Percentage CSE	-3	-1	-1	-1	-1
	Consumer NPC	1.05	1.03	1.02	1.03	1.03
	Consumer NAC	1.03	1.01	1.01	1.02	1.01
Sugar	USD mn	-7 342	-7 451	-7 432	-8 441	-6 480
	Euro mn	-6 679	-7 200	-6 645	-7 922	-7 032
	Percentage CSE	-58	-56	-55	-63	-50
	Consumer NPC	2.38	2.38	2.27	2.78	2.08
	Consumer NAC	2.44	2.30	2.22	2.70	2.00
Milk	USD mn	-34 179	-34 326	-39 043	-34 852	-29 082
	Euro mn	-31 270	-33 058	-34 908	-32 708	-31 557
	Percentage CSE	-57	-48	-52	-48	-43
	Consumer NPC	2.65	2.05	2.25	2.04	1.86
	Consumer NAC	2.40	1.92	2.10	1.91	1.75
Beef and Veal	USD mn	-18 401	-17 008	-16 831	-18 856	-15 337
	Euro mn	-16 793	-16 462	-15 049	-17 696	-16 642
	Percentage CSE	-28	-23	-24	-25	-21
	Consumer NPC	1.43	1.36	1.38	1.39	1.32
	Consumer NAC	1.39	1.31	1.32	1.34	1.27
Sheepmeat	USD mn	-3 680	-1 332	-1 599	-1 592	-805
	Euro mn	-3 306	-1 266	-1 430	-1 494	-873
	Percentage CSE	-53	-20	-24	-24	-13
	Consumer NPC	2.14	1.26	1.31	1.31	1.16
	Consumer NAC	2.13	1.26	1.31	1.31	1.16
Wool	USD mn	-9	1	0	1	1
	Euro mn	-8	1	0	1	1
	Percentage CSE	-3	1	0	1	1
	Consumer NPC	1.04	1.02	1.02	1.02	1.01
	Consumer NAC	1.03	0.99	1.00	0.99	0.99

Table III.11. **OECD: Consumer Support Estimate by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Pigmeat	USD mn	-7 181	-8 355	-5 110	-11 729	-8 225
	Euro mn	-6 413	-8 167	-4 569	-11 008	-8 925
	Percentage CSE	-16	-21	-13	-30	-19
	Consumer NPC	1.23	1.33	1.19	1.50	1.29
	Consumer NAC	1.20	1.27	1.14	1.44	1.24
Poultry	USD mn	-3 984	-2 812	-1 248	-2 945	-4 242
	Euro mn	-3 543	-2 828	-1 116	-2 764	-4 603
	Percentage CSE	-18	-9	-4	-9	-13
	Consumer NPC	1.27	1.14	1.08	1.15	1.20
	Consumer NAC	1.22	1.10	1.04	1.10	1.15
Eggs	USD mn	-2 196	-1 183	-1 448	-1 363	-738
	Euro mn	-1 986	-1 125	-1 295	-1 279	-801
	Percentage CSE	-15	-8	-9	-9	-5
	Consumer NPC	1.20	1.11	1.13	1.12	1.08
	Consumer NAC	1.18	1.09	1.10	1.10	1.05
Other commodities	USD mn	-56 489	-59 981	-60 558	-64 164	-55 221
	Euro mn	-51 192	-58 094	-54 145	-60 218	-59 920
	Percentage CSE	-34	-28	-28	-30	-27
	Consumer NPC	1.57	1.46	1.46	1.50	1.43
	Consumer NAC	1.51	1.40	1.39	1.43	1.36
All commodities	USD mn	-166 892	-158 430	-156 485	-171 719	-147 085
	Euro mn	-151 435	-153 558	-139 913	-161 158	-159 602
	Percentage CSE	-33	-28	-27	-30	-26
	Consumer NPC	1.61	1.46	1.45	1.51	1.42
	Consumer NAC	1.49	1.38	1.37	1.43	1.35

Notes: See Part II.4 for detailed explanations. p: provisional. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient. The CSE for "other commodities" is the residual of the CSE for all commodities minus the CSE for commodities listed above. 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 2001.

Table III.12. **OECD: Total Support Estimate by country**

		1986-88	1998-2000	1998	1999	2000p
Australia	USD mn	1 644	1 625	1 784	1 636	1 454
	Euro mn	1 505	1 570	1 595	1 535	1 578
	Percentage of GDP	0.80	0.43	0.49	0.41	0.38
Canada	USD mn	7 122	5 039	4 773	4 790	5 555
	Euro mn	6 503	4 930	4 267	4 495	6 028
	Percentage of GDP	1.69	0.77	0.79	0.74	0.80
Czech Republic	USD mn	5 426	810	944	830	655
	Euro mn	4 971	778	844	779	711
	Percentage of GDP	12.09	1.53	1.69	1.56	1.32
European Union	USD mn	111 079	119 188	124 549	129 518	103 497
	Euro mn	100 687	115 072	111 360	121 553	112 305
	Percentage of GDP	2.61	1.44	1.46	1.52	1.32
Hungary	USD mn	3 414	1 223	1 203	1 384	1 083
	Euro mn	3 135	1 183	1 076	1 299	1 175
	Percentage of GDP	7.76	2.58	2.56	2.86	2.34
Iceland	USD mn	258	175	181	182	161
	Euro mn	231	169	162	171	175
	Percentage of GDP	5.00	2.07	2.23	2.11	1.88
Japan	USD mn	62 023	69 831	66 544	69 681	73 269
	Euro mn	56 136	68 132	59 497	65 396	79 505
	Percentage of GDP	2.57	1.65	1.75	1.60	1.59
Korea	USD mn	14 302	20 847	15 884	22 405	24 250
	Euro mn	12 854	20 514	14 202	21 027	26 314
	Percentage of GDP	10.06	5.25	5.01	5.50	5.25
Mexico	USD mn	1 392	6 175	5 548	5 460	7 516
	Euro mn	1 320	6 080	4 961	5 124	8 156
	Percentage of GDP	1.00	1.25	1.32	1.13	1.31
New Zealand	USD mn	553	153	161	173	126
	Euro mn	523	148	144	163	137
	Percentage of GDP	1.77	0.29	0.30	0.32	0.26
Norway	USD mn	2 980	2 646	2 833	2 691	2 413
	Euro mn	2 698	2 559	2 533	2 526	2 618
	Percentage of GDP	3.39	1.72	1.93	1.76	1.49
Poland	USD mn	2 875	3 013	3 605	3 045	2 389
	Euro mn	2 573	2 891	3 223	2 858	2 593
	Percentage of GDP	2.56	1.91	2.29	2.00	1.45
Switzerland	USD mn	6 152	5 533	6 077	5 578	4 946
	Euro mn	5 557	5 345	5 434	5 235	5 366
	Percentage of GDP	3.72	2.17	2.31	2.15	2.06
Turkey	USD mn	2 983	10 993	13 840	12 087	7 053
	Euro mn	2 709	10 457	12 374	11 344	7 653
	Percentage of GDP	3.53	5.66	6.90	6.55	3.54
United States	USD mn	68 235	93 319	91 163	96 499	92 296
	Euro mn	62 534	90 741	81 509	90 564	100 151
	Percentage of GDP	1.44	1.00	1.04	1.04	0.92
OECD	USD mn	298 480	340 544	339 065	355 927	326 640
	Euro mn	271 216	330 544	303 158	334 037	354 437
	Percentage of GDP	2.25	1.35	1.39	1.39	1.26

Notes: See Part II.4 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database 2001.

Table III.13. **OECD: Total Support Estimate per capita**

	1986-88	1998-2000	1998	1999	2000p
USD					
Australia	101	87	95	88	78
Canada	269	166	158	157	182
Czech Republic	526	79	92	81	64
European Union	327	318	333	345	276
Hungary	325	124	121	140	110
Iceland	1 044	631	660	658	576
Japan	507	551	526	550	578
Korea	343	446	342	478	518
Mexico	18	64	58	56	77
New Zealand	168	33	36	37	26
Norway	711	596	639	605	543
Poland	76	78	93	79	62
Switzerland	929	761	855	757	671
Turkey	57	171	217	187	109
United States	281	343	337	354	338
OECD	295	302	302	315	289
Euro					
Australia	93	84	85	82	85
Canada	246	162	141	147	198
Czech Republic	482	76	83	76	70
European Union	296	307	297	324	299
Hungary	298	120	108	132	119
Iceland	938	611	590	617	625
Japan	459	538	470	516	628
Korea	309	439	306	449	562
Mexico	17	63	52	53	84
New Zealand	159	32	32	35	29
Norway	644	576	572	568	589
Poland	68	75	83	74	67
Switzerland	839	734	765	710	728
Turkey	52	162	194	175	118
United States	258	333	302	332	367
OECD	326	313	338	336	266

Notes: See Part II.4 for detailed explanations. p: provisional. EU-12 for 1986-94, EU-15 from 1995, EU includes ex-GDR from 1990. Austria, Finland, and Sweden are included in the OECD totals for all years, and in the EU from 1995.
Source: OECD, PSE/CSE database 2001.

Table III.14. **Australia: Estimates of support to agriculture**
(AUD million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**20 155**	**30 279**	**29 023**	**30 597**	**31 218**
of which share of MPS commodities (%)	*81*	*74*	*73*	*75*	*74*
Total value of consumption (at farm gate)	**6 404**	**10 224**	**9 684**	**10 269**	**10 719**
Producer Support Estimate (PSE)	**1 768**	**1 851**	**2 044**	**1 699**	**1 810**
Market Price Support (MPS)	809	575	804	477	443
of which MPS commodities	*655*	*425*	*589*	*355*	*330*
Payments based on output	0	50	50	50	50
Payments based on area planted/animal numbers	0	12	0	0	37
Payments based on historical entitlements	0	30	0	0	91
Payments based on input use	577	911	904	929	899
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	382	273	286	243	289
Miscellaneous payments	1	0	0	0	0
Percentage PSE	**9**	**6**	**7**	**5**	**6**
Producer NPC	**1.05**	**1.03**	**1.04**	**1.02**	**1.02**
Producer NAC	**1.10**	**1.06**	**1.07**	**1.06**	**1.06**
General Services Support Estimate (GSSE)	**541**	**814**	**797**	**836**	**809**
Research and development	298	588	579	599	587
Agricultural schools	0	0	0	0	0
Inspection services	89	48	49	55	39
Infrastructure	65	153	143	156	161
Marketing and promotion	49	10	11	10	8
Public stockholding	0	0	0	0	0
Miscellaneous	41	15	15	15	15
GSSE as a share of TSE (%)	**23.8**	**31.1**	**28.1**	**33.0**	**32.2**
Consumer Support Estimate (CSE)	**-432**	**-273**	**-338**	**-190**	**-289**
Transfers to producers from consumers	-433	-241	-342	-195	-186
Other transfers from consumers	0	0	0	0	0
Transfers to consumers from taxpayers	0	-36	0	0	-109
Excess feed cost	0	4	3	4	5
Percentage CSE	**-7**	**-3**	**-3**	**-2**	**-3**
Consumer NPC	**1.08**	**1.02**	**1.04**	**1.02**	**1.02**
Consumer NAC	**1.08**	**1.03**	**1.04**	**1.02**	**1.03**
Total Support Estimate (TSE)	**2 309**	**2 629**	**2 841**	**2 535**	**2 511**
Transfers from consumers	433	241	342	195	186
Transfers from taxpayers	1 876	2 388	2 500	2 340	2 325
Budget revenues	0	0	0	0	0
TSE as a share of GDP (%)	**0.8**	**0.4**	**0.5**	**0.4**	**0.4**
GDP deflator 1995 = 100	**76.4**	**105.7**	**103.8**	**104.9**	**108.5**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Australia are: wheat, other grains, rice, oilseeds, sugar, cotton, milk, beef and veal, sheepmeat, wool, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.15. **Australia: Main indicators by commodity**

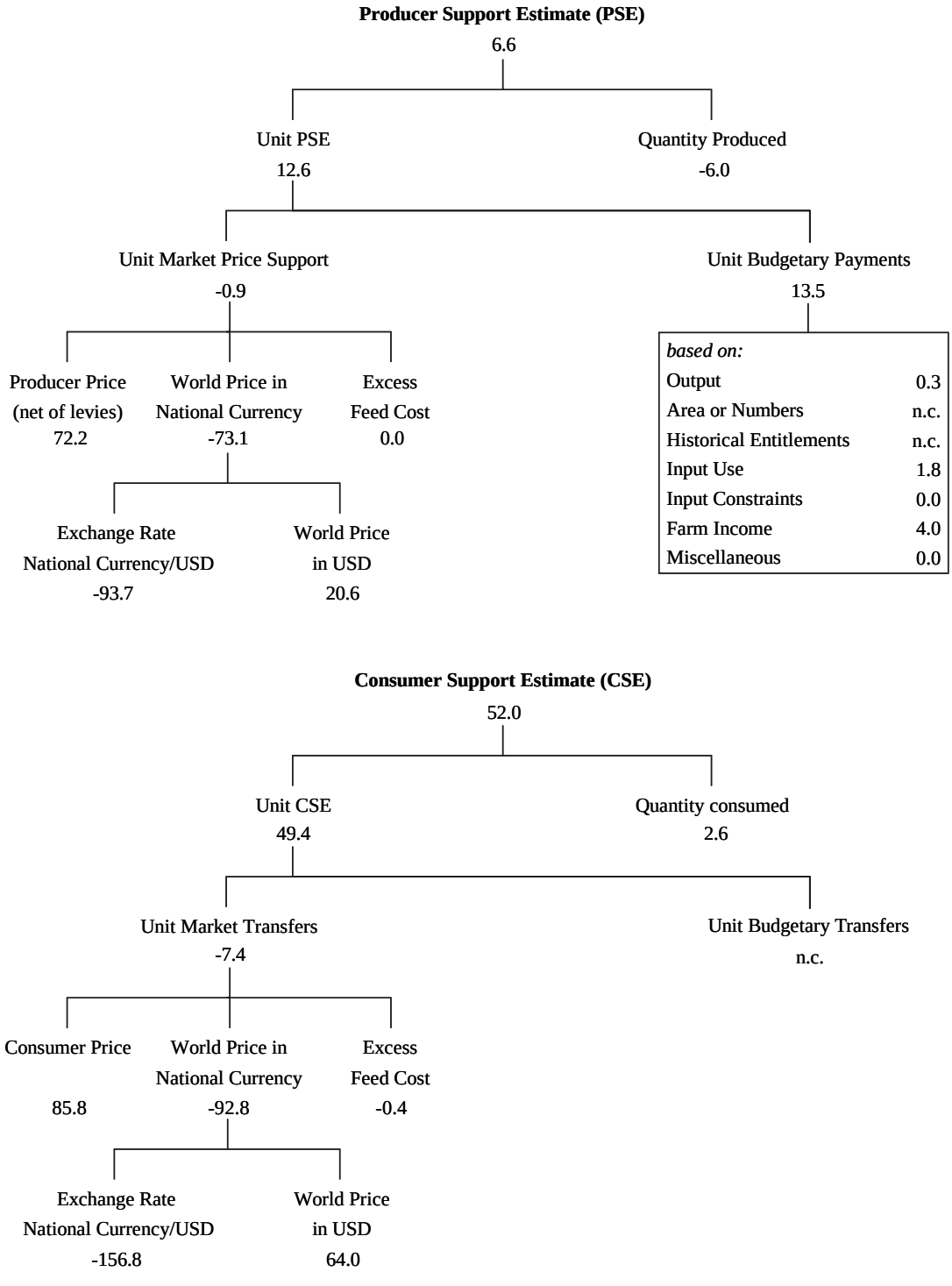
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (AUD mn)	177	214	207	226	209
	Percentage PSE	9	6	6	6	6
	Producer NPC	1.05	1.02	1.02	1.02	1.02
	Producer NAC	1.10	1.06	1.06	1.06	1.06
	Percentage CSE	-4	-1	-1	0	0
	Consumer NPC	1.05	1.01	1.01	1.01	1.01
	Consumer NAC	1.05	1.01	1.01	1.00	1.00
Maize	PSE (AUD mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains	PSE (AUD mn)	29	48	49	49	46
	Percentage PSE	4	4	5	4	4
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.04	1.04	1.05	1.04	1.04
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.01	1.00	1.02	1.01
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Rice	PSE (AUD mn)	16	17	19	15	18
	Percentage PSE	17	7	6	7	7
	Producer NPC	1.13	1.03	1.03	1.03	1.03
	Producer NAC	1.22	1.07	1.07	1.07	1.07
	Percentage CSE	-11	-3	-3	-3	-3
	Consumer NPC	1.13	1.03	1.03	1.03	1.03
	Consumer NAC	1.13	1.03	1.03	1.03	1.03
Oilseeds	PSE (AUD mn)	6	19	21	21	15
	Percentage PSE	5	3	3	3	3
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.06	1.03	1.03	1.03	1.03
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.03	0.98	0.94	1.01	0.99
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Sugar	PSE (AUD mn)	89	56	46	42	82
	Percentage PSE	14	6	4	5	9
	Producer NPC	1.12	1.00	1.00	1.00	1.00
	Producer NAC	1.16	1.06	1.04	1.05	1.10
	Percentage CSE	-10	0	0	0	0
	Consumer NPC	1.12	1.00	1.00	1.00	1.00
	Consumer NAC	1.12	1.00	1.00	1.00	1.00
Milk	PSE (AUD mn)	502	520	659	421	480
	Percentage PSE	33	17	22	14	16
	Producer NPC	1.45	1.16	1.24	1.12	1.12
	Producer NAC	1.51	1.21	1.28	1.17	1.19
	Percentage CSE	-30	-16	-19	-11	-18
	Consumer NPC	1.45	1.16	1.24	1.12	1.12
	Consumer NAC	1.45	1.19	1.24	1.12	1.22
Beef and Veal	PSE (AUD mn)	200	189	195	195	177
	Percentage PSE	7	4	5	4	4
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.07	1.04	1.05	1.04	1.04
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00

Table III.15. **Australia: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (AUD mn)	24	41	45	42	36
	Percentage PSE	3	4	5	4	4
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.04	1.04	1.05	1.05	1.04
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Wool	PSE (AUD mn)	149	124	124	126	121
	Percentage PSE	3	5	6	5	5
	Producer NPC	1.00	1.01	1.01	1.01	1.01
	Producer NAC	1.03	1.06	1.06	1.06	1.05
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Pigmeat	PSE (AUD mn)	15	28	24	30	28
	Percentage PSE	3	4	4	4	3
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.03	1.04	1.04	1.04	1.03
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Poultry	PSE (AUD mn)	26	38	38	40	38
	Percentage PSE	4	3	4	4	3
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.04	1.04	1.04	1.04	1.03
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Eggs	PSE (AUD mn)	47	12	13	12	11
	Percentage PSE	18	4	4	4	3
	Producer NPC	1.18	1.00	1.00	1.00	1.00
	Producer NAC	1.23	1.04	1.04	1.04	1.04
	Percentage CSE	-14	0	0	0	0
	Consumer NPC	1.18	1.00	1.00	1.00	1.00
	Consumer NAC	1.18	1.00	1.00	1.00	1.00
Other commodities	PSE (AUD mn)	488	544	603	479	549
	Percentage PSE	9	5	5	4	4
	Producer NPC	1.05	1.03	1.03	1.02	1.02
	Producer NAC	1.10	1.05	1.06	1.04	1.05
	Percentage CSE	-7	-2	-3	-2	-2
	Consumer NPC	1.07	1.02	1.04	1.02	1.02
	Consumer NAC	1.07	1.02	1.04	1.02	1.02
All commodities	PSE (AUD mn)	1 768	1 851	2 044	1 699	1 810
	Percentage PSE	9	6	7	5	6
	Producer NPC	1.05	1.03	1.04	1.02	1.02
	Producer NAC	1.10	1.06	1.07	1.06	1.06
	Percentage CSE	-7	-3	-3	-2	-3
	Consumer NPC	1.08	1.02	1.04	1.02	1.02
	Consumer NAC	1.08	1.03	1.04	1.02	1.03

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.2. **Australia: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -0.9 percentage points to the 6.6 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.16. **Canada: Estimates of support to agriculture**
(CAD million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**18 420**	**28 828**	**28 365**	**28 483**	**29 635**
of which share of MPS commodities (%)	*83*	*77*	*77*	*75*	*77*
Total value of consumption (at farm gate)	**15 319**	**20 255**	**20 007**	**20 051**	**20 706**
Producer Support Estimate (PSE)	**7 429**	**5 615**	**5 113**	**5 348**	**6 385**
Market Price Support (MPS)	3 653	3 171	3 139	3 104	3 270
of which MPS commodities	*3 015*	*2 429*	*2 432*	*2 343*	*2 513*
Payments based on output	1 263	432	352	490	454
Payments based on area planted/animal numbers	1 220	335	234	285	487
Payments based on historical entitlements	0	240	0	0	721
Payments based on input use	1 130	412	407	420	411
Payments based on input constraints	10	0	1	0	0
Payments based on overall farming income	0	1 017	979	1 039	1 033
Miscellaneous payments	153	7	1	11	9
Percentage PSE	**33**	**18**	**17**	**17**	**19**
Producer NPC	**1.42**	**1.15**	**1.15**	**1.15**	**1.16**
Producer NAC	**1.51**	**1.22**	**1.20**	**1.21**	**1.24**
General Services Support Estimate (GSSE)	**1 907**	**1 866**	**1 967**	**1 767**	**1 865**
Research and development	332	379	389	398	350
Agricultural schools	277	262	284	252	248
Inspection services	327	389	394	372	400
Infrastructure	473	328	342	305	337
Marketing and promotion	498	509	558	439	530
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**20.5**	**25.1**	**27.8**	**24.8**	**22.6**
Consumer Support Estimate (CSE)	**-3 286**	**-3 238**	**-3 186**	**-3 189**	**-3 340**
Transfers to producers from consumers	-3 607	-3 158	-3 110	-3 105	-3 260
Other transfers from consumers	-41	-80	-77	-83	-80
Transfers to consumers from taxpayers	53	0	0	0	0
Excess feed cost	310	0	0	0	0
Percentage CSE	**-22**	**-16**	**-16**	**-16**	**-16**
Consumer NPC	**1.32**	**1.19**	**1.19**	**1.19**	**1.19**
Consumer NAC	**1.28**	**1.19**	**1.19**	**1.19**	**1.19**
Total Support Estimate (TSE)	**9 389**	**7 482**	**7 080**	**7 115**	**8 250**
Transfers from consumers	3 649	3 238	3 186	3 189	3 340
Transfers from taxpayers	5 782	4 323	3 970	4 010	4 990
Budget revenues	-41	-80	-77	-83	-80
TSE as a share of GDP (%)	**1.7**	**0.8**	**0.8**	**0.7**	**0.8**
GDP deflator 1995 = 100	**81.3**	**104.3**	**102.1**	**103.7**	**107.1**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs.
MPS commodities for Canada are: wheat, maize, other grains, oilseeds, milk, beef and veal, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.17. **Canada: Main indicators by commodity**

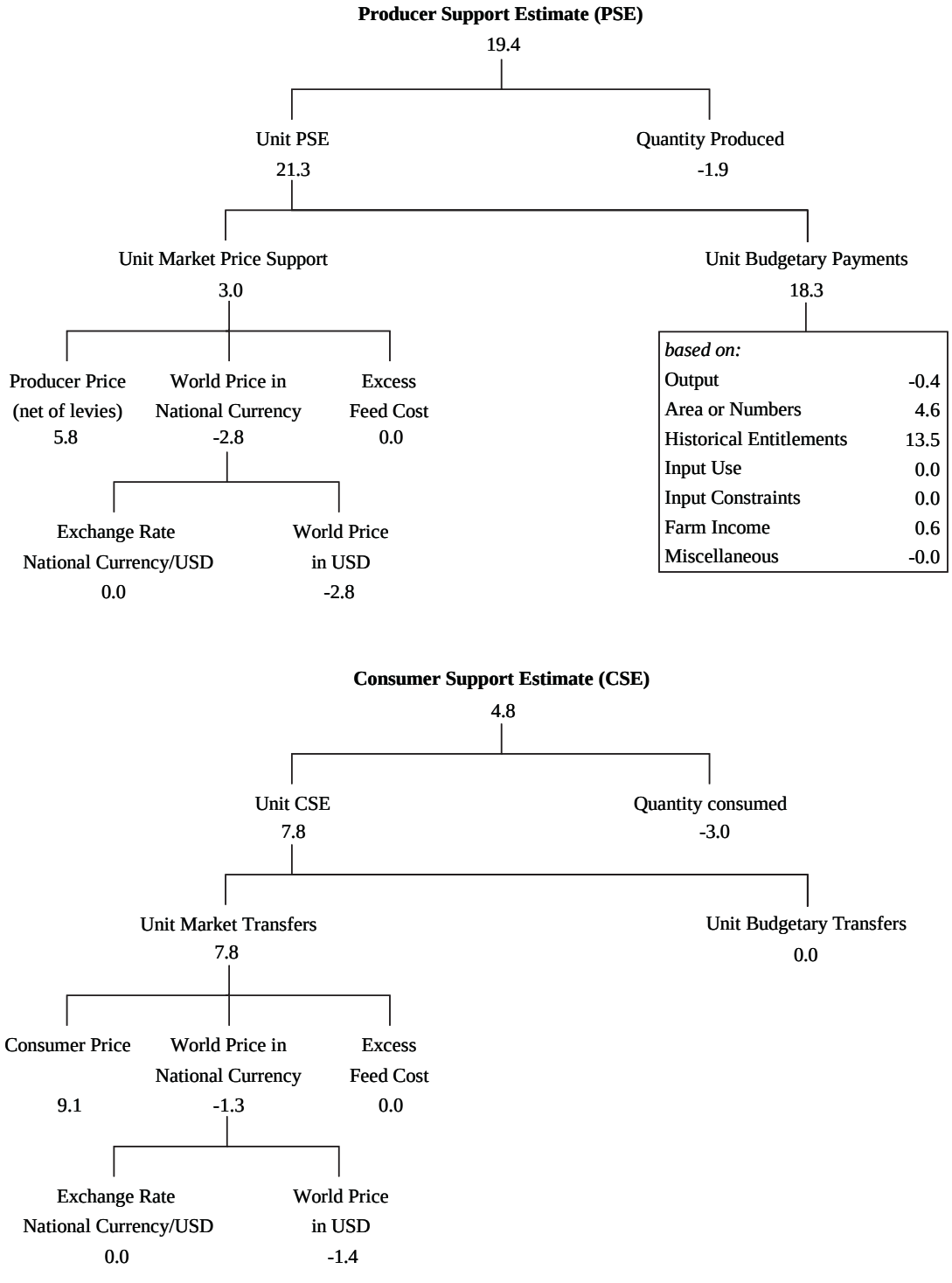
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (CAD mn)	2 048	447	331	350	659
	Percentage PSE	45	12	9	10	17
	Producer NPC	1.48	1.00	1.00	1.00	1.01
	Producer NAC	1.83	1.14	1.10	1.11	1.20
	Percentage CSE	-25	0	0	0	0
	Consumer NPC	1.54	1.00	1.00	1.00	1.00
	Consumer NAC	1.38	1.00	1.00	1.00	1.00
Maize	PSE (CAD mn)	210	170	98	172	240
	Percentage PSE	24	14	8	14	20
	Producer NPC	1.17	1.06	1.03	1.07	1.09
	Producer NAC	1.34	1.17	1.09	1.16	1.25
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.02	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Other grains	PSE (CAD mn)	711	111	77	75	181
	Percentage PSE	54	9	6	6	15
	Producer NPC	1.99	1.02	1.01	1.02	1.02
	Producer NAC	2.50	1.10	1.06	1.07	1.17
	Percentage CSE	4	0	0	0	0
	Consumer NPC	1.83	1.00	1.00	1.00	1.00
	Consumer NAC	0.97	1.00	1.00	1.00	1.00
Rice	PSE (CAD mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (CAD mn)	378	330	300	255	436
	Percentage PSE	25	10	8	8	15
	Producer NPC	1.19	1.00	1.00	1.01	1.01
	Producer NAC	1.35	1.12	1.09	1.08	1.18
	Percentage CSE	-6	0	0	0	0
	Consumer NPC	1.10	1.00	0.98	1.00	1.01
	Consumer NAC	1.07	1.00	1.00	1.00	1.00
Sugar	PSE (CAD mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk	PSE (CAD mn)	2 292	2 464	2 436	2 412	2 543
	Percentage PSE	61	58	59	57	59
	Producer NPC	3.09	2.36	2.39	2.31	2.39
	Producer NAC	2.61	2.40	2.42	2.35	2.43
	Percentage CSE	-63	-57	-57	-56	-58
	Consumer NPC	2.84	2.31	2.32	2.26	2.35
	Consumer NAC	2.84	2.31	2.32	2.26	2.35
Beef and Veal	PSE (CAD mn)	346	433	414	380	506
	Percentage PSE	9	8	8	7	9
	Producer NPC	1.07	1.03	1.05	1.02	1.03
	Producer NAC	1.10	1.09	1.09	1.08	1.10
	Percentage CSE	-2	-1	-1	0	0
	Consumer NPC	1.58	1.49	1.57	1.39	1.50
	Consumer NAC	1.02	1.01	1.01	1.00	1.00

Table III.17. **Canada: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (CAD mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool	PSE (CAD mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (CAD mn)	97	248	166	287	289
	Percentage PSE	5	9	7	11	8
	Producer NPC	1.04	1.04	1.03	1.06	1.04
	Producer NAC	1.05	1.09	1.07	1.12	1.09
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Poultry	PSE (CAD mn)	191	43	59	33	36
	Percentage PSE	18	3	4	2	2
	Producer NPC	1.19	1.01	1.02	1.01	1.01
	Producer NAC	1.23	1.03	1.04	1.02	1.02
	Percentage CSE	-15	-1	-2	-1	-1
	Consumer NPC	1.19	1.01	1.02	1.01	1.01
	Consumer NAC	1.19	1.01	1.02	1.01	1.01
Eggs	PSE (CAD mn)	109	86	91	90	78
	Percentage PSE	22	17	19	18	15
	Producer NPC	1.28	1.16	1.17	1.17	1.14
	Producer NAC	1.31	1.21	1.23	1.22	1.18
	Percentage CSE	-19	-16	-18	-17	-14
	Consumer NPC	1.34	0.99	0.95	1.00	1.01
	Consumer NAC	1.28	1.19	1.21	1.20	1.16
Other commodities	PSE (CAD mn)	1 048	1 284	1 141	1 293	1 417
	Percentage PSE	39	18	17	18	19
	Producer NPC	1.42	1.15	1.15	1.15	1.16
	Producer NAC	1.65	1.22	1.20	1.23	1.23
	Percentage CSE	-23	-16	-16	-16	-16
	Consumer NPC	1.32	1.19	1.19	1.19	1.19
	Consumer NAC	1.31	1.19	1.19	1.19	1.19
All commodities	PSE (CAD mn)	7 429	5 615	5 113	5 348	6 385
	Percentage PSE	33	18	17	17	19
	Producer NPC	1.42	1.15	1.15	1.15	1.16
	Producer NAC	1.51	1.22	1.20	1.21	1.24
	Percentage CSE	-22	-16	-16	-16	-16
	Consumer NPC	1.32	1.19	1.19	1.19	1.19
	Consumer NAC	1.28	1.19	1.19	1.19	1.19

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.3. **Canada: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed 3.0 percentage points to the 19.4 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.18. **Czech Republic: Estimates of support to agriculture**
(CZK million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**91 684**	**117 084**	**129 057**	**114 295**	**107 900**
of which share of MPS commodities (%)	*68*	*73*	*72*	*70*	*76*
Total value of consumption (at farm gate)	**74 454**	**104 927**	**115 144**	**100 598**	**99 038**
Producer Support Estimate (PSE)	**61 507**	**24 551**	**27 050**	**25 119**	**21 485**
Market Price Support (MPS)	47 912	15 805	18 894	16 156	12 366
of which MPS commodities	*32 674*	*11 461*	*13 668*	*11 258*	*9 458*
Payments based on output	2 088	120	0	0	360
Payments based on area planted/animal numbers	0	1 131	1 032	1 195	1 166
Payments based on historical entitlements	0	3 318	2 882	3 755	3 317
Payments based on input use	3 001	4 053	4 186	3 927	4 047
Payments based on input constraints	0	74	48	84	89
Payments based on overall farming income	8 506	50	8	2	140
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**59**	**19**	**20**	**20**	**18**
Producer NPC	**2.43**	**1.13**	**1.16**	**1.13**	**1.10**
Producer NAC	**2.47**	**1.24**	**1.25**	**1.26**	**1.22**
General Services Support Estimate (GSSE)	**781**	**3 615**	**3 408**	**3 605**	**3 833**
Research and development	142	947	893	979	970
Agricultural schools	583	1 614	1 612	1 607	1 624
Inspection services	56	57	35	45	90
Infrastructure	0	987	858	964	1 139
Marketing and promotion	0	10	10	10	10
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**1.1**	**13.0**	**11.2**	**12.6**	**15.1**
Consumer Support Estimate (CSE)	**-28 628**	**-14 062**	**-15 798**	**-15 257**	**-11 133**
Transfers to producers from consumers	-41 272	-12 179	-15 355	-12 187	-8 996
Other transfers from consumers	-78	-14	-94	-171	222
Transfers to consumers from taxpayers	10 895	0	0	0	0
Excess feed cost	1 827	-1 869	-349	-2 899	-2 359
Percentage CSE	**-45**	**-13**	**-14**	**-15**	**-11**
Consumer NPC	**2.36**	**1.13**	**1.15**	**1.14**	**1.10**
Consumer NAC	**1.87**	**1.15**	**1.16**	**1.18**	**1.13**
Total Support Estimate (TSE)	**73 184**	**28 167**	**30 458**	**28 724**	**25 318**
Transfers from consumers	41 350	12 194	15 449	12 358	8 774
Transfers from taxpayers	31 912	15 987	15 103	16 538	16 321
Budget revenues	-78	-14	-94	-171	222
TSE as a share of GDP (%)	**n.c.**	**1.5**	**1.7**	**1.6**	**1.3**
GDP deflator 1995 = 100	**n.c.**	**131.2**	**128.3**	**131.4**	**133.9**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for the Czech Republic are: wheat, other grains, oilseeds, sugar, milk, beef and veal, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.19. **Czech Republic: Main indicators by commodity**

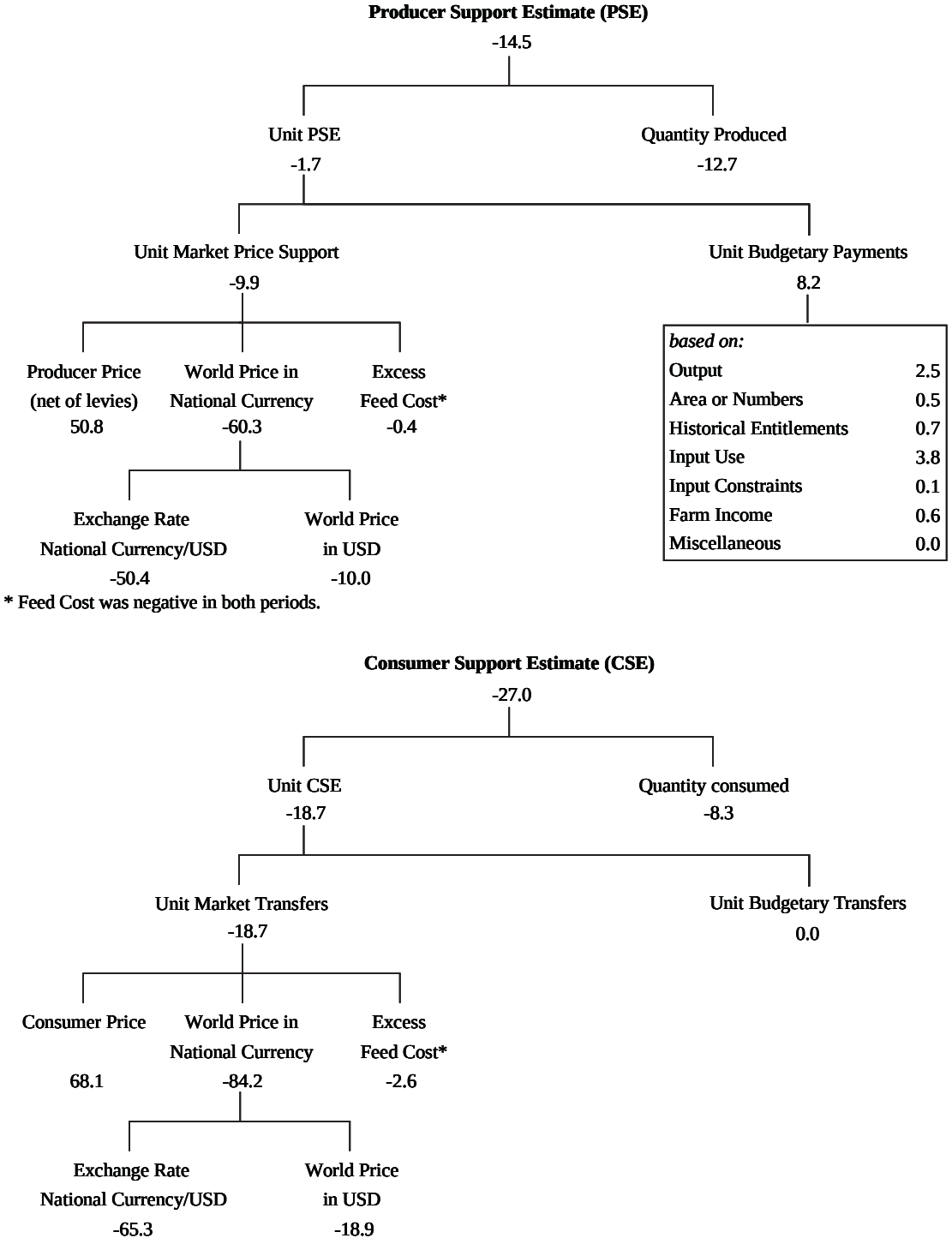
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (CZK mn)	1 617	-856	-983	-1 618	32
	Percentage PSE	25	-7	-7	-14	0
	Producer NPC	1.26	0.88	0.89	0.82	0.93
	Producer NAC	1.46	0.94	0.93	0.88	1.00
	Percentage CSE	7	3	5	3	2
	Consumer NPC	1.24	0.88	0.89	0.82	0.93
	Consumer NAC	0.93	0.97	0.96	0.97	0.98
Maize	PSE (CZK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains	PSE (CZK mn)	2 686	-712	1 049	-1 404	-1 781
	Percentage PSE	52	-15	15	-25	-34
	Producer NPC	1.99	0.87	1.15	0.77	0.69
	Producer NAC	2.29	0.91	1.18	0.80	0.75
	Percentage CSE	-10	7	-3	9	14
	Consumer NPC	1.95	0.87	1.15	0.77	0.69
	Consumer NAC	1.11	0.94	1.03	0.92	0.88
Rice	PSE (CZK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (CZK mn)	556	-1 040	-1 548	-1 172	-401
	Percentage PSE	45	-21	-32	-23	-7
	Producer NPC	1.62	0.79	0.74	0.78	0.86
	Producer NAC	1.86	0.84	0.76	0.82	0.93
	Percentage CSE	-35	27	36	28	16
	Consumer NPC	1.58	0.79	0.74	0.78	0.86
	Consumer NAC	1.58	0.79	0.74	0.78	0.86
Sugar	PSE (CZK mn)	1 514	583	674	453	622
	Percentage PSE	64	22	23	21	22
	Producer NPC	2.52	1.20	1.23	1.17	1.19
	Producer NAC	2.91	1.28	1.30	1.26	1.29
	Percentage CSE	-35	-17	-19	-15	-16
	Consumer NPC	2.47	1.20	1.23	1.17	1.19
	Consumer NAC	1.61	1.20	1.23	1.17	1.19
Milk	PSE (CZK mn)	13 311	7 880	9 942	7 573	6 125
	Percentage PSE	63	36	44	35	28
	Producer NPC	2.75	1.43	1.64	1.38	1.27
	Producer NAC	2.83	1.57	1.78	1.54	1.39
	Percentage CSE	4	-29	-39	-27	-21
	Consumer NPC	2.70	1.43	1.64	1.38	1.26
	Consumer NAC	1.04	1.43	1.64	1.38	1.26
Beef and Veal	PSE (CZK mn)	9 305	662	31	699	1 256
	Percentage PSE	74	7	0	7	14
	Producer NPC	3.79	0.96	0.90	0.95	1.04
	Producer NAC	3.85	1.08	1.00	1.08	1.17
	Percentage CSE	-64	4	11	5	-4
	Consumer NPC	3.71	0.96	0.90	0.95	1.04
	Consumer NAC	2.92	0.96	0.90	0.95	1.04

Table III.19. **Czech Republic: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (CZK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool	PSE (CZK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (CZK mn)	8 163	5 318	4 465	7 132	4 358
	Percentage PSE	59	28	19	41	24
	Producer NPC	2.73	1.24	1.17	1.42	1.13
	Producer NAC	2.49	1.41	1.24	1.68	1.31
	Percentage CSE	-60	-18	-14	-30	-11
	Consumer NPC	2.67	1.24	1.17	1.42	1.13
	Consumer NAC	2.52	1.24	1.17	1.42	1.13
Poultry	PSE (CZK mn)	2 208	3 122	2 984	3 068	3 313
	Percentage PSE	66	46	42	46	50
	Producer NPC	2.89	1.69	1.62	1.64	1.80
	Producer NAC	3.03	1.87	1.74	1.87	2.00
	Percentage CSE	-61	-41	-38	-39	-44
	Consumer NPC	2.83	1.69	1.62	1.64	1.80
	Consumer NAC	2.56	1.69	1.62	1.64	1.80
Eggs	PSE (CZK mn)	1 935	2 518	2 763	2 412	2 377
	Percentage PSE	53	41	41	44	38
	Producer NPC	2.32	1.53	1.59	1.57	1.45
	Producer NAC	2.22	1.70	1.70	1.80	1.61
	Percentage CSE	-49	-35	-37	-36	-31
	Consumer NPC	2.27	1.53	1.59	1.57	1.45
	Consumer NAC	2.10	1.53	1.59	1.57	1.45
Other commodities	PSE (CZK mn)	20 212	7 078	7 673	7 976	5 584
	Percentage PSE	58	20	20	21	20
	Producer NPC	2.43	1.13	1.16	1.13	1.10
	Producer NAC	2.44	1.26	1.25	1.27	1.25
	Percentage CSE	-56	-12	-13	-12	-9
	Consumer NPC	2.36	1.13	1.15	1.14	1.10
	Consumer NAC	2.36	1.13	1.15	1.14	1.10
All commodities	PSE (CZK mn)	61 507	24 551	27 050	25 119	21 485
	Percentage PSE	59	19	20	20	18
	Producer NPC	2.43	1.13	1.16	1.13	1.10
	Producer NAC	2.47	1.24	1.25	1.26	1.22
	Percentage CSE	-45	-13	-14	-15	-11
	Consumer NPC	2.36	1.13	1.15	1.14	1.10
	Consumer NAC	1.87	1.15	1.16	1.18	1.13

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.4. **Czech Republic: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -9.9 percentage points to the -14.5 per cent change in PSE. (*) Feed Cost was negative in both periods.
See Part II.4. for detailed explanations.

Table III.20. **European Union: Estimates of support to agriculture**
(Euro million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**182 471**	**213 454**	**213 534**	**211 826**	**215 003**
of which share of MPS commodities (%)	*70*	*68*	*68*	*68*	*68*
Total value of consumption (at farm gate)	**164 178**	**168 109**	**169 280**	**165 174**	**169 873**
Producer Support Estimate (PSE)	**85 829**	**101 350**	**98 596**	**107 546**	**97 907**
Market Price Support (MPS)	73 338	62 056	60 248	68 399	57 522
of which MPS commodities	*51 103*	*41 962*	*40 747*	*46 249*	*38 891*
Payments based on output	4 823	4 804	4 581	4 718	5 114
Payments based on area planted/animal numbers	2 418	24 101	23 540	23 874	24 890
Payments based on historical entitlements	0	665	728	644	624
Payments based on input use	4 528	6 864	6 820	7 270	6 500
Payments based on input constraints	695	3 110	3 090	3 046	3 194
Payments based on overall farming income	0	0	1	0	0
Miscellaneous payments	27	-252	-411	-406	62
Percentage PSE	**44**	**40**	**39**	**43**	**38**
Producer NPC	**1.85**	**1.45**	**1.44**	**1.55**	**1.37**
Producer NAC	**1.79**	**1.67**	**1.64**	**1.75**	**1.62**
General Services Support Estimate (GSSE)	**10 317**	**9 881**	**8 901**	**10 185**	**10 557**
Research and development	1 042	1 517	1 358	1 649	1 544
Agricultural schools	93	669	698	698	612
Inspection services	156	230	288	207	196
Infrastructure	1 121	1 721	1 469	1 755	1 938
Marketing and promotion	2 989	3 353	3 088	3 515	3 455
Public stockholding	4 884	1 679	1 771	1 611	1 655
Miscellaneous	33	712	228	750	1 157
GSSE as a share of TSE (%)	**10.3**	**8.6**	**8.0**	**8.4**	**9.4**
Consumer Support Estimate (CSE)	**-64 169**	**-53 798**	**-52 612**	**-60 427**	**-48 356**
Transfers to producers from consumers	-75 122	-59 352	-58 905	-66 896	-52 257
Other transfers from consumers	-1 545	-289	-334	-332	-200
Transfers to consumers from taxpayers	4 541	3 842	3 863	3 822	3 841
Excess feed cost	7 958	2 001	2 765	2 980	259
Percentage CSE	**-40**	**-33**	**-32**	**-37**	**-29**
Consumer NPC	**1.88**	**1.56**	**1.54**	**1.69**	**1.45**
Consumer NAC	**1.67**	**1.49**	**1.47**	**1.60**	**1.41**
Total Support Estimate (TSE)	**100 687**	**115 072**	**111 360**	**121 553**	**112 305**
Transfers from consumers	76 668	59 641	59 239	67 228	52 457
Transfers from taxpayers	25 565	55 720	52 455	54 657	60 048
Budget revenues	-1 545	-289	-334	-332	-200
TSE as a share of GDP (%)	**2.6**	**1.4**	**1.5**	**1.5**	**1.3**
GDP deflator 1995 = 100	**71.7**	**108.0**	**106.5**	**108.0**	**109.5**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for the European Community are: wheat, maize, other grains, rice, oilseeds, sugar, milk, beef and veal, sheepmeat, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.21. **European Union: Main indicators by commodity**

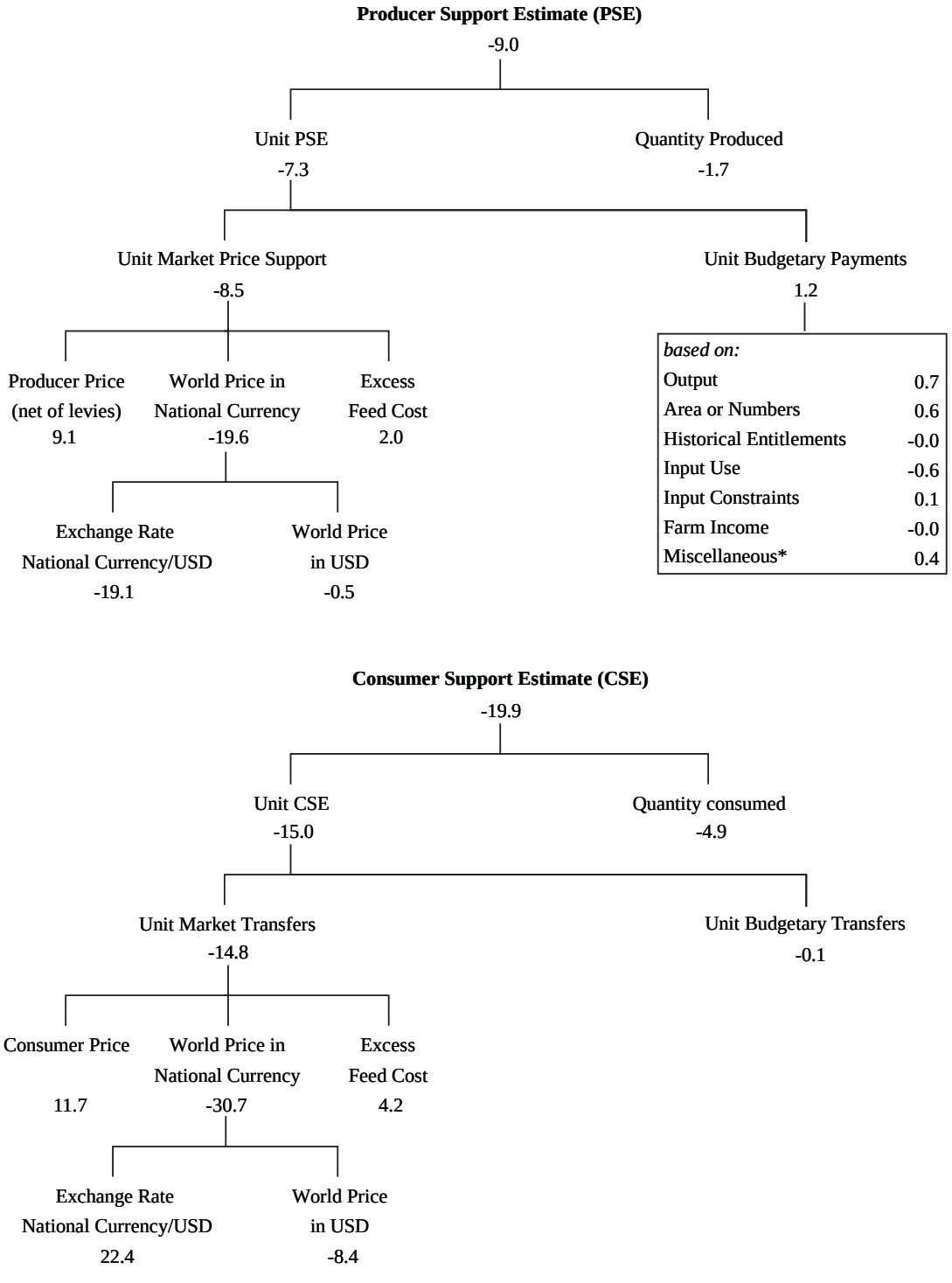
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (Euro mn)	7 874	9 496	9 685	10 234	8 570
	Percentage PSE	52	49	48	54	43
	Producer NPC	2.09	1.16	1.20	1.29	1.00
	Producer NAC	2.12	1.96	1.94	2.16	1.77
	Percentage CSE	-33	-6	-8	-11	2
	Consumer NPC	2.07	1.16	1.20	1.29	0.99
	Consumer NAC	1.49	1.07	1.09	1.13	0.98
Maize	PSE (Euro mn)	2 862	2 308	2 121	2 448	2 355
	Percentage PSE	52	38	37	40	36
	Producer NPC	2.20	1.22	1.25	1.33	1.08
	Producer NAC	2.16	1.61	1.60	1.67	1.56
	Percentage CSE	-9	-2	-2	-4	0
	Consumer NPC	2.20	1.21	1.25	1.32	1.07
	Consumer NAC	1.10	1.02	1.02	1.04	1.00
Other grains	PSE (Euro mn)	5 186	6 392	7 311	6 670	5 196
	Percentage PSE	56	58	65	61	46
	Producer NPC	2.42	1.35	1.61	1.44	1.00
	Producer NAC	2.40	2.45	2.88	2.60	1.86
	Percentage CSE	-13	-5	-10	-7	2
	Consumer NPC	2.42	1.34	1.61	1.44	0.99
	Consumer NAC	1.15	1.05	1.11	1.08	0.98
Rice	PSE (Euro mn)	391	147	224	146	71
	Percentage PSE	57	17	26	17	8
	Producer NPC	2.53	1.02	1.18	0.99	0.89
	Producer NAC	2.32	1.21	1.35	1.20	1.09
	Percentage CSE	-58	0	-15	1	14
	Consumer NPC	2.43	1.02	1.18	0.99	0.88
	Consumer NAC	2.43	1.01	1.17	0.99	0.88
Oilseeds	PSE (Euro mn)	2 828	1 188	1 090	1 212	1 261
	Percentage PSE	59	27	22	28	30
	Producer NPC	2.38	1.00	1.00	1.00	1.01
	Producer NAC	2.44	1.37	1.29	1.39	1.42
	Percentage CSE	1	0	0	0	0
	Consumer NPC	1.06	0.98	0.90	0.98	1.04
	Consumer NAC	0.99	1.00	1.00	1.00	1.00
Sugar	PSE (Euro mn)	2 877	2 799	2 699	3 138	2 559
	Percentage PSE	60	53	52	58	49
	Producer NPC	3.32	2.61	2.44	3.00	2.39
	Producer NAC	2.52	2.14	2.07	2.39	1.96
	Percentage CSE	-61	-51	-51	-54	-50
	Consumer NPC	3.90	3.01	2.82	2.66	2.56
	Consumer NAC	2.61	2.06	2.02	2.16	1.99
Milk	PSE (Euro mn)	18 054	17 165	19 310	16 704	15 481
	Percentage PSE	57	48	54	48	43
	Producer NPC	2.73	1.91	2.15	1.88	1.70
	Producer NAC	2.34	1.95	2.18	1.93	1.75
	Percentage CSE	-59	-45	-51	-44	-38
	Consumer NPC	2.72	1.90	2.14	1.88	1.69
	Consumer NAC	2.49	1.82	2.05	1.80	1.62
Beef and Veal	PSE (Euro mn)	13 676	20 588	20 543	21 364	19 856
	Percentage PSE	59	76	77	77	75
	Producer NPC	1.97	1.92	1.89	1.98	1.89
	Producer NAC	2.57	4.18	4.27	4.34	3.93
	Percentage CSE	-58	-67	-67	-68	-65
	Consumer NPC	1.62	1.38	1.33	1.44	1.36
	Consumer NAC	2.53	2.99	3.01	3.09	2.87

Table III.21. **European Union: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (Euro mn)	3 647	3 614	3 548	3 912	3 383
	Percentage PSE	70	56	57	59	52
	Producer NPC	2.86	1.31	1.38	1.37	1.18
	Producer NAC	3.47	2.29	2.34	2.44	2.08
	Percentage CSE	-64	-23	-28	-27	-15
	Consumer NPC	2.86	1.31	1.38	1.37	1.18
	Consumer NAC	2.86	1.31	1.38	1.37	1.18
Wool	PSE (Euro mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (Euro mn)	1 170	5 064	2 267	7 175	5 749
	Percentage PSE	7	25	11	39	25
	Producer NPC	1.15	1.21	1.08	1.37	1.19
	Producer NAC	1.09	1.36	1.13	1.63	1.33
	Percentage CSE	-17	-25	-11	-41	-22
	Consumer NPC	0.87	0.83	0.73	0.90	0.86
	Consumer NAC	1.22	1.36	1.12	1.69	1.28
Poultry	PSE (Euro mn)	1 040	2 782	954	2 697	4 695
	Percentage PSE	14	33	10	32	57
	Producer NPC	1.49	1.36	1.12	1.38	1.59
	Producer NAC	1.17	1.64	1.12	1.48	2.33
	Percentage CSE	-33	-35	-13	-36	-55
	Consumer NPC	1.46	1.02	0.95	1.05	1.06
	Consumer NAC	1.51	1.65	1.15	1.56	2.25
Eggs	PSE (Euro mn)	660	506	493	627	398
	Percentage PSE	14	12	11	15	9
	Producer NPC	1.28	1.12	1.13	1.19	1.06
	Producer NAC	1.16	1.13	1.12	1.17	1.10
	Percentage CSE	-19	-10	-10	-15	-6
	Consumer NPC	1.14	1.13	1.22	1.25	0.93
	Consumer NAC	1.24	1.12	1.12	1.17	1.07
Other commodities	PSE (Euro mn)	25 566	29 301	28 352	31 217	28 334
	Percentage PSE	40	28	28	30	28
	Producer NPC	1.85	1.45	1.44	1.55	1.37
	Producer NAC	1.66	1.40	1.39	1.43	1.38
	Percentage CSE	-44	-33	-32	-38	-28
	Consumer NPC	1.88	1.56	1.54	1.69	1.45
	Consumer NAC	1.79	1.49	1.48	1.61	1.39
All commodities	PSE (Euro mn)	85 829	101 350	98 596	107 546	97 907
	Percentage PSE	44	40	39	43	38
	Producer NPC	1.85	1.45	1.44	1.55	1.37
	Producer NAC	1.79	1.67	1.64	1.75	1.62
	Percentage CSE	-40	-33	-32	-37	-29
	Consumer NPC	1.88	1.56	1.54	1.69	1.45
	Consumer NAC	1.67	1.49	1.47	1.60	1.41

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.5. **European Union: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -8.5 percentage points to the -9.0 per cent change in PSE.
See Part II.4. for detailed explanations. (*) Miscellaneous was negative in the first period, and positive in the second period.

Table III.22. **Hungary: Estimates of support to agriculture**
(HUF million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**287 762**	**1 123 793**	**1 071 100**	**1 074 402**	**1 225 877**
of which share of MPS commodities (%)	*69*	*67*	*68*	*68*	*65*
Total value of consumption (at farm gate)	**239 641**	**904 360**	**770 262**	**889 776**	**1 053 042**
Producer Support Estimate (PSE)	**124 997**	**244 660**	**221 088**	**271 457**	**241 435**
Market Price Support (MPS)	94 532	140 070	124 232	159 917	136 061
of which MPS commodities	*64 804*	*93 799*	*84 435*	*108 100*	*88 863*
Payments based on output	0	22 981	21 399	31 178	16 367
Payments based on area planted/animal numbers	0	8 909	0	11 149	15 578
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	10 833	64 337	62 043	61 056	69 912
Payments based on input constraints	0	691	930	664	480
Payments based on overall farming income	18 832	7 476	12 484	7 250	2 694
Miscellaneous payments	800	195	0	243	343
Percentage PSE	**39**	**20**	**19**	**23**	**18**
Producer NPC	**1.52**	**1.15**	**1.11**	**1.19**	**1.14**
Producer NAC	**1.66**	**1.25**	**1.23**	**1.30**	**1.22**
General Services Support Estimate (GSSE)	**3 437**	**51 688**	**36 704**	**55 626**	**62 735**
Research and development	137	4 205	3 734	3 977	4 904
Agricultural schools	199	3 726	2 234	3 944	4 999
Inspection services	1 882	35 600	28 584	37 095	41 120
Infrastructure	1 220	4 922	960	7 314	6 491
Marketing and promotion	0	3 236	1 192	3 295	5 221
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**2.5**	**17.2**	**14.2**	**17.0**	**20.5**
Consumer Support Estimate (CSE)	**-66 358**	**-115 924**	**-87 199**	**-144 105**	**-116 469**
Transfers to producers from consumers	-78 732	-101 030	-61 792	-128 812	-112 485
Other transfers from consumers	-253	-412	57	-222	-1 072
Transfers to consumers from taxpayers	12 233	833	0	1 000	1 500
Excess feed cost	394	-15 316	-25 464	-16 072	-4 412
Percentage CSE	**-29**	**-13**	**-11**	**-16**	**-11**
Consumer NPC	**1.52**	**1.13**	**1.09**	**1.17**	**1.12**
Consumer NAC	**1.42**	**1.15**	**1.13**	**1.19**	**1.12**
Total Support Estimate (TSE)	**140 668**	**297 182**	**257 792**	**328 083**	**305 670**
Transfers from consumers	78 985	101 442	61 735	129 033	113 557
Transfers from taxpayers	61 936	196 152	196 000	199 271	193 185
Budget revenues	-253	-412	57	-222	-1 072
TSE as a share of GDP (%)	**n.c.**	**2.6**	**2.6**	**2.9**	**2.3**
GDP deflator 1995 = 100	**n.c.**	**176.0**	**161.7**	**176.2**	**190.1**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Hungary are: wheat, maize, other grains, oilseeds, sugar, milk, beef and veal, sheepmeat, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.23. **Hungary: Main indicators by commodity**

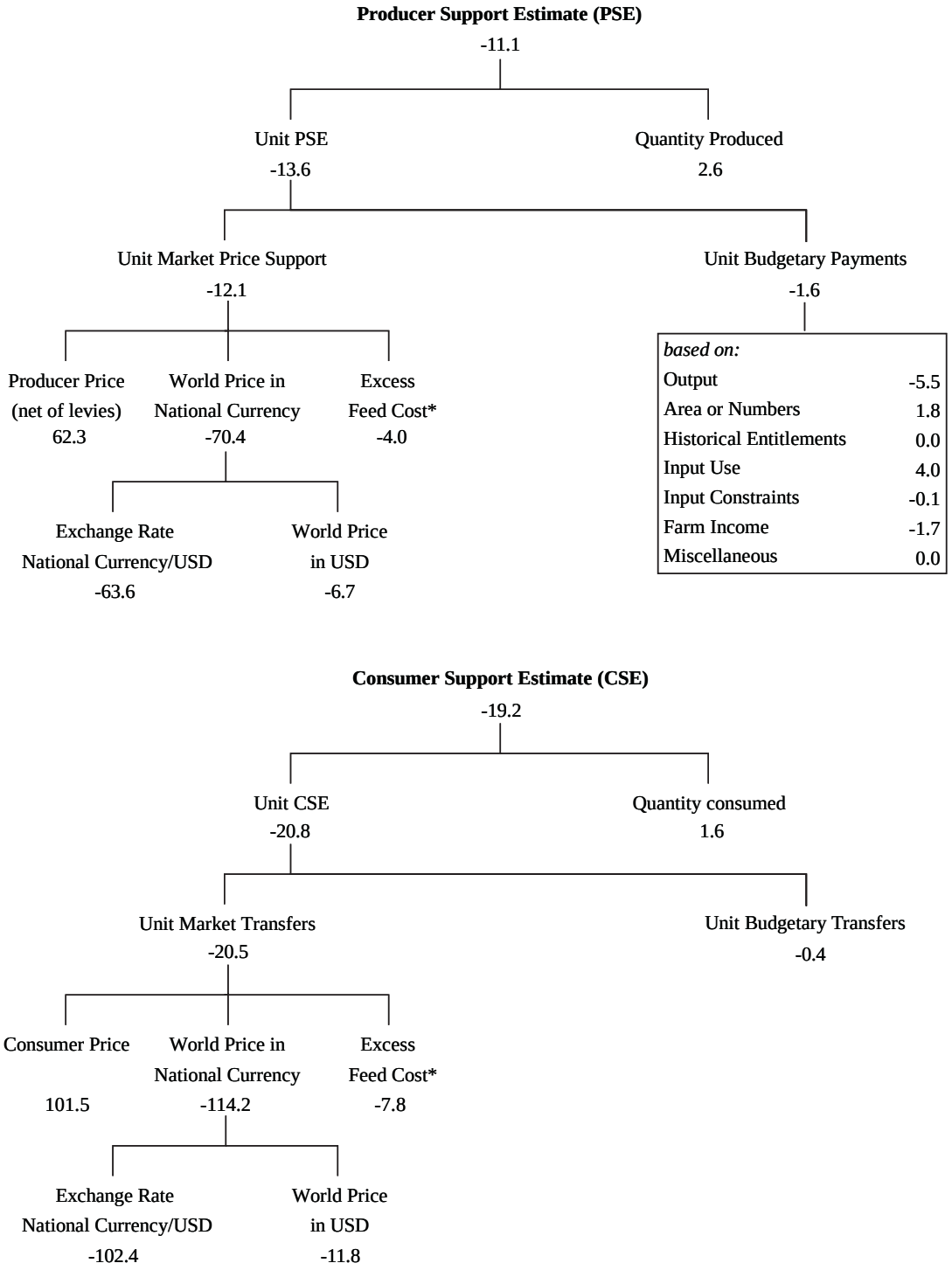
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (HUF mn)	2 602	4 580	-14 424	9 619	18 545
	Percentage PSE	11	5	-15	15	16
	Producer NPC	1.04	1.01	0.81	1.09	1.11
	Producer NAC	1.15	1.08	0.87	1.17	1.20
	Percentage CSE	0	3	18	-1	-7
	Consumer NPC	1.04	0.97	0.80	1.01	1.11
	Consumer NAC	1.01	0.98	0.85	1.01	1.08
Maize	PSE (HUF mn)	2 442	-19 450	-36 654	-22 684	988
	Percentage PSE	8	-16	-35	-15	1
	Producer NPC	1.01	0.81	0.69	0.81	0.94
	Producer NAC	1.11	0.87	0.74	0.87	1.01
	Percentage CSE	0.3	10	16	11	3
	Consumer NPC	1.01	0.80	0.68	0.77	0.93
	Consumer NAC	1.00	0.91	0.86	0.90	0.97
Other grains	PSE (HUF mn)	1 453	2 491	4 064	2 573	836
	Percentage PSE	37	10	15	11	3
	Producer NPC	1.55	1.03	1.10	1.04	0.96
	Producer NAC	1.72	1.11	1.18	1.12	1.03
	Percentage CSE	-9	-1	-3	-1	1
	Consumer NPC	1.55	1.02	1.08	1.03	0.96
	Consumer NAC	1.10	1.01	1.03	1.01	0.99
Rice	PSE (HUF mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (HUF mn)	2 047	-1 882	-4 471	-1 486	310
	Percentage PSE	21	-5	-11	-4	1
	Producer NPC	1.21	0.89	0.84	0.90	0.94
	Producer NAC	1.33	0.96	0.90	0.97	1.01
	Percentage CSE	-13	13	21	12	7
	Consumer NPC	1.21	0.89	0.83	0.90	0.94
	Consumer NAC	1.21	0.89	0.83	0.90	0.94
Sugar	PSE (HUF mn)	2 968	7 462	7 673	9 689	5 024
	Percentage PSE	55	46	44	56	38
	Producer NPC	2.17	1.76	1.68	2.10	1.51
	Producer NAC	2.39	1.89	1.80	2.26	1.62
	Percentage CSE	-51	-41	-39	-51	-34
	Consumer NPC	2.17	1.73	1.65	2.04	1.51
	Consumer NAC	2.17	1.73	1.65	2.04	1.51
Milk	PSE (HUF mn)	10 388	71 375	65 415	77 304	71 407
	Percentage PSE	44	50	53	52	45
	Producer NPC	1.75	1.83	1.89	1.91	1.70
	Producer NAC	1.89	2.02	2.13	2.09	1.82
	Percentage CSE	-2	-43	-46	-45	-38
	Consumer NPC	1.75	1.77	1.85	1.83	1.63
	Consumer NAC	1.06	1.76	1.85	1.82	1.61
Beef and Veal	PSE (HUF mn)	10 449	-1 919	-1 817	-718	-3 224
	Percentage PSE	69	-8	-8	-3	-15
	Producer NPC	3.06	0.82	0.80	0.86	0.81
	Producer NAC	3.28	0.92	0.93	0.97	0.87
	Percentage CSE	-64	23	27	17	25
	Consumer NPC	3.06	0.81	0.79	0.85	0.80
	Consumer NAC	2.84	0.81	0.79	0.85	0.80

Table III.23. **Hungary: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (HUF mn)	1 697	-560	1 310	-1 175	-1 815
	Percentage PSE	39	-9	18	-17	-26
	Producer NPC	1.49	0.88	1.11	0.79	0.74
	Producer NAC	1.65	0.95	1.22	0.85	0.79
	Percentage CSE	-29	18	-8	28	35
	Consumer NPC	1.49	0.87	1.09	0.78	0.74
	Consumer NAC	1.41	0.87	1.09	0.78	0.74
Wool	PSE (HUF mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (HUF mn)	35 096	36 785	59 140	50 603	613
	Percentage PSE	55	20	32	28	0
	Producer NPC	2.06	1.14	1.27	1.23	0.93
	Producer NAC	2.28	1.29	1.46	1.39	1.00
	Percentage CSE	-48	-8	-19	-15	10
	Consumer NPC	2.06	1.11	1.24	1.18	0.91
	Consumer NAC	1.93	1.11	1.24	1.18	0.91
Poultry	PSE (HUF mn)	11 125	38 411	43 513	37 156	34 565
	Percentage PSE	41	35	36	36	32
	Producer NPC	1.53	1.36	1.34	1.37	1.36
	Producer NAC	1.70	1.53	1.56	1.56	1.48
	Percentage CSE	-28	-24	-23	-24	-24
	Consumer NPC	1.53	1.31	1.31	1.32	1.32
	Consumer NAC	1.40	1.31	1.31	1.32	1.32
Eggs	PSE (HUF mn)	5 412	29 332	26 936	28 641	32 418
	Percentage PSE	48	58	58	62	53
	Producer NPC	1.89	2.10	2.01	2.30	2.00
	Producer NAC	2.03	2.38	2.39	2.62	2.15
	Percentage CSE	-44	-52	-49	-56	-50
	Consumer NPC	1.89	2.08	1.97	2.29	2.00
	Consumer NAC	1.89	2.08	1.97	2.29	2.00
Other commodities	PSE (HUF mn)	39 319	78 036	70 404	81 935	81 767
	Percentage PSE	40	19	19	22	18
	Producer NPC	1.52	1.15	1.11	1.19	1.14
	Producer NAC	1.67	1.24	1.23	1.28	1.22
	Percentage CSE	-33	-11	-8	-15	-11
	Consumer NPC	1.52	1.13	1.09	1.17	1.12
	Consumer NAC	1.52	1.13	1.09	1.17	1.12
All commodities	PSE (HUF mn)	124 997	244 660	221 088	271 457	241 435
	Percentage PSE	39	20	19	23	18
	Producer NPC	1.52	1.15	1.11	1.19	1.14
	Producer NAC	1.66	1.25	1.23	1.30	1.22
	Percentage CSE	-29	-13	-11	-16	-11
	Consumer NPC	1.52	1.13	1.09	1.17	1.12
	Consumer NAC	1.42	1.15	1.13	1.19	1.12

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.6. **Hungary: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -12.1 percentage points to the -11.1 per cent change in PSE.
See Part II.4. for detailed explanations. (*) Feed Cost was negative in both periods.

Table III.24. **Iceland: Estimates of support to agriculture**
(ISK million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**9 644**	**11 766**	**11 574**	**11 849**	**11 876**
of which share of MPS commodities (%)	*81*	*75*	*74*	*75*	*75*
Total value of consumption (at farm gate)	**8 625**	**11 735**	**11 362**	**11 894**	**11 949**
Producer Support Estimate (PSE)	**7 937**	**11 418**	**11 422**	**11 622**	**11 209**
Market Price Support (MPS)	6 923	5 831	5 979	6 173	5 340
of which MPS commodities	*5 625*	*4 348*	*4 434*	*4 615*	*3 995*
Payments based on output	113	3 143	2 979	3 126	3 324
Payments based on area planted/animal numbers	48	0	0	0	0
Payments based on historical entitlements	0	1 599	1 535	1 599	1 664
Payments based on input use	853	845	929	724	881
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**	**66**	**67**	**67**	**63**
Producer NPC	**3.91**	**2.74**	**2.83**	**2.87**	**2.53**
Producer NAC	**3.93**	**2.93**	**3.04**	**3.05**	**2.72**
General Services Support Estimate (GSSE)	**935**	**1 365**	**1 349**	**1 513**	**1 231**
Research and development	93	189	182	195	190
Agricultural schools	149	378	367	407	359
Inspection services	39	144	101	177	154
Infrastructure	281	378	414	463	256
Marketing and promotion	10	27	27	27	27
Public stockholding	359	241	250	236	236
Miscellaneous	5	8	8	8	9
GSSE as a share of TSE (%)	**8.7**	**10.6**	**10.5**	**11.5**	**9.7**
Consumer Support Estimate (CSE)	**-4 669**	**-5 901**	**-5 891**	**-6 345**	**-5 468**
Transfers to producers from consumers	-6 303	-5 854	-5 897	-6 225	-5 441
Other transfers from consumers	-71	-176	-82	-178	-267
Transfers to consumers from taxpayers	1 705	128	87	58	240
Excess feed cost	0	0	0	0	0
Percentage CSE	**-67**	**-51**	**-52**	**-54**	**-47**
Consumer NPC	**3.84**	**2.06**	**2.11**	**2.17**	**1.91**
Consumer NAC	**3.13**	**2.04**	**2.09**	**2.16**	**1.88**
Total Support Estimate (TSE)	**10 577**	**12 911**	**12 859**	**13 194**	**12 681**
Transfers from consumers	6 374	6 030	5 979	6 403	5 708
Transfers from taxpayers	4 274	7 057	6 962	6 969	7 240
Budget revenues	-71	-176	-82	-178	-267
TSE as a share of GDP (%)	**5.0**	**2.1**	**2.2**	**2.1**	**1.9**
GDP deflator 1995 = 100	**49.7**	**115.5**	**111.1**	**115.2**	**120.1**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Iceland are: milk, beef and veal, sheepmeat, wool, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.25. **Iceland: Main indicators by commodity**

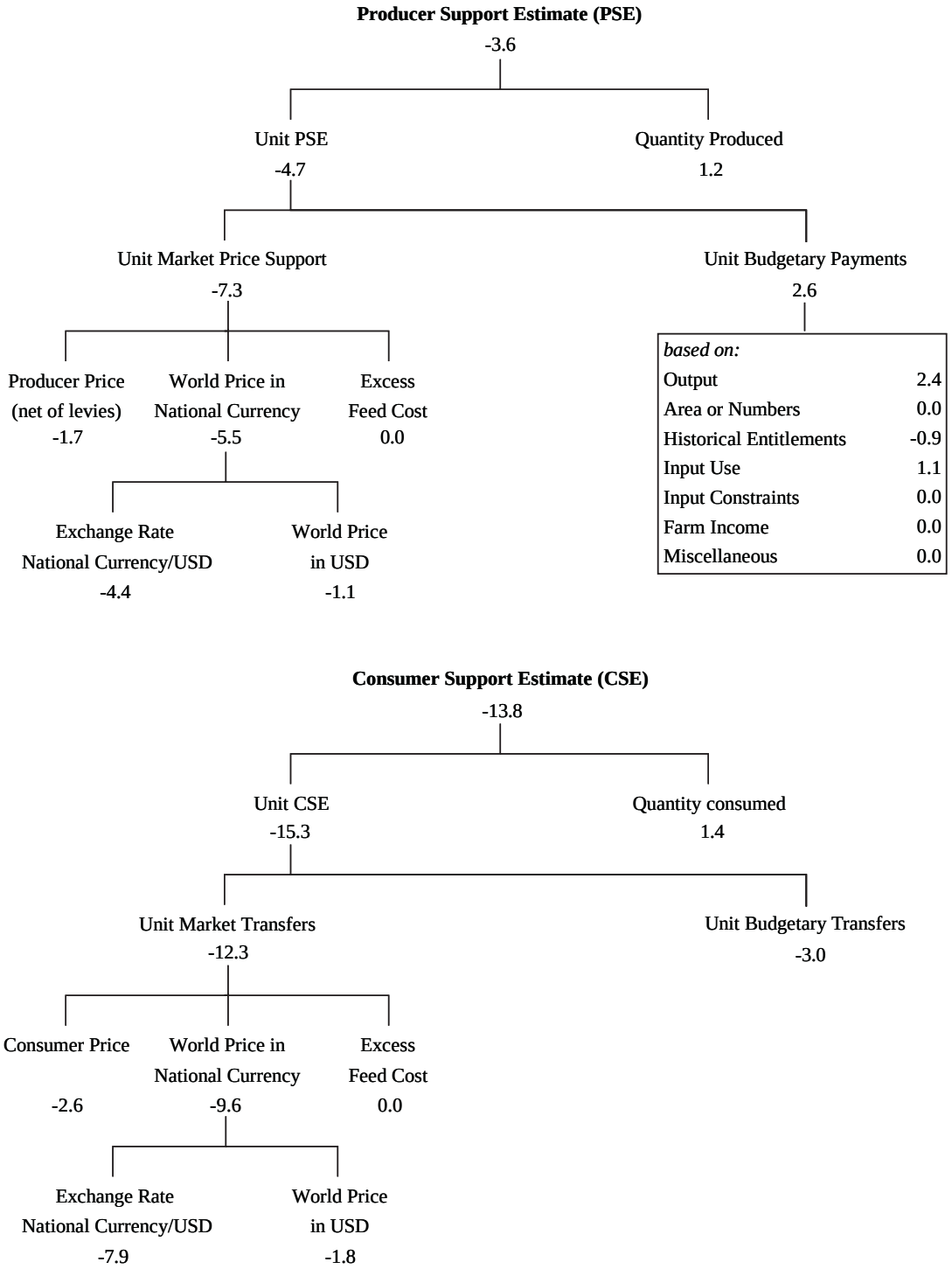
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (ISK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Maize	PSE (ISK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains	PSE (ISK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Rice	PSE (ISK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (ISK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Sugar	PSE (ISK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk	PSE (ISK mn)	2 736	5 498	5 428	5 413	5 652
	Percentage PSE	82	80	81	80	80
	Producer NPC	5.65	5.05	5.26	5.01	4.88
	Producer NAC	5.60	5.12	5.37	5.04	4.95
	Percentage CSE	-73	-63	-66	-63	-60
	Consumer NPC	5.62	2.67	2.82	2.65	2.53
	Consumer NAC	4.15	2.72	2.91	2.72	2.53
Beef and Veal	PSE (ISK mn)	347	521	508	547	506
	Percentage PSE	56	49	49	51	49
	Producer NPC	2.23	1.89	1.84	1.96	1.87
	Producer NAC	2.35	1.98	1.96	2.03	1.96
	Percentage CSE	-45	-47	-46	-49	-46
	Consumer NPC	2.21	1.87	1.83	1.94	1.85
	Consumer NAC	2.00	1.89	1.86	1.97	1.85

Table III.25. **Iceland: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (ISK mn)	2 407	1 931	2 027	2 000	1 765
	Percentage PSE	74	52	56	54	46
	Producer NPC	3.82	1.05	1.11	1.11	0.92
	Producer NAC	3.99	2.10	2.27	2.19	1.85
	Percentage CSE	-60	-3	-10	-11	10
	Consumer NPC	3.80	1.03	1.10	1.09	0.91
	Consumer NAC	2.67	1.04	1.11	1.12	0.91
Wool	PSE (ISK mn)	47	153	192	136	130
	Percentage PSE	25	62	68	63	55
	Producer NPC	1.32	2.67	3.17	2.66	2.18
	Producer NAC	1.33	2.69	3.16	2.69	2.22
	Percentage CSE	104	-188	137	-320	-380
	Consumer NPC	1.32	2.67	3.17	2.66	2.18
	Consumer NAC	0.49	- 0.13	0.42	- 0.45	- 0.36
Pigmeat	PSE (ISK mn)	321	575	517	709	499
	Percentage PSE	67	55	53	64	49
	Producer NPC	3.14	2.25	2.10	2.73	1.91
	Producer NAC	3.11	2.29	2.13	2.77	1.96
	Percentage CSE	-67	-55	-53	-64	-48
	Consumer NPC	2.95	2.25	2.10	2.73	1.91
	Consumer NAC	3.02	2.27	2.13	2.76	1.91
Poultry	PSE (ISK mn)	239	708	670	709	746
	Percentage PSE	87	85	84	86	87
	Producer NPC	8.34	7.15	6.38	7.32	7.74
	Producer NAC	7.73	6.85	6.16	6.99	7.41
	Percentage CSE	-87	-86	-85	-86	-87
	Consumer NPC	7.54	7.13	6.38	7.27	7.73
	Consumer NAC	7.80	7.18	6.46	7.36	7.72
Eggs	PSE (ISK mn)	304	353	343	375	341
	Percentage PSE	80	77	78	80	74
	Producer NPC	5.28	4.41	4.50	4.98	3.77
	Producer NAC	5.08	4.45	4.52	4.99	3.83
	Percentage CSE	-80	-77	-78	-80	-73
	Consumer NPC	5.02	4.40	4.50	4.95	3.76
	Consumer NAC	5.13	4.44	4.55	5.00	3.76
Other commodities	PSE (ISK mn)	1 535	1 680	1 738	1 733	1 570
	Percentage PSE	73	53	55	55	49
	Producer NPC	3.91	2.74	2.83	2.87	2.53
	Producer NAC	3.84	2.12	2.20	2.21	1.95
	Percentage CSE	-74	-51	-53	-54	-48
	Consumer NPC	3.84	2.06	2.11	2.17	1.91
	Consumer NAC	3.84	2.06	2.11	2.17	1.91
All commodities	PSE (ISK mn)	7 937	11 418	11 422	11 622	11 209
	Percentage PSE	75	66	67	67	63
	Producer NPC	3.91	2.74	2.83	2.87	2.53
	Producer NAC	3.93	2.93	3.04	3.05	2.72
	Percentage CSE	-67	-51	-52	-54	-47
	Consumer NPC	3.84	2.06	2.11	2.17	1.91
	Consumer NAC	3.13	2.04	2.09	2.16	1.88

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.7. **Iceland: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -7.3 percentage points to the -3.6 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.26. **Japan: Estimates of support to agriculture**
(JPY billion)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**10 936**	**9 686**	**10 060**	**9 498**	**9 501**
of which share of MPS commodities (%)	*59*	*54*	*53*	*54*	*54*
Total value of consumption (at farm gate)	**13 882**	**14 041**	**14 917**	**13 551**	**13 656**
Producer Support Estimate (PSE)	**7 784**	**6 483**	**6 557**	**6 437**	**6 456**
Market Price Support (MPS)	7 037	5 916	5 991	5 878	5 878
of which MPS commodities	*4 184*	*3 168*	*3 155*	*3 204*	*3 146*
Payments based on output	221	165	160	153	181
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	287	291	289	280
Payments based on input constraints	228	116	116	117	117
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**67**	**63**	**62**	**64**	**64**
Producer NPC	**2.87**	**2.87**	**2.73**	**2.91**	**2.97**
Producer NAC	**3.00**	**2.72**	**2.61**	**2.78**	**2.78**
General Services Support Estimate (GSSE)	**1 267**	**1 689**	**2 140**	**1 491**	**1 436**
Research and development	46	72	87	72	58
Agricultural schools	29	33	28	28	44
Inspection services	8	11	11	11	11
Infrastructure	1 008	1 352	1 771	1 166	1 119
Marketing and promotion	22	27	28	26	28
Public stockholding	43	49	57	46	46
Miscellaneous	110	144	158	143	131
GSSE as a share of TSE (%)	**14.1**	**20.5**	**24.6**	**18.8**	**18.2**
Consumer Support Estimate (CSE)	**-8 177**	**-7 508**	**-7 823**	**-7 372**	**-7 328**
Transfers to producers from consumers	-6 940	-5 916	-5 991	-5 878	-5 878
Other transfers from consumers	-1 269	-1 623	-1 867	-1 524	-1 478
Transfers to consumers from taxpayers	-16	10	14	9	6
Excess feed cost	47	21	21	21	21
Percentage CSE	**-59**	**-54**	**-52**	**-54**	**-54**
Consumer NPC	**2.46**	**2.16**	**2.11**	**2.20**	**2.17**
Consumer NAC	**2.44**	**2.15**	**2.10**	**2.19**	**2.16**
Total Support Estimate (TSE)	**9 036**	**8 182**	**8 711**	**7 937**	**7 898**
Transfers from consumers	8 209	7 539	7 858	7 402	7 356
Transfers from taxpayers	2 096	2 266	2 720	2 058	2 020
Budget revenues	-1 269	-1 623	-1 867	-1 524	-1 478
TSE as a share of GDP (%)	**2.6**	**1.6**	**1.7**	**1.6**	**1.6**
GDP deflator 1995 = 100	**90.8**	**98.1**	**99.5**	**98.1**	**96.8**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs.
MPS commodities for Japan are: wheat, other grains, rice, oilseeds, sugar, milk, beef and veal, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.27. **Japan: Main indicators by commodity**

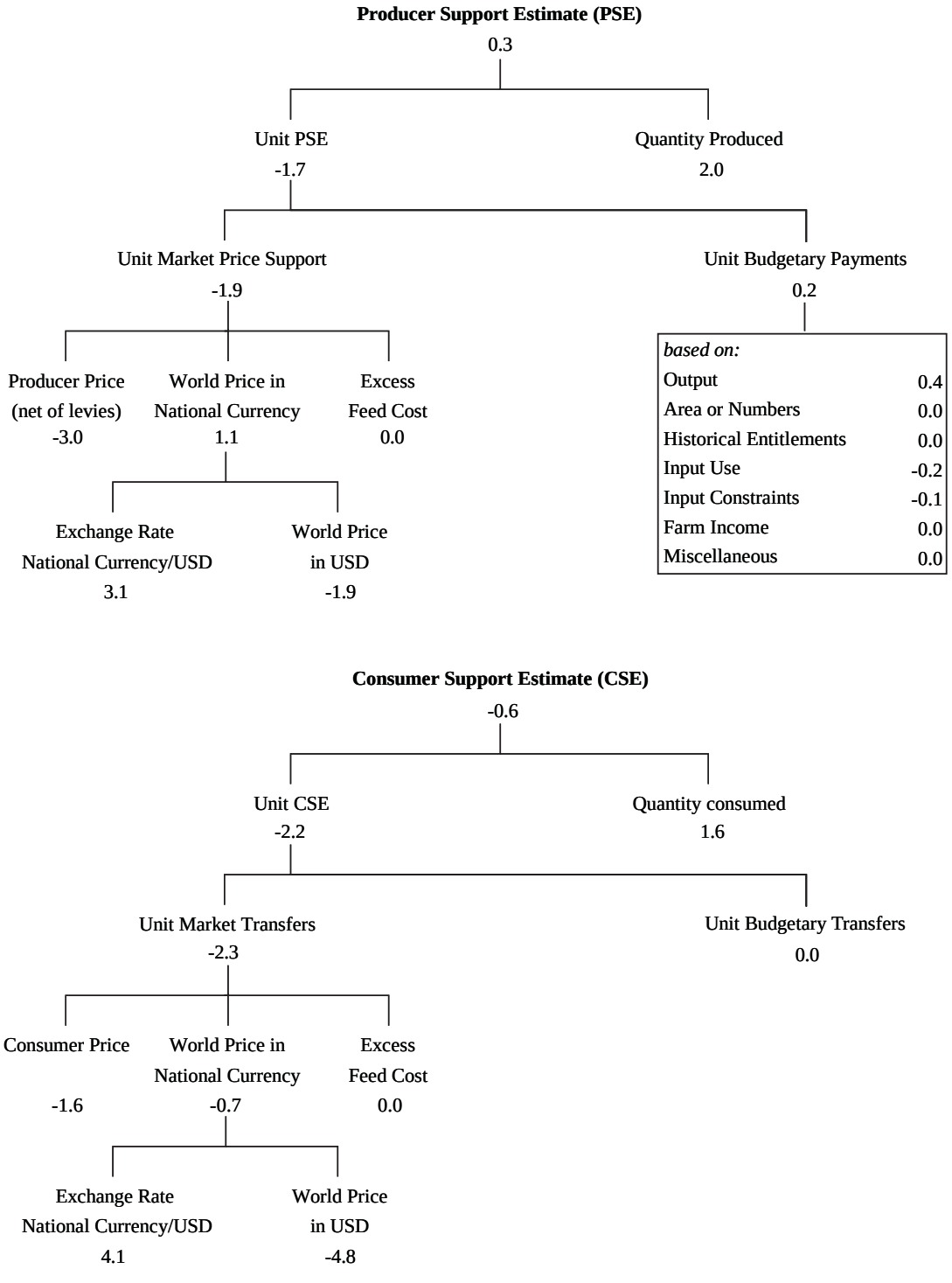
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (JPY bn)	163	87	79	84	98
	Percentage PSE	87	85	84	86	86
	Producer NPC	6.45	6.05	5.49	6.36	6.31
	Producer NAC	7.58	6.80	6.12	7.17	7.11
	Percentage CSE	-78	-65	-59	-66	-70
	Consumer NPC	2.75	1.92	1.78	2.00	1.98
	Consumer NAC	4.58	2.91	2.46	2.95	3.32
Maize	PSE (JPY bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains	PSE (JPY bn)	63	25	19	27	27
	Percentage PSE	89	85	86	86	85
	Producer NPC	7.79	6.00	5.88	6.14	6.00
	Producer NAC	9.17	6.86	6.91	6.97	6.70
	Percentage CSE	-74	-41	-32	-46	-46
	Consumer NPC	1.53	1.36	1.31	1.39	1.38
	Consumer NAC	3.84	1.72	1.46	1.85	1.86
Rice	PSE (JPY bn)	2 939	2 232	2 235	2 268	2 193
	Percentage PSE	84	86	84	87	88
	Producer NPC	5.81	7.06	5.81	7.19	8.17
	Producer NAC	6.20	7.43	6.15	7.62	8.52
	Percentage CSE	-78	-86	-84	-87	-88
	Consumer NPC	5.83	6.65	5.45	6.82	7.68
	Consumer NAC	4.78	7.43	6.29	7.57	8.42
Oilseeds	PSE (JPY bn)	47	20	17	20	24
	Percentage PSE	75	58	54	57	61
	Producer NPC	2.96	1.84	1.67	1.81	2.05
	Producer NAC	4.15	2.37	2.19	2.33	2.60
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Sugar	PSE (JPY bn)	86	61	71	68	43
	Percentage PSE	66	58	65	67	43
	Producer NPC	2.88	2.45	2.75	2.94	1.66
	Producer NAC	2.99	2.56	2.86	3.07	1.75
	Percentage CSE	-67	-54	-61	-62	-40
	Consumer NPC	1.89	1.86	1.93	1.96	1.68
	Consumer NAC	3.01	2.28	2.54	2.65	1.66
Milk	PSE (JPY bn)	631	583	576	585	587
	Percentage PSE	84	80	79	81	81
	Producer NPC	6.28	4.84	4.46	4.92	5.15
	Producer NAC	6.49	5.07	4.66	5.15	5.38
	Percentage CSE	-78	-72	-70	-72	-73
	Consumer NPC	4.75	3.57	3.34	3.62	3.75
	Consumer NAC	4.70	3.55	3.32	3.60	3.73
Beef and Veal	PSE (JPY bn)	377	204	215	201	195
	Percentage PSE	44	33	33	33	32
	Producer NPC	1.76	1.44	1.46	1.44	1.42
	Producer NAC	1.80	1.48	1.50	1.48	1.46
	Percentage CSE	-43	-29	-30	-29	-28
	Consumer NPC	1.76	1.40	1.42	1.40	1.39
	Consumer NAC	1.76	1.40	1.42	1.40	1.39

Table III.27. **Japan: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (JPY bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool	PSE (JPY bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (JPY bn)	294	243	234	242	252
	Percentage PSE	42	54	50	56	58
	Producer NPC	1.73	2.18	1.96	2.22	2.35
	Producer NAC	1.76	2.21	1.99	2.25	2.38
	Percentage CSE	-41	-54	-49	-55	-57
	Consumer NPC	1.73	2.18	1.96	2.22	2.35
	Consumer NAC	1.73	2.18	1.96	2.22	2.35
Poultry	PSE (JPY bn)	49	35	35	34	35
	Percentage PSE	12	11	11	12	11
	Producer NPC	1.13	1.12	1.12	1.12	1.12
	Producer NAC	1.14	1.13	1.13	1.13	1.13
	Percentage CSE	-11	-10	-10	-10	-10
	Consumer NPC	1.13	1.12	1.12	1.12	1.12
	Consumer NAC	1.13	1.12	1.12	1.12	1.12
Eggs	PSE (JPY bn)	74	63	64	63	61
	Percentage PSE	18	16	17	16	16
	Producer NPC	1.21	1.18	1.19	1.18	1.17
	Producer NAC	1.22	1.19	1.20	1.19	1.18
	Percentage CSE	-17	-15	-15	-15	-15
	Consumer NPC	1.20	1.17	1.18	1.18	1.17
	Consumer NAC	1.20	1.17	1.18	1.19	1.17
Other commodities	PSE (JPY bn)	3 060	2 932	3 010	2 845	2 941
	Percentage PSE	66	60	58	60	61
	Producer NPC	2.87	2.87	2.73	2.91	2.97
	Producer NAC	2.98	2.49	2.40	2.52	2.55
	Percentage CSE	-59	-54	-53	-55	-54
	Consumer NPC	2.46	2.16	2.11	2.20	2.17
	Consumer NAC	2.46	2.16	2.11	2.20	2.17
All commodities	PSE (JPY bn)	7 784	6 483	6 557	6 437	6 456
	Percentage PSE	67	63	62	64	64
	Producer NPC	2.87	2.87	2.73	2.91	2.97
	Producer NAC	3.00	2.72	2.61	2.78	2.78
	Percentage CSE	-59	-54	-52	-54	-54
	Consumer NPC	2.46	2.16	2.11	2.20	2.17
	Consumer NAC	2.44	2.15	2.10	2.19	2.16

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.8. **Japan: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -1.9 percentage points to the 0.3 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.28. **Korea: Estimates of support to agriculture**
(KRW billion)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**13 624**	**30 844**	**29 639**	**31 638**	**31 255**
of which share of MPS commodities (%)	*71*	*63*	*63*	*63*	*62*
Total value of consumption (at farm gate)	**14 183**	**34 786**	**31 235**	**36 352**	**36 772**
Producer Support Estimate (PSE)	**9 752**	**21 062**	**17 508**	**22 298**	**23 380**
Market Price Support (MPS)	9 656	20 111	16 519	21 401	22 412
of which MPS commodities	*6 805*	*12 603*	*10 439*	*13 409*	*13 961*
Payments based on output	0	0	0	0	0
Payments based on area planted/animal numbers	0	16	13	14	21
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	69	654	780	607	574
Payments based on input constraints	0	54	54	85	22
Payments based on overall farming income	28	228	142	191	352
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**71**	**66**	**57**	**69**	**73**
Producer NPC	**3.19**	**2.89**	**2.24**	**2.95**	**3.47**
Producer NAC	**3.49**	**3.05**	**2.33**	**3.18**	**3.64**
General Services Support Estimate (GSSE)	**1 613**	**4 138**	**4 303**	**4 179**	**3 931**
Research and development	52	276	293	255	279
Agricultural schools	5	44	43	46	45
Inspection services	21	112	81	121	135
Infrastructure	374	2 443	2 648	2 455	2 227
Marketing and promotion	0	23	20	23	24
Public stockholding	1 162	1 240	1 218	1 279	1 222
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**14.2**	**16.5**	**19.3**	**15.7**	**14.3**
Consumer Support Estimate (CSE)	**-9 532**	**-21 893**	**-16 844**	**-23 678**	**-25 156**
Transfers to producers from consumers	-9 407	-19 888	-16 372	-21 401	-21 891
Other transfers from consumers	-184	-2 222	-907	-2 388	-3 371
Transfers to consumers from taxpayers	59	217	435	111	106
Excess feed cost	0	0	0	0	0
Percentage CSE	**-67**	**-63**	**-55**	**-65**	**-69**
Consumer NPC	**3.09**	**2.78**	**2.24**	**2.89**	**3.19**
Consumer NAC	**3.07**	**2.76**	**2.21**	**2.88**	**3.19**
Total Support Estimate (TSE)	**11 425**	**25 417**	**22 246**	**26 588**	**27 418**
Transfers from consumers	9 592	22 110	17 279	23 789	25 262
Transfers from taxpayers	2 018	5 529	5 874	5 187	5 527
Budget revenues	-184	-2 222	-907	-2 388	-3 371
TSE as a share of GDP (%)	**10.1**	**5.3**	**5.0**	**5.5**	**5.3**
GDP deflator 1995 = 100	**54.7**	**111.0**	**112.6**	**110.8**	**109.7**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Korea are: other grains, garlic, red pepper, rice, oilseeds, milk, beef and veal, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.29. **Korea: Main indicators by commodity**

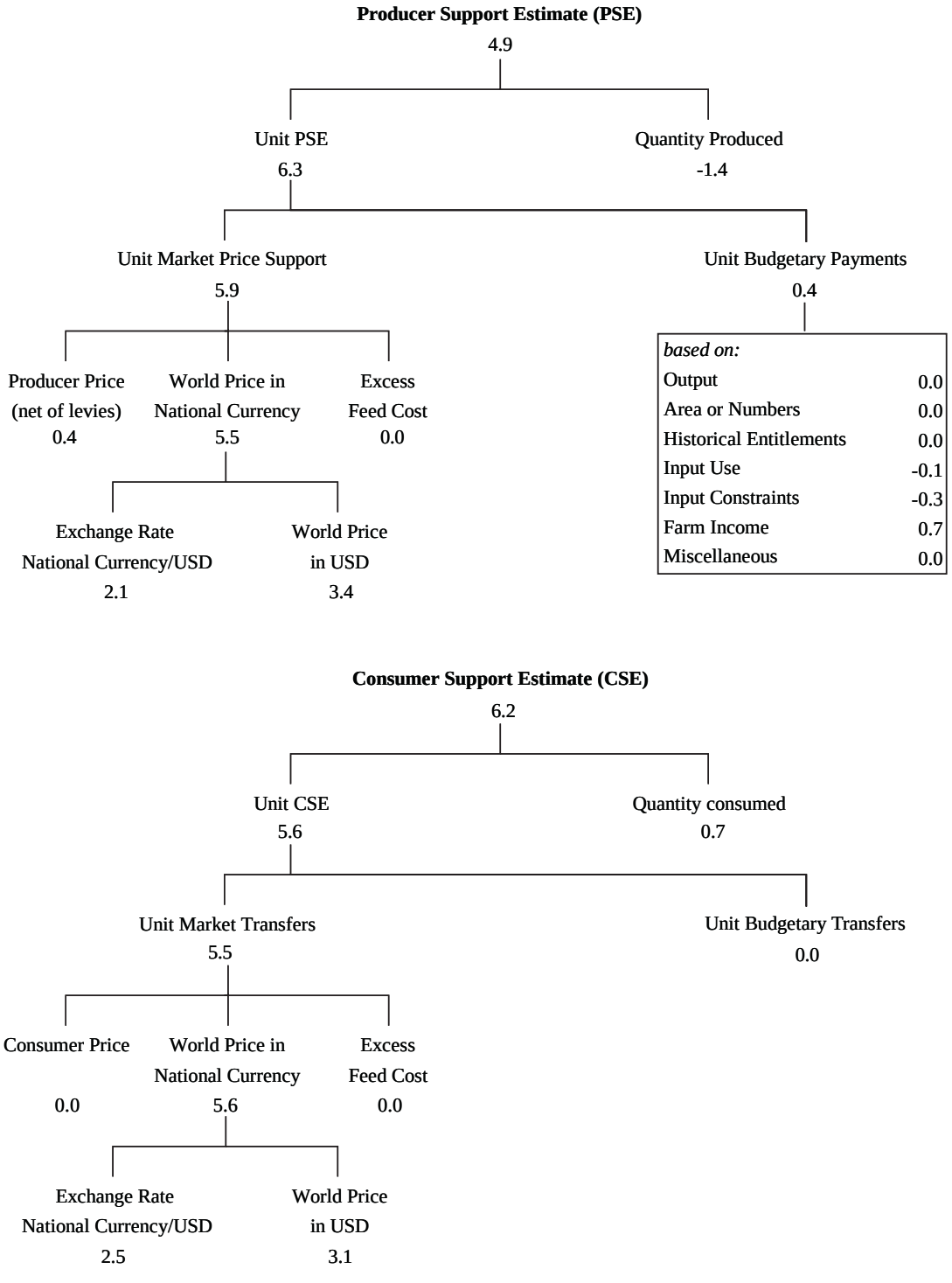
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (KRW bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Maize	PSE (KRW bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains	PSE (KRW bn)	219	178	141	231	163
	Percentage PSE	72	78	70	83	82
	Producer NPC	3.69	4.77	3.25	5.80	5.28
	Producer NAC	3.63	4.91	3.34	5.96	5.42
	Percentage CSE	-70	-67	-56	-77	-67
	Consumer NPC	3.45	3.22	2.27	4.33	3.07
	Consumer NAC	3.37	3.22	2.27	4.33	3.07
Rice	PSE (KRW bn)	4 541	7 891	6 575	7 930	9 168
	Percentage PSE	82	77	71	77	84
	Producer NPC	5.59	4.60	3.40	4.15	6.25
	Producer NAC	5.62	4.73	3.51	4.26	6.41
	Percentage CSE	-82	-77	-71	-76	-84
	Consumer NPC	5.59	4.60	3.40	4.15	6.25
	Consumer NAC	5.58	4.59	3.39	4.15	6.24
Oilseeds	PSE (KRW bn)	157	261	224	242	316
	Percentage PSE	79	86	80	89	90
	Producer NPC	4.75	7.88	4.93	8.67	10.03
	Producer NAC	4.78	8.10	5.08	8.94	10.30
	Percentage CSE	-42	-36	-28	-41	-39
	Consumer NPC	1.72	1.58	1.40	1.70	1.64
	Consumer NAC	1.72	1.58	1.40	1.70	1.64
Sugar	PSE (KRW bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk	PSE (KRW bn)	328	878	734	864	1 037
	Percentage PSE	73	69	65	70	74
	Producer NPC	3.83	3.23	2.79	3.19	3.70
	Producer NAC	3.85	3.32	2.88	3.28	3.80
	Percentage CSE	-73	-68	-64	-68	-73
	Consumer NPC	3.83	3.23	2.79	3.19	3.70
	Consumer NAC	3.77	3.21	2.77	3.17	3.68
Beef and Veal	PSE (KRW bn)	508	1 374	1 009	1 687	1 427
	Percentage PSE	54	61	48	66	68
	Producer NPC	2.31	2.69	1.86	3.01	3.19
	Producer NAC	2.26	2.68	1.93	2.95	3.16
	Percentage CSE	-52	-58	-41	-65	-67
	Consumer NPC	2.37	2.72	1.85	3.07	3.25
	Consumer NAC	2.17	2.55	1.70	2.89	3.06

Table III.29. **Korea: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (KRW bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool	PSE (KRW bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (KRW bn)	311	992	622	1 343	1 011
	Percentage PSE	33	42	27	52	47
	Producer NPC	1.46	1.63	1.29	1.90	1.71
	Producer NAC	1.50	1.78	1.37	2.08	1.87
	Percentage CSE	-32	-40	-24	-51	-45
	Consumer NPC	1.39	1.52	1.20	1.77	1.58
	Consumer NAC	1.50	1.72	1.32	2.02	1.82
Poultry	PSE (KRW bn)	140	321	226	335	401
	Percentage PSE	51	42	29	46	52
	Producer NPC	1.81	1.51	1.28	1.58	1.66
	Producer NAC	2.18	1.78	1.41	1.86	2.07
	Percentage CSE	-50	-39	-26	-44	-48
	Consumer NPC	1.55	1.26	1.07	1.32	1.38
	Consumer NAC	2.14	1.68	1.35	1.79	1.91
Eggs	PSE (KRW bn)	2	64	124	53	14
	Percentage PSE	1	9	17	8	2
	Producer NPC	0.92	1.05	1.17	1.06	0.92
	Producer NAC	1.01	1.10	1.20	1.09	1.02
	Percentage CSE	11	-4	-14	-5	8
	Consumer NPC	0.92	1.05	1.17	1.06	0.92
	Consumer NAC	0.92	1.05	1.17	1.06	0.92
Other commodities	PSE (KRW bn)	3 546	9 104	7 854	9 614	9 843
	Percentage PSE	73	66	56	69	71
	Producer NPC	3.17	2.86	2.28	2.94	3.37
	Producer NAC	4.26	3.02	2.29	3.27	3.50
	Percentage CSE	-67	-63	-56	-65	-68
	Consumer NPC	3.07	2.77	2.31	2.89	3.11
	Consumer NAC	3.06	2.75	2.29	2.88	3.09
All commodities	PSE (KRW bn)	9 752	21 062	17 508	22 298	23 380
	Percentage PSE	71	66	57	69	73
	Producer NPC	3.17	2.86	2.28	2.94	3.37
	Producer NAC	3.49	3.05	2.33	3.18	3.64
	Percentage CSE	-67	-63	-55	-65	-69
	Consumer NPC	3.09	2.78	2.24	2.89	3.19
	Consumer NAC	3.07	2.76	2.21	2.88	3.19

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.9. **Korea: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed 5.9 percentage points to the 4.9 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.30. **Mexico: Estimates of support to agriculture**
(MXN million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**23 588**	**272 833**	**256 025**	**264 556**	**297 919**
of which share of MPS commodities (%)	*75*	*67*	*67*	*67*	*67*
Total value of consumption (at farm gate)	**20 956**	**255 012**	**237 862**	**252 040**	**275 133**
Producer Support Estimate (PSE)	**-426**	**45 428**	**37 022**	**41 259**	**58 004**
Market Price Support (MPS)	-2 501	29 462	23 397	24 401	40 587
of which MPS commodities	*-1 855*	*19 840*	*15 696*	*16 454*	*27 369*
Payments based on output	2	57	51	42	77
Payments based on area planted/animal numbers	1	679	544	739	755
Payments based on historical entitlements	0	9 500	8 492	9 372	10 635
Payments based on input use	2 073	5 180	4 135	6 006	5 399
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	0	534	403	648	550
Miscellaneous payments	0	17	0	50	1
Percentage PSE	**-1**	**16**	**14**	**15**	**18**
Producer NPC	**0.91**	**1.13**	**1.11**	**1.12**	**1.18**
Producer NAC	**0.99**	**1.19**	**1.16**	**1.17**	**1.23**
General Services Support Estimate (GSSE)	**848**	**4 147**	**3 813**	**4 335**	**4 292**
Research and development	77	1 009	948	1 041	1 038
Agricultural schools	125	1 296	1 110	1 370	1 409
Inspection services	0	720	610	757	793
Infrastructure	223	518	527	535	491
Marketing and promotion	18	303	287	352	270
Public stockholding	400	19	58	0	0
Miscellaneous	6	281	273	280	291
GSSE as a share of TSE (%)	**64.0**	**7.3**	**7.5**	**8.3**	**6.0**
Consumer Support Estimate (CSE)	**3 378**	**-28 372**	**-18 439**	**-26 174**	**-40 503**
Transfers to producers from consumers	2 236	-32 178	-23 932	-27 636	-44 965
Other transfers from consumers	-114	-6 604	-5 526	-7 029	-7 257
Transfers to consumers from taxpayers	1 087	8 423	9 952	6 565	8 752
Excess feed cost	169	1 987	1 067	1 927	2 967
Percentage CSE	**18**	**-11**	**-8**	**-11**	**-15**
Consumer NPC	**0.91**	**1.18**	**1.14**	**1.16**	**1.23**
Consumer NAC	**0.85**	**1.13**	**1.09**	**1.12**	**1.18**
Total Support Estimate (TSE)	**1 509**	**57 998**	**50 786**	**52 158**	**71 048**
Transfers from consumers	-2 122	38 782	29 458	34 665	52 222
Transfers from taxpayers	3 744	25 820	26 855	24 522	26 084
Budget revenues	-114	-6 604	-5 526	-7 029	-7 257
TSE as a share of GDP (%)	**1.0**	**1.3**	**1.3**	**1.1**	**1.3**
GDP deflator 1995 = 100	**15.2**	**203.3**	**177.6**	**205.9**	**226.4**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Mexico are: wheat, maize, other grains, coffee, beans, tomatoes, rice, oilseeds, sugar, milk, beef and veal, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.31. **Mexico: Main indicators by commodity**

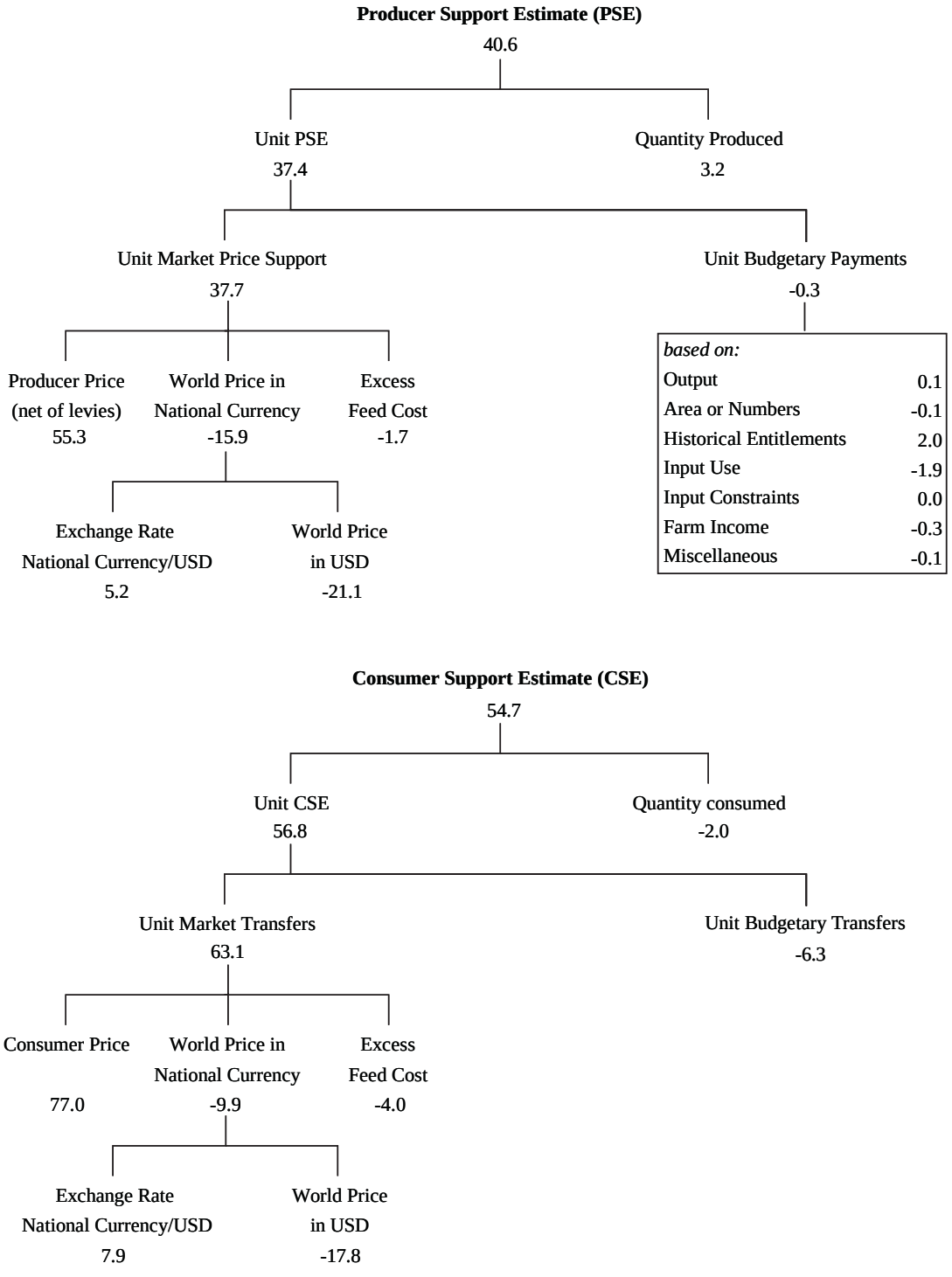
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (MXN mn)	-7	1 804	1 504	1 822	2 086
	Percentage PSE	-2	35	30	37	37
	Producer NPC	0.88	1.36	1.27	1.39	1.41
	Producer NAC	0.99	1.54	1.42	1.60	1.60
	Percentage CSE	218	-4	-2	-4	-6
	Consumer NPC	0.89	1.24	1.19	1.25	1.28
	Consumer NAC	0.50	1.04	1.02	1.04	1.07
Maize	PSE (MXN mn)	1 066	12 519	9 762	12 089	15 707
	Percentage PSE	37	39	32	39	46
	Producer NPC	1.45	1.34	1.21	1.31	1.49
	Producer NAC	1.64	1.65	1.48	1.64	1.85
	Percentage CSE	-2	-6	7	-11	-13
	Consumer NPC	1.35	1.27	1.17	1.24	1.39
	Consumer NAC	1.09	1.07	0.94	1.12	1.15
Other grains	PSE (MXN mn)	328	2 741	1 954	2 756	3 514
	Percentage PSE	28	31	23	33	37
	Producer NPC	1.22	1.17	1.06	1.18	1.27
	Producer NAC	1.40	1.47	1.30	1.50	1.60
	Percentage CSE	-2	2	2	1	2
	Consumer NPC	1.19	1.10	1.05	1.10	1.16
	Consumer NAC	1.02	0.98	0.98	0.99	0.98
Rice	PSE (MXN mn)	-36	205	49	206	361
	Percentage PSE	-31	23	6	25	38
	Producer NPC	0.66	1.20	0.97	1.19	1.45
	Producer NAC	0.77	1.33	1.06	1.33	1.60
	Percentage CSE	143	-8	0	-8	-15
	Consumer NPC	0.67	1.09	1.00	1.09	1.18
	Consumer NAC	0.44	1.09	1.00	1.09	1.18
Oilseeds	PSE (MXN mn)	25	164	113	207	171
	Percentage PSE	13	40	26	48	45
	Producer NPC	0.98	1.25	1.07	1.37	1.32
	Producer NAC	1.15	1.69	1.35	1.92	1.81
	Percentage CSE	6	-7	-9	-7	-5
	Consumer NPC	1.00	1.09	1.10	1.09	1.07
	Consumer NAC	0.94	1.08	1.10	1.08	1.06
Sugar	PSE (MXN mn)	96	6 341	4 667	6 878	7 478
	Percentage PSE	17	51	39	57	56
	Producer NPC	1.00	2.22	1.72	2.51	2.42
	Producer NAC	1.25	2.08	1.65	2.32	2.26
	Percentage CSE	-4	-60	-50	-65	-65
	Consumer NPC	1.13	1.98	1.43	2.32	2.20
	Consumer NAC	1.07	2.58	2.01	2.88	2.84
Milk	PSE (MXN mn)	441	10 159	8 327	10 377	11 774
	Percentage PSE	34	44	42	43	45
	Producer NPC	1.56	1.83	1.75	1.82	1.92
	Producer NAC	1.62	1.78	1.74	1.77	1.83
	Percentage CSE	-17	-38	-29	-42	-45
	Consumer NPC	1.45	1.73	1.64	1.71	1.82
	Consumer NAC	1.28	1.65	1.40	1.71	1.82
Beef and Veal	PSE (MXN mn)	-518	2 631	3 330	1 719	2 842
	Percentage PSE	-28	14	19	9	14
	Producer NPC	0.75	1.14	1.21	1.07	1.13
	Producer NAC	0.79	1.17	1.24	1.10	1.16
	Percentage CSE	36	-10	-15	-5	-11
	Consumer NPC	0.75	1.12	1.18	1.06	1.12
	Consumer NAC	0.75	1.12	1.18	1.06	1.12

Table III.31. **Mexico: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (MXN mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool	PSE (MXN mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (MXN mn)	-354	1 224	347	1 645	1 680
	Percentage PSE	-51	10	4	15	12
	Producer NPC	0.71	1.17	1.05	1.24	1.21
	Producer NAC	0.74	1.12	1.04	1.17	1.14
	Percentage CSE	59	-13	-5	-18	-17
	Consumer NPC	0.71	1.16	1.06	1.22	1.20
	Consumer NAC	0.71	1.16	1.06	1.22	1.20
Poultry	PSE (MXN mn)	219	-106	-359	-2 018	2 059
	Percentage PSE	10	-1	-2	-11	8
	Producer NPC	1.16	1.01	0.99	0.92	1.13
	Producer NAC	1.15	0.99	0.98	0.90	1.09
	Percentage CSE	-10	-1	1	7	-11
	Consumer NPC	1.16	1.01	0.99	0.93	1.13
	Consumer NAC	1.16	1.01	0.99	0.93	1.13
Eggs	PSE (MXN mn)	-196	-4 315	-3 253	-4 580	-5 112
	Percentage PSE	-31	-40	-32	-44	-45
	Producer NPC	0.76	0.72	0.76	0.70	0.70
	Producer NAC	0.78	0.71	0.76	0.69	0.69
	Percentage CSE	37	39	32	42	43
	Consumer NPC	0.76	0.72	0.76	0.70	0.70
	Consumer NAC	0.76	0.72	0.76	0.70	0.70
Other commodities	PSE (MXN mn)	-1 491	12 061	10 581	10 158	15 445
	Percentage PSE	-8	8	8	7	10
	Producer NPC	0.85	1.20	1.15	1.18	1.26
	Producer NAC	0.99	1.19	1.16	1.17	1.23
	Percentage CSE	28	-9	-10	-7	-12
	Consumer NPC	0.91	1.18	1.14	1.16	1.23
	Consumer NAC	0.85	1.13	1.09	1.12	1.18
All commodities	PSE (MXN mn)	-426	45 428	37 022	41 259	58 004
	Percentage PSE	-1	16	14	15	18
	Producer NPC	0.85	1.20	1.15	1.18	1.26
	Producer NAC	0.99	1.19	1.16	1.17	1.23
	Percentage CSE	18	-11	-8	-11	-15
	Consumer NPC	0.91	1.18	1.14	1.16	1.23
	Consumer NAC	0.85	1.13	1.09	1.12	1.18

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.10. **Mexico: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed 37.7 percentage points to the 40.6 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.32. **New Zealand: Estimates of support to agriculture**
(NZD million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**6 935**	**11 301**	**10 027**	**11 101**	**12 775**
of which share of MPS commodities (%)	*72*	*71*	*70*	*71*	*73*
Total value of consumption (at farm gate)	**1 676**	**2 512**	**2 447**	**2 455**	**2 635**
Producer Support Estimate (PSE)	**809**	**83**	**131**	**158**	**95**
Market Price Support (MPS)	112	90	96	121	52
of which MPS commodities	*81*	*64*	*67*	*86*	*38*
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	36	34	37	38
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	42	2	0	0	5
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**11**	**1**	**1**	**1**	**1**
Producer NPC	**1.02**	**1.00**	**1.01**	**1.01**	**1.00**
Producer NAC	**1.13**	**1.01**	**1.01**	**1.01**	**1.00**
General Services Support Estimate (GSSE)	**177**	**174**	**170**	**169**	**183**
Research and development	77	117	114	113	125
Agricultural schools	0	9	9	9	9
Inspection services	54	48	47	47	49
Infrastructure	47	0	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 (%)	**22.8**	**58.0**	**57.0**	**52.0**	**66.0**
Consumer Support Estimate (CSE)	**-107**	**-85**	**-91**	**-113**	**-52**
Transfers to producers from consumers	-107	-85	-91	-112	-52
Other transfers from consumers	0	0	0	-1	0
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	0	0	0	0	0
Percentage CSE	**-6**	**-4**	**-4**	**-5**	**-2**
Consumer NPC	**1.07**	**1.02**	**1.02**	**1.03**	**1.00**
Consumer NAC	**1.07**	**1.02**	**1.02**	**1.03**	**1.00**
Total Support Estimate (TSE)	**987**	**302**	**301**	**327**	**279**
Transfers from consumers	107	85	91	113	52
Transfers from taxpayers	880	217	210	214	227
Budget revenues	0	0	0	-1	0
TSE as a share of GDP (%)	**1.8**	**0.3**	**0.3**	**0.3**	**0.3**
GDP deflator 1995 = 100	**75.1**	**104.4**	**103.6**	**103.6**	**105.9**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for New Zealand are: wheat, maize, other grains, milk, beef and veal, sheepmeat, wool, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.33. **New Zealand: Main indicators by commodity**

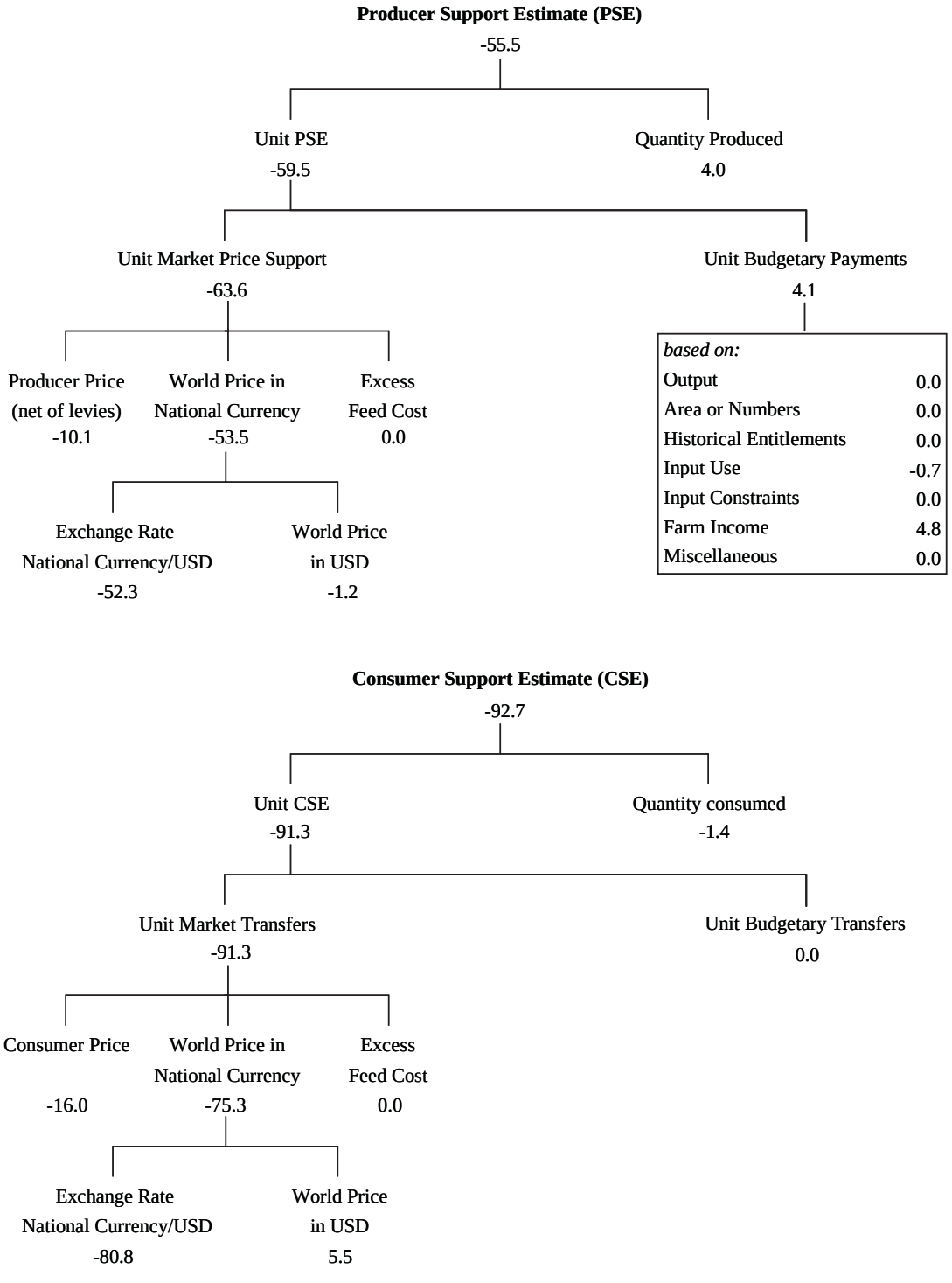
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (NZD mn)	5	0	0	0	0
	Percentage PSE	7	0	0	0	0
	Producer NPC	1.03	1.00	1.00	1.00	1.00
	Producer NAC	1.07	1.00	1.00	1.00	1.00
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Maize	PSE (NZD mn)	1	0	0	0	0
	Percentage PSE	2	0	0	0	0
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.02	1.00	1.00	1.00	1.00
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Other grains	PSE (NZD mn)	1	0	0	0	0
	Percentage PSE	2	0	0	0	0
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.02	1.00	1.00	1.00	1.00
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Rice	PSE (NZD mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (NZD mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Sugar	PSE (NZD mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk	PSE (NZD mn)	124	13	12	13	14
	Percentage PSE	9	0	0	0	0
	Producer NPC	1.02	1.00	1.00	1.00	1.00
	Producer NAC	1.10	1.00	1.00	1.00	1.00
	Percentage CSE	-8	0	0	0	0
	Consumer NPC	1.09	1.00	1.00	1.00	1.00
	Consumer NAC	1.09	1.00	1.00	1.00	1.00
Beef and Veal	PSE (NZD mn)	74	14	13	14	14
	Percentage PSE	7	1	1	1	1
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.07	1.01	1.01	1.01	1.01
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00

Table III.33 **New Zealand: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (NZD mn)	362	5	5	5	5
	Percentage PSE	24	0	0	0	0
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.56	1.00	1.00	1.00	1.00
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Wool	PSE (NZD mn)	86	0	0	0	0
	Percentage PSE	6	0	0	0	0
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.06	1.00	1.00	1.00	1.00
	Percentage CSE	0	0	0	0	0
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	1.00	1.00	1.00	1.00	1.00
Pigmeat	PSE (NZD mn)	6	3	3	3	4
	Percentage PSE	5	2	2	3	2
	Producer NPC	1.02	1.00	1.00	1.00	1.00
	Producer NAC	1.05	1.03	1.02	1.03	1.02
	Percentage CSE	-2	0	0	0	0
	Consumer NPC	1.02	1.00	1.00	1.00	1.00
	Consumer NAC	1.02	1.00	1.00	1.00	1.00
Poultry	PSE (NZD mn)	59	30	42	48	1
	Percentage PSE	57	16	22	24	1
	Producer NPC	2.80	1.19	1.27	1.31	1.00
	Producer NAC	2.86	1.20	1.29	1.32	1.01
	Percentage CSE	-56	-15	-22	-23	0
	Consumer NPC	2.80	1.19	1.27	1.31	1.00
	Consumer NAC	2.80	1.19	1.27	1.31	1.00
Eggs	PSE (NZD mn)	36	35	27	40	38
	Percentage PSE	43	40	30	47	44
	Producer NPC	1.81	1.74	1.56	1.88	1.79
	Producer NAC	1.05	1.04	1.03	1.04	1.04
	Percentage CSE	-40	-40	-36	-43	-42
	Consumer NPC	1.81	1.74	1.56	1.88	1.79
	Consumer NAC	1.04	1.04	1.03	1.04	1.04
Other commodities	PSE (NZD mn)	87	28	29	35	19
	Percentage PSE	4	0	1	1	0
	Producer NPC	1.02	1.00	1.01	1.01	1.00
	Producer NAC	1.05	1.00	1.01	1.01	1.00
	Percentage CSE	-6	-2	-2	-3	0
	Consumer NPC	1.06	1.02	1.02	1.03	1.00
	Consumer NAC	1.06	1.02	1.02	1.03	1.00
All commodities	PSE (NZD mn)	841	128	131	158	95
	Percentage PSE	11	1	1	1	1
	Producer NPC	1.02	1.00	1.01	1.01	1.00
	Producer NAC	1.13	1.01	1.01	1.01	1.00
	Percentage CSE	-6	-4	-4	-5	-2
	Consumer NPC	1.07	1.02	1.02	1.03	1.00
	Consumer NAC	1.07	1.02	1.02	1.03	1.00

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.11. **New Zealand: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -63.6 percentage points to the -55.5 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.34. **Norway: Estimates of support to agriculture**
(NOK million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**17 354**	**17 747**	**18 598**	**17 654**	**16 990**
of which share of MPS commodities (%)	*73*	*84*	*83*	*86*	*84*
Total value of consumption (at farm gate)	**17 899**	**17 196**	**18 044**	**16 916**	**16 629**
Producer Support Estimate (PSE)	**18 019**	**19 595**	**19 915**	**19 444**	**19 426**
Market Price Support (MPS)	8 166	7 852	8 653	8 095	6 809
of which MPS commodities	*5 984*	*6 626*	*7 221*	*6 938*	*5 720*
Payments based on output	4 437	3 174	3 225	3 147	3 148
Payments based on area planted/animal numbers	1 645	2 127	1 791	2 186	2 403
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	3 451	5 763	6 019	5 617	5 652
Payments based on input constraints	320	380	227	399	514
Payments based on overall farming income	0	300	0	0	900
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**66**	**66**	**67**	**67**	**66**
Producer NPC	**3.60**	**2.83**	**2.93**	**3.02**	**2.53**
Producer NAC	**2.96**	**2.98**	**3.00**	**3.03**	**2.91**
General Services Support Estimate (GSSE)	**885**	**1 435**	**1 321**	**1 391**	**1 594**
Research and development	504	508	481	512	531
Agricultural schools	0	0	0	0	0
Inspection services	0	31	15	35	42
Infrastructure	133	110	73	107	150
Marketing and promotion	247	725	731	717	727
Public stockholding	0	20	22	20	19
Miscellaneous	0	42	0	0	126
GSSE as a share of TSE (%)	**4.3**	**6.8**	**6.2**	**6.6**	**7.5**
Consumer Support Estimate (CSE)	**-8 098**	**-8 233**	**-8 962**	**-8 483**	**-7 253**
Transfers to producers from consumers	-10 340	-9 410	-10 182	-9 728	-8 321
Other transfers from consumers	-957	-155	-228	-140	-96
Transfers to consumers from taxpayers	1 522	163	138	149	203
Excess feed cost	1 677	1 169	1 310	1 235	960
Percentage CSE	**-49**	**-48**	**-50**	**-51**	**-44**
Consumer NPC	**2.73**	**2.26**	**2.36**	**2.40**	**2.02**
Consumer NAC	**1.98**	**1.94**	**2.00**	**2.02**	**1.79**
Total Support Estimate (TSE)	**20 426**	**21 194**	**21 375**	**20 984**	**21 224**
Transfers from consumers	11 297	9 565	10 410	9 868	8 417
Transfers from taxpayers	10 086	11 784	11 193	11 257	12 903
Budget revenues	-957	-155	-228	-140	-96
TSE as a share of GDP (%)	**3.4**	**1.7**	**1.9**	**1.8**	**1.5**
GDP deflator 1995 = 100	**80.8**	**117.4**	**106.6**	**113.7**	**131.9**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Norway are: wheat, other grains, milk, beef and veal, sheepmeat, wool, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.35. **Norway: Main indicators by commodity**

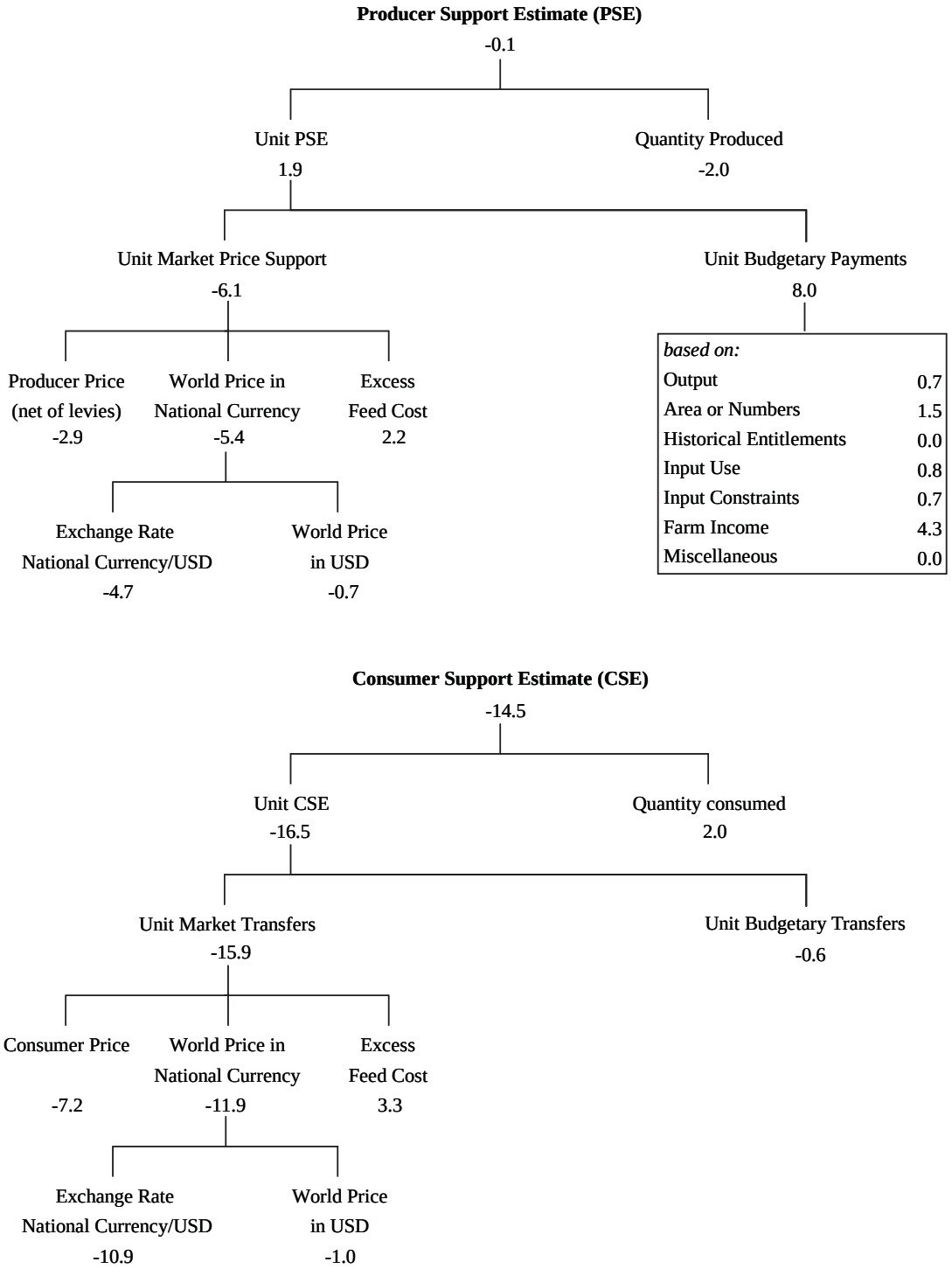
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (NOK mn)	468	555	550	547	568
	Percentage PSE	80	71	68	76	70
	Producer NPC	3.69	2.61	2.30	3.12	2.42
	Producer NAC	5.02	3.56	3.13	4.20	3.34
	Percentage CSE	-19	-10	-2	-21	-8
	Consumer NPC	2.12	2.69	2.37	3.15	2.47
	Consumer NAC	1.25	1.12	1.02	1.26	1.08
Maize	PSE (NOK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Other grains	PSE (NOK mn)	2 486	1 996	2 089	2 098	1 802
	Percentage PSE	82	75	78	77	70
	Producer NPC	4.25	2.72	3.00	3.01	2.15
	Producer NAC	5.67	4.06	4.55	4.33	3.30
	Percentage CSE	-21	-6	-8	-5	-4
	Consumer NPC	3.95	2.74	3.02	3.03	2.16
	Consumer NAC	1.27	1.06	1.09	1.06	1.05
Rice	PSE (NOK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (NOK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Sugar	PSE (NOK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Milk	PSE (NOK mn)	6 607	8 639	8 827	8 394	8 694
	Percentage PSE	75	76	76	75	76
	Producer NPC	4.49	3.89	4.38	3.83	3.45
	Producer NAC	3.98	4.12	4.19	3.98	4.19
	Percentage CSE	-21	-65	-70	-65	-61
	Consumer NPC	2.45	2.91	3.31	2.86	2.56
	Consumer NAC	1.27	2.91	3.31	2.86	2.56
Beef and Veal	PSE (NOK mn)	2 491	3 148	3 230	3 079	3 136
	Percentage PSE	67	64	65	62	64
	Producer NPC	3.24	2.42	2.49	2.46	2.31
	Producer NAC	3.08	2.77	2.88	2.66	2.78
	Percentage CSE	-58	-48	-51	-50	-45
	Consumer NPC	2.53	1.94	2.03	1.99	1.81
	Consumer NAC	2.45	1.94	2.03	1.99	1.81

Table III.35 **Norway: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (NOK mn)	1 014	1 403	1 344	1 408	1 456
	Percentage PSE	70	72	71	73	71
	Producer NPC	3.78	1.82	1.82	1.92	1.71
	Producer NAC	3.38	3.51	3.49	3.65	3.40
	Percentage CSE	-60	-24	-23	-29	-21
	Consumer NPC	2.69	1.32	1.29	1.41	1.26
	Consumer NAC	2.59	1.32	1.29	1.41	1.26
Wool	PSE (NOK mn)	240	433	414	424	461
	Percentage PSE	71	85	85	85	83
	Producer NPC	2.19	3.10	3.29	3.20	2.82
	Producer NAC	3.46	6.50	6.86	6.61	6.04
	Percentage CSE	-54	0	0	0	0
	Consumer NPC	2.19	1.00	1.00	1.00	1.00
	Consumer NAC	2.19	1.00	1.00	1.00	1.00
Pigmeat	PSE (NOK mn)	1 204	939	958	1 104	756
	Percentage PSE	44	36	35	42	30
	Producer NPC	2.40	1.98	1.88	2.40	1.65
	Producer NAC	1.80	1.57	1.55	1.72	1.44
	Percentage CSE	-56	-47	-45	-57	-38
	Consumer NPC	2.31	1.93	1.83	2.35	1.61
	Consumer NAC	2.31	1.93	1.83	2.35	1.61
Poultry	PSE (NOK mn)	182	349	228	353	465
	Percentage PSE	57	55	44	56	65
	Producer NPC	7.14	3.74	2.54	4.18	4.50
	Producer NAC	2.49	2.30	1.79	2.29	2.82
	Percentage CSE	-85	-71	-61	-76	-78
	Consumer NPC	7.14	3.74	2.54	4.18	4.50
	Consumer NAC	7.14	3.74	2.54	4.18	4.50
Eggs	PSE (NOK mn)	532	316	296	358	293
	Percentage PSE	56	49	48	54	45
	Producer NPC	4.27	2.79	2.73	3.55	2.09
	Producer NAC	2.29	1.97	1.92	2.17	1.83
	Percentage CSE	-74	-62	-63	-72	-52
	Consumer NPC	4.02	2.77	2.71	3.52	2.07
	Consumer NAC	4.02	2.77	2.71	3.52	2.07
Other commodities	PSE (NOK mn)	2 795	1 817	1 978	1 678	1 795
	Percentage PSE	53	54	55	55	52
	Producer NPC	3.60	2.83	2.93	3.02	2.53
	Producer NAC	2.14	2.18	2.20	2.23	2.10
	Percentage CSE	-63	-56	-58	-58	-51
	Consumer NPC	2.73	2.26	2.36	2.40	2.02
	Consumer NAC	2.73	2.26	2.36	2.40	2.02
All commodities	PSE (NOK mn)	18 019	19 595	19 915	19 444	19 426
	Percentage PSE	66	66	67	67	66
	Producer NPC	3.60	2.83	2.93	3.02	2.53
	Producer NAC	2.96	2.98	3.00	3.03	2.91
	Percentage CSE	-49	-48	-50	-51	-44
	Consumer NPC	2.73	2.26	2.36	2.40	2.02
	Consumer NAC	1.98	1.94	2.00	2.02	1.79

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.12. **Norway: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -6.1 percentage points to the -0.1 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.36. **Poland: Estimates of support to agriculture**
(PLN million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**363**	**50 619**	**54 743**	**50 705**	**46 409**
of which share of MPS commodities (%)	*73*	*67*	*64*	*64*	*73*
Total value of consumption (at farm gate)	**362**	**49 095**	**52 326**	**48 847**	**46 111**
Producer Support Estimate (PSE)	**52**	**10 981**	**11 851**	**11 387**	**9 705**
Market Price Support (MPS)	16	8 787	9 881	8 945	7 536
of which MPS commodities	*14*	*5 862*	*6 371*	*5 697*	*5 517*
Payments based on output	0	187	0	274	288
Payments based on area planted/animal numbers	0	15	0	0	44
Payments based on historical entitlements	11	0	0	0	0
Payments based on input use	26	1 957	1 938	2 133	1 798
Payments based on input constraints	0	6	6	6	7
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	0	29	26	28	31
Percentage PSE	**12**	**21**	**21**	**21**	**20**
Producer NPC	**1.19**	**1.26**	**1.27**	**1.25**	**1.25**
Producer NAC	**1.15**	**1.26**	**1.26**	**1.27**	**1.25**
General Services Support Estimate (GSSE)	**6**	**690**	**727**	**674**	**667**
Research and development	4	263	330	229	229
Agricultural schools	0	15	13	15	17
Inspection services	0	0	0	0	0
Infrastructure	1	163	145	164	180
Marketing and promotion	1	119	105	120	131
Public stockholding	0	101	108	117	79
Miscellaneous	0	29	26	28	31
GSSE as a share of TSE (%)	**7.2**	**5.9**	**5.8**	**5.6**	**6.4**
Consumer Support Estimate (CSE)	**-8**	**-8 908**	**-10 093**	**-8 874**	**-7 758**
Transfers to producers from consumers	-50	-9 606	-10 963	-9 371	-8 484
Other transfers from consumers	-4	-176	-193	-92	-243
Transfers to consumers from taxpayers	40	10	10	10	11
Excess feed cost	6	863	1 053	578	958
Percentage CSE	**-3**	**-18**	**-19**	**-18**	**-17**
Consumer NPC	**1.20**	**1.25**	**1.27**	**1.24**	**1.23**
Consumer NAC	**1.05**	**1.22**	**1.24**	**1.22**	**1.20**
Total Support Estimate (TSE)	**98**	**11 681**	**12 588**	**12 072**	**10 384**
Transfers from consumers	54	9 782	11 156	9 463	8 727
Transfers from taxpayers	49	2 075	1 624	2 701	1 899
Budget revenues	-4	-176	-193	-92	-243
TSE as a share of GDP (%)	**2.6**	**1.9**	**2.3**	**2.0**	**1.5**
GDP deflator 1995 = 100	**n.c.**	**163.9**	**151.2**	**162.0**	**178.3**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Poland are: wheat, maize, other grains, oilseeds, sugar, milk, beef and veal, sheepmeat, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.37. **Poland: Main indicators by commodity**

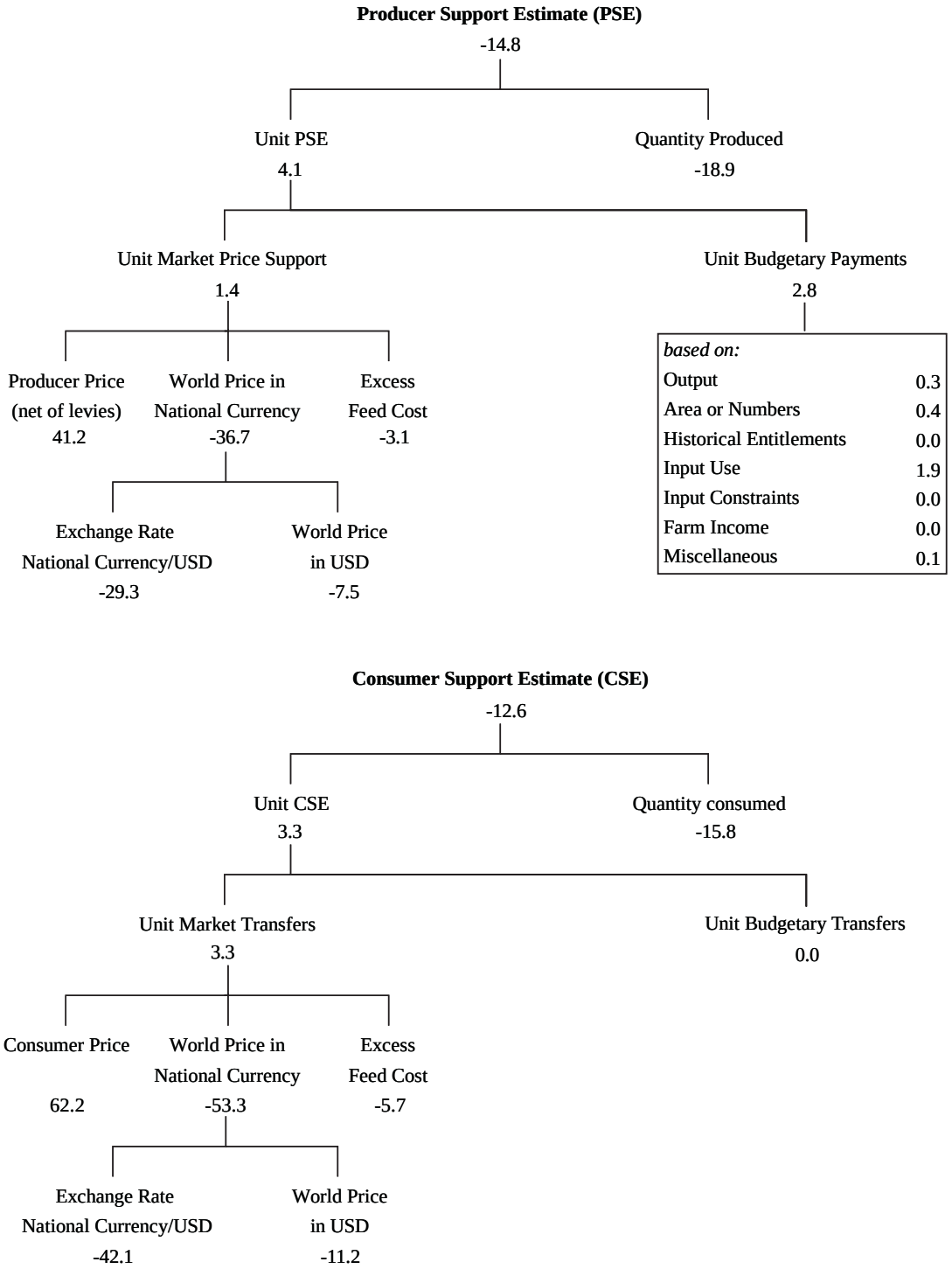
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (PLN mn)	12	950	1 192	647	1 010
	Percentage PSE	36	21	26	15	21
	Producer NPC	1.45	1.22	1.30	1.13	1.23
	Producer NAC	1.58	1.26	1.35	1.18	1.27
	Percentage CSE	-9	-8	-13	-3	-8
	Consumer NPC	1.45	1.17	1.30	1.06	1.16
	Consumer NAC	1.10	1.09	1.15	1.03	1.08
Maize	PSE (PLN mn)	0	11	60	-11	-15
	Percentage PSE	25	5	24	-4	-4
	Producer NPC	1.24	1.07	1.30	0.95	0.96
	Producer NAC	1.34	1.08	1.31	0.96	0.96
	Percentage CSE	-8	-2	-11	2	2
	Consumer NPC	1.24	1.07	1.30	0.95	0.96
	Consumer NAC	1.09	1.03	1.12	0.98	0.98
Other grains	PSE (PLN mn)	4	819	793	745	920
	Percentage PSE	17	25	22	24	28
	Producer NPC	1.15	1.26	1.21	1.24	1.32
	Producer NAC	1.27	1.33	1.28	1.32	1.39
	Percentage CSE	13	-4	-3	-3	-5
	Consumer NPC	1.15	1.26	1.21	1.24	1.32
	Consumer NAC	0.90	1.04	1.04	1.04	1.05
Rice	PSE (PLN mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (PLN mn)	3	157	153	101	218
	Percentage PSE	31	18	15	13	26
	Producer NPC	1.31	1.16	1.12	1.07	1.29
	Producer NAC	1.46	1.23	1.17	1.15	1.36
	Percentage CSE	5	-13	-11	-7	-22
	Consumer NPC	1.31	1.16	1.12	1.07	1.29
	Consumer NAC	0.98	1.16	1.12	1.07	1.29
Sugar	PSE (PLN mn)	3	746	682	572	983
	Percentage PSE	31	52	45	44	69
	Producer NPC	1.42	2.18	1.74	1.69	3.11
	Producer NAC	1.55	2.27	1.81	1.77	3.22
	Percentage CSE	-13	-50	-43	-41	-68
	Consumer NPC	1.42	2.18	1.74	1.69	3.11
	Consumer NAC	1.25	2.18	1.74	1.69	3.11
Milk	PSE (PLN mn)	-11	1 008	1 545	1 042	438
	Percentage PSE	-25	13	20	13	5
	Producer NPC	1.17	1.17	1.29	1.14	1.07
	Producer NAC	0.85	1.15	1.24	1.15	1.06
	Percentage CSE	1	-14	-22	-12	-7
	Consumer NPC	1.17	1.17	1.29	1.14	1.07
	Consumer NAC	1.02	1.17	1.29	1.14	1.07
Beef and Veal	PSE (PLN mn)	11	-395	-971	-233	19
	Percentage PSE	31	-11	-26	-7	1
	Producer NPC	1.50	0.91	0.80	0.92	1.01
	Producer NAC	1.45	0.91	0.79	0.93	1.01
	Percentage CSE	-20	11	25	9	-1
	Consumer NPC	1.50	0.91	0.80	0.92	1.01
	Consumer NAC	1.27	0.91	0.80	0.92	1.01

Table III.37 **Poland: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (PLN mn)	1	14	14	11	16
	Percentage PSE	24	25	26	19	30
	Producer NPC	1.24	1.09	1.11	1.00	1.16
	Producer NAC	1.32	1.34	1.36	1.24	1.43
	Percentage CSE	5	-8	-9	0	-13
	Consumer NPC	1.24	1.09	1.11	1.00	1.16
	Consumer NAC	0.97	1.09	1.10	1.00	1.15
Wool	PSE (PLN mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (PLN mn)	-1	2 124	2 305	2 524	1 542
	Percentage PSE	-4	23	23	29	17
	Producer NPC	0.93	1.35	1.35	1.45	1.24
	Producer NAC	0.98	1.31	1.31	1.41	1.20
	Percentage CSE	27	-25	-26	-31	-20
	Consumer NPC	0.93	1.35	1.35	1.45	1.24
	Consumer NAC	0.80	1.35	1.35	1.45	1.24
Poultry	PSE (PLN mn)	6	625	462	628	785
	Percentage PSE	42	34	27	35	41
	Producer NPC	1.76	1.60	1.45	1.56	1.79
	Producer NAC	1.73	1.54	1.37	1.54	1.70
	Percentage CSE	-34	-37	-31	-36	-44
	Consumer NPC	1.76	1.60	1.45	1.56	1.79
	Consumer NAC	1.52	1.60	1.45	1.56	1.79
Eggs	PSE (PLN mn)	6	1 063	1 181	1 097	910
	Percentage PSE	39	51	55	55	42
	Producer NPC	1.66	2.12	2.35	2.22	1.78
	Producer NAC	1.66	2.06	2.24	2.21	1.73
	Percentage CSE	-29	-52	-57	-55	-44
	Consumer NPC	1.66	2.12	2.35	2.22	1.78
	Consumer NAC	1.43	2.12	2.35	2.22	1.78
Other commodities	PSE (PLN mn)	18	3 859	4 435	4 262	2 880
	Percentage PSE	36	22	22	22	22
	Producer NPC	1.19	1.26	1.27	1.25	1.25
	Producer NAC	3.51	1.28	1.28	1.28	1.28
	Percentage CSE	-16	-20	-21	-19	-19
	Consumer NPC	1.20	1.25	1.27	1.24	1.23
	Consumer NAC	1.20	1.25	1.27	1.24	1.23
All commodities	PSE (PLN mn)	52	10 981	11 851	11 387	9 705
	Percentage PSE	12	21	21	21	20
	Producer NPC	1.19	1.26	1.27	1.25	1.25
	Producer NAC	1.15	1.26	1.26	1.27	1.25
	Percentage CSE	-3	-18	-19	-18	-17
	Consumer NPC	1.20	1.25	1.27	1.24	1.23
	Consumer NAC	1.05	1.22	1.24	1.22	1.20

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.13. **Poland: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed 1.4 percentage points to the -14.8 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.38. **Slovakia: Estimates of support to agriculture**
(SKK million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**46 602**	**54 546**	**57 895**	**54 268**	**51 476**
of which share of MPS commodities (%)	*66*	*74*	*76*	*72*	*74*
Total value of consumption (at farm gate)	**38 128**	**50 414**	**51 367**	**50 519**	**49 355**
Producer Support Estimate (PSE)	**31 069**	**15 751**	**18 368**	**15 121**	**13 763**
Market Price Support (MPS)	20 629	5 428	8 859	5 910	1 516
of which MPS commodities	*13 640*	*4 053*	*6 758*	*4 277*	*1 124*
Payments based on output	1 031	1 167	1 263	1 062	1 177
Payments based on area planted/animal numbers	0	3 436	3 238	3 591	3 480
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	2 338	4 347	4 769	3 991	4 279
Payments based on input constraints	0	38	53	20	40
Payments based on overall farming income	7 072	1 273	140	407	3 271
Miscellaneous payments	0	62	45	140	0
Percentage PSE	**55**	**24**	**27**	**24**	**22**
Producer NPC	**1.81**	**1.16**	**1.22**	**1.17**	**1.08**
Producer NAC	**2.24**	**1.32**	**1.37**	**1.31**	**1.28**
General Services Support Estimate (GSSE)	**2 169**	**1 914**	**1 979**	**1 984**	**1 779**
Research and development	573	633	783	591	525
Agricultural schools	850	92	104	93	80
Inspection services	464	413	563	405	270
Infrastructure	282	655	431	790	743
Marketing and promotion	0	122	99	105	161
Public stockholding	0	0	0	0	0
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	**5.8**	**10.9**	**9.7**	**11.6**	**11.4**
Consumer Support Estimate (CSE)	**-11 463**	**-6 287**	**-7 350**	**-7 937**	**-3 576**
Transfers to producers from consumers	-16 384	-5 453	-7 154	-6 862	-2 344
Other transfers from consumers	-391	-304	-485	-320	-106
Transfers to consumers from taxpayers	4 639	5	0	2	12
Excess feed cost	673	-535	290	-757	-1 138
Percentage CSE	**-34**	**-12**	**-14**	**-16**	**-7**
Consumer NPC	**1.81**	**1.13**	**1.17**	**1.17**	**1.05**
Consumer NAC	**1.53**	**1.14**	**1.17**	**1.19**	**1.08**
Total Support Estimate (TSE)	**37 877**	**17 669**	**20 347**	**17 107**	**15 554**
Transfers from consumers	16 775	5 757	7 640	7 182	2 450
Transfers from taxpayers	21 493	12 216	13 193	10 245	13 210
Budget revenues	-391	-304	-485	-320	-106
TSE as a share of GDP (%)	**23.1**	**2.2**	**2.7**	**2.1**	**1.7**
GDP deflator 1995 = 100	**0.0**	**124.7**	**117.1**	**124.8**	**132.3**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Slovakia are: wheat,maize, other grains, oilseeds, sugar, milk, beef and veal, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.39. **Slovakia: Main indicators by commodity**

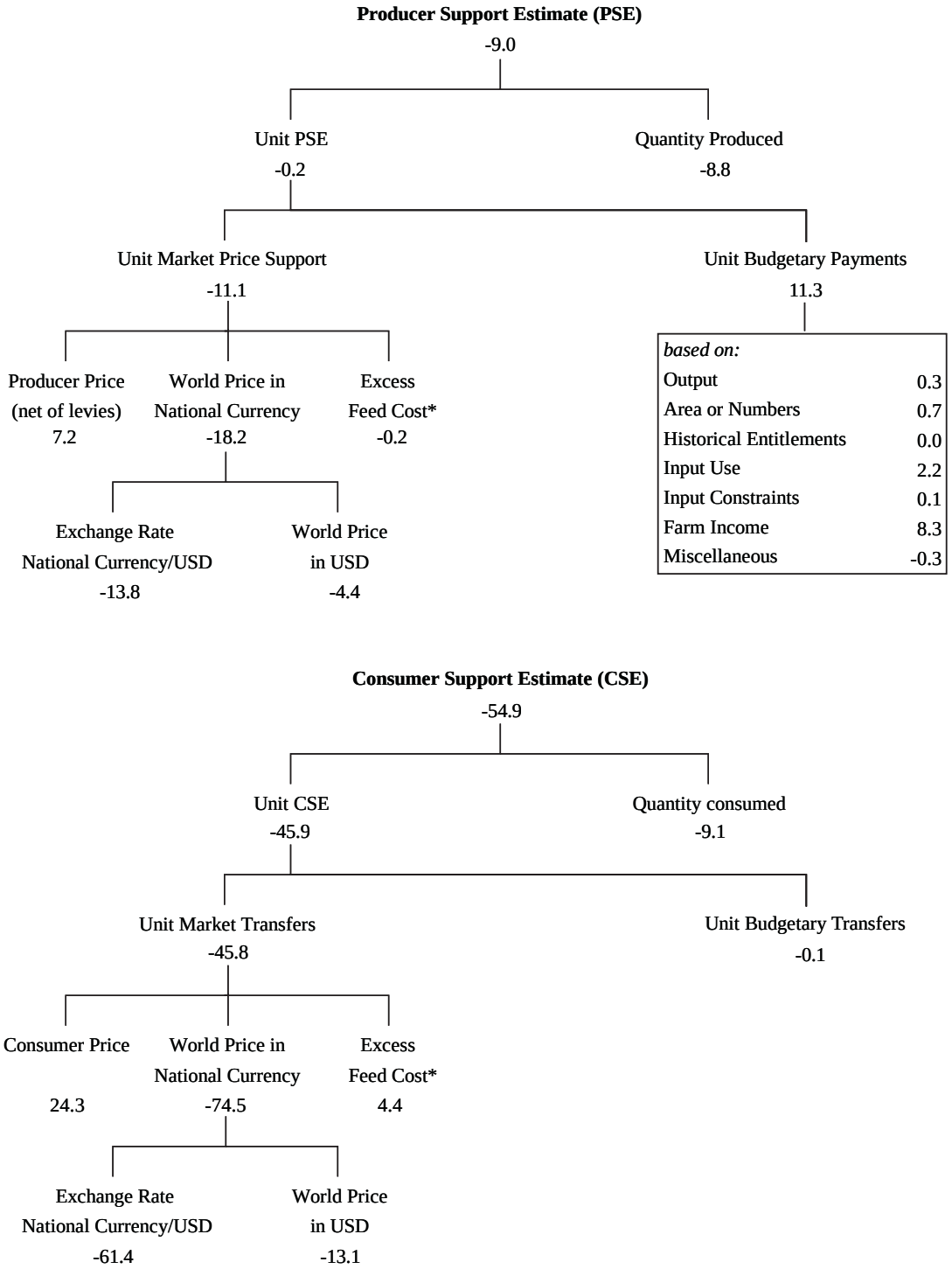
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (SKK mn)	1 044	946	1 295	465	1 078
	Percentage PSE	24	15	17	10	17
	Producer NPC	1.19	0.96	1.04	0.94	0.92
	Producer NAC	1.33	1.17	1.21	1.11	1.21
	Percentage CSE	5	2	-1	3	5
	Consumer NPC	1.17	0.96	1.03	0.94	0.92
	Consumer NAC	0.96	0.98	1.01	0.97	0.96
Maize	PSE (SKK mn)	827	-166	-98	-379	-19
	Percentage PSE	37	-6	-4	-13	-1
	Producer NPC	1.41	0.77	0.82	0.74	0.76
	Producer NAC	1.61	0.94	0.96	0.88	0.99
	Percentage CSE	-21	9	8	9	9
	Consumer NPC	1.41	0.77	0.82	0.74	0.76
	Consumer NAC	1.28	0.92	0.92	0.92	0.92
Other grains	PSE (SKK mn)	620	666	1 508	345	146
	Percentage PSE	27	17	36	10	6
	Producer NPC	1.30	1.03	1.34	0.94	0.81
	Producer NAC	1.45	1.25	1.56	1.12	1.07
	Percentage CSE	32	-21	30	-29	-65
	Consumer NPC	1.27	1.03	1.33	0.95	0.80
	Consumer NAC	0.79	1.68	0.77	1.41	2.88
Rice	PSE (SKK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (SKK mn)	337	-39	-364	-76	322
	Percentage PSE	42	-3	-19	-3	13
	Producer NPC	1.57	0.80	0.72	0.82	0.84
	Producer NAC	1.75	0.99	0.84	0.97	1.15
	Percentage CSE	-33	25	40	17	18
	Consumer NPC	1.53	0.84	0.71	0.98	0.83
	Consumer NAC	1.53	0.81	0.71	0.85	0.85
Sugar	PSE (SKK mn)	506	623	696	666	505
	Percentage PSE	64	48	53	46	44
	Producer NPC	2.55	1.60	1.82	1.62	1.36
	Producer NAC	2.85	1.92	2.11	1.86	1.78
	Percentage CSE	-43	-36	-45	-38	-27
	Consumer NPC	2.50	1.60	1.81	1.62	1.36
	Consumer NAC	1.82	1.60	1.81	1.62	1.36
Milk	PSE (SKK mn)	6 749	4 336	4 926	4 028	4 055
	Percentage PSE	64	40	47	37	35
	Producer NPC	2.27	1.53	1.72	1.47	1.40
	Producer NAC	2.97	1.68	1.90	1.60	1.54
	Percentage CSE	5	-27	-35	-24	-21
	Consumer NPC	2.22	1.37	1.54	1.31	1.26
	Consumer NAC	1.00	1.37	1.54	1.31	1.26
Beef and Veal	PSE (SKK mn)	3 881	-708	-785	-733	-606
	Percentage PSE	67	-18	-19	-21	-15
	Producer NPC	2.31	0.76	0.76	0.76	0.78
	Producer NAC	3.10	0.85	0.84	0.83	0.87
	Percentage CSE	-44	31	33	32	28
	Consumer NPC	2.26	0.76	0.75	0.76	0.78
	Consumer NAC	1.83	0.76	0.75	0.76	0.78

Table III.39 **Slovakia: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (SKK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Wool	PSE (SKK mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (SKK mn)	5 203	3 403	3 927	4 388	1 895
	Percentage PSE	69	30	32	39	19
	Producer NPC	2.29	1.35	1.35	1.56	1.15
	Producer NAC	3.22	1.45	1.48	1.64	1.23
	Percentage CSE	-53	-24	-25	-36	-12
	Consumer NPC	2.24	1.35	1.34	1.56	1.14
	Consumer NAC	2.11	1.35	1.34	1.56	1.14
Poultry	PSE (SKK mn)	1 221	1 461	1 597	1 364	1 423
	Percentage PSE	59	39	40	36	39
	Producer NPC	1.82	1.50	1.52	1.45	1.52
	Producer NAC	2.44	1.63	1.68	1.57	1.65
	Percentage CSE	-40	-33	-34	-31	-34
	Consumer NPC	1.78	1.49	1.51	1.45	1.52
	Consumer NAC	1.66	1.49	1.51	1.45	1.52
Eggs	PSE (SKK mn)	1 107	650	1 016	637	296
	Percentage PSE	50	25	32	28	13
	Producer NPC	1.54	1.23	1.33	1.30	1.06
	Producer NAC	2.07	1.34	1.48	1.40	1.15
	Percentage CSE	-31	-18	-25	-23	-6
	Consumer NPC	1.50	1.23	1.33	1.30	1.06
	Consumer NAC	1.49	1.23	1.33	1.30	1.06
Other commodities	PSE (SKK mn)	9 574	4 578	4 651	4 416	4 668
	Percentage PSE	52	27	29	26	27
	Producer NPC	1.81	1.16	1.22	1.17	1.08
	Producer NAC	2.13	1.37	1.40	1.35	1.36
	Percentage CSE	-44	-11	-15	-14	-5
	Consumer NPC	1.81	1.13	1.17	1.17	1.05
	Consumer NAC	1.81	1.13	1.17	1.17	1.05
All commodities	PSE (SKK mn)	31 069	15 751	18 368	15 121	13 763
	Percentage PSE	55	24	27	24	22
	Producer NPC	1.81	1.16	1.22	1.17	1.08
	Producer NAC	2.24	1.32	1.37	1.31	1.28
	Percentage CSE	-34	-12	-14	-16	-7
	Consumer NPC	1.81	1.13	1.17	1.17	1.05
	Consumer NAC	1.53	1.14	1.17	1.19	1.08

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.14. **Slovakia: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -11.1 percentage points to the -9.0 per cent change in PSE.
See Part II.4. for detailed explanations. (*) Feed Cost was negative in both periods.

Table III.40. **Switzerland: Estimates of support to agriculture**

(CHF million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**9 482**	**7 465**	**7 775**	**7 180**	**7 439**
of which share of MPS commodities (%)	*85*	*81*	*82*	*81*	*80*
Total value of consumption (at farm gate)	**11 602**	**8 696**	**8 946**	**8 676**	**8 467**
Producer Support Estimate (PSE)	**7 944**	**7 319**	**7 264**	**7 194**	**7 501**
Market Price Support (MPS)	6 486	4 471	4 594	4 388	4 432
of which MPS commodities	*5 539*	*3 622*	*3 780*	*3 535*	*3 550*
Payments based on output	102	225	117	261	297
Payments based on area planted/animal numbers	494	1 000	1 379	776	846
Payments based on historical entitlements	0	908	371	1 163	1 190
Payments based on input use	647	400	475	303	423
Payments based on input constraints	0	119	120	112	124
Payments based on overall farming income	0	0	0	0	0
Miscellaneous payments	216	196	208	191	190
Percentage PSE	**73**	**71**	**70**	**72**	**71**
Producer NPC	**3.86**	**3.06**	**3.06**	**3.19**	**2.93**
Producer NAC	**3.66**	**3.45**	**3.28**	**3.58**	**3.49**
General Services Support Estimate (GSSE)	**688**	**522**	**553**	**497**	**515**
Research and development	135	97	122	79	90
Agricultural schools	38	27	33	25	23
Inspection services	14	12	15	10	10
Infrastructure	137	77	75	75	80
Marketing and promotion	45	51	32	57	64
Public stockholding	103	62	68	60	58
Miscellaneous	216	196	208	191	190
GSSE as a share of TSE (%)	**7.1**	**6.1**	**6.3**	**5.9**	**6.2**
Consumer Support Estimate (CSE)	**-7 253**	**-4 829**	**-4 680**	**-4 975**	**-4 833**
Transfers to producers from consumers	-6 715	-4 758	-4 892	-4 737	-4 646
Other transfers from consumers	-1 932	-999	-1 082	-1 166	-750
Transfers to consumers from taxpayers	1 020	672	993	691	333
Excess feed cost	374	256	301	237	230
Percentage CSE	**-69**	**-60**	**-59**	**-62**	**-59**
Consumer NPC	**3.93**	**2.96**	**3.01**	**3.13**	**2.76**
Consumer NAC	**3.18**	**2.52**	**2.43**	**2.65**	**2.46**
Total Support Estimate (TSE)	**9 653**	**8 513**	**8 810**	**8 381**	**8 348**
Transfers from consumers	8 647	5 757	5 974	5 903	5 396
Transfers from taxpayers	2 938	3 755	3 918	3 645	3 702
Budget revenues	-1 932	-999	-1 082	-1 166	-750
TSE as a share of GDP (%)	**3.7**	**2.2**	**2.3**	**2.2**	**2.1**
GDP deflator 1995 = 100	**78.8**	**101.1**	**100.4**	**101.0**	**102.0**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Switzerland are: wheat, maize, other grains, oilseeds, sugar, milk, beef and veal, sheepmeat, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.41. **Switzerland: Main indicators by commodity**

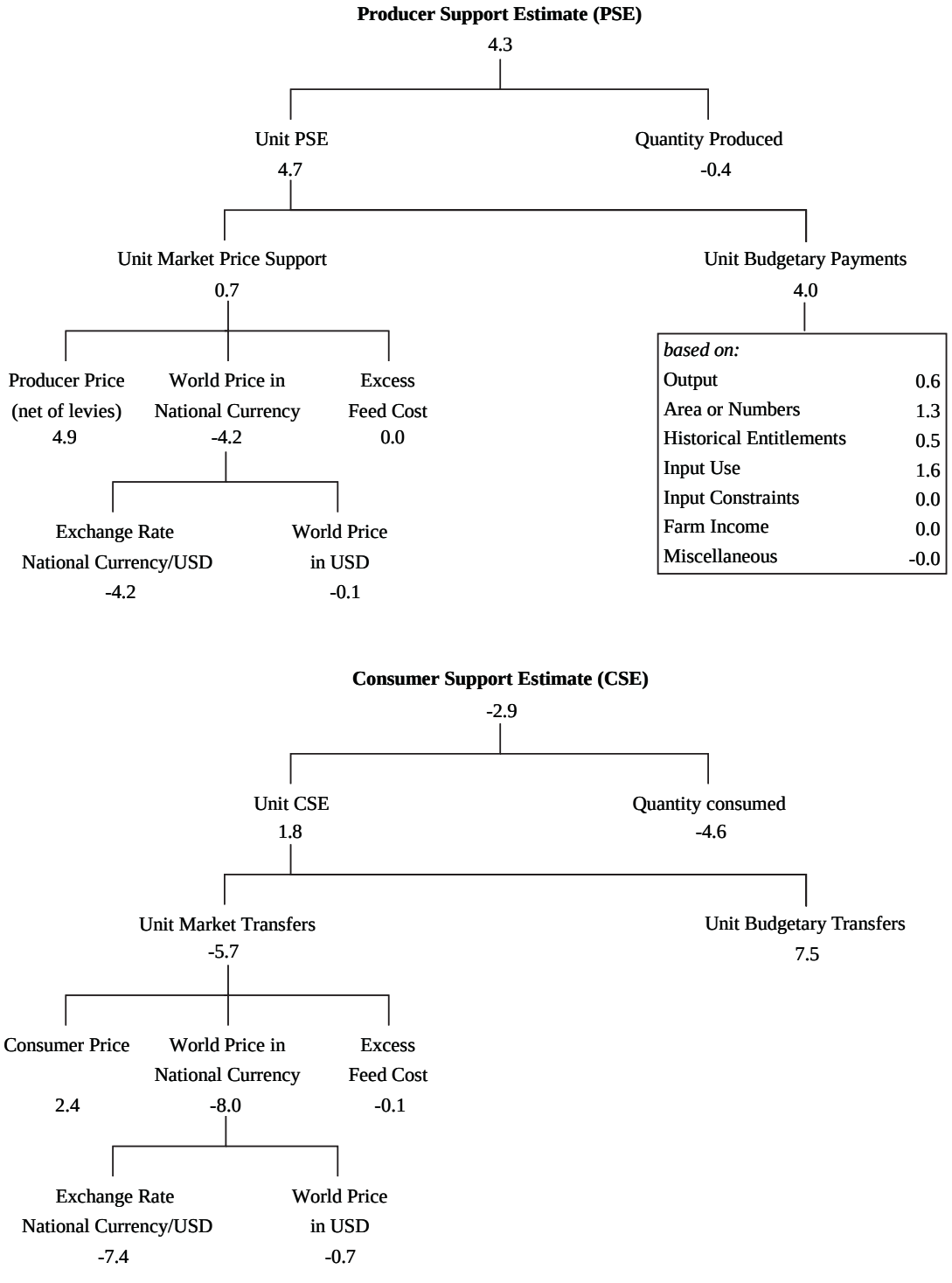
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (CHF mn)	442	383	432	344	372
	Percentage PSE	77	66	64	70	64
	Producer NPC	4.02	2.95	3.26	3.04	2.55
	Producer NAC	4.36	2.97	2.75	3.35	2.81
	Percentage CSE	-62	-50	-51	-51	-47
	Consumer NPC	4.02	2.95	3.26	3.04	2.55
	Consumer NAC	2.62	2.00	2.04	2.05	1.89
Maize	PSE (CHF mn)	169	101	121	91	92
	Percentage PSE	80	68	74	67	64
	Producer NPC	3.46	2.24	2.51	2.27	1.95
	Producer NAC	5.18	3.24	3.91	3.05	2.75
	Percentage CSE	-40	-18	-22	-18	-14
	Consumer NPC	3.46	2.24	2.51	2.27	1.95
	Consumer NAC	1.67	1.22	1.29	1.22	1.16
Other grains	PSE (CHF mn)	272	159	192	129	156
	Percentage PSE	85	71	70	69	73
	Producer NPC	4.53	2.43	2.29	2.37	2.62
	Producer NAC	6.55	3.43	3.34	3.26	3.69
	Percentage CSE	-46	-18	-19	-22	-14
	Consumer NPC	4.53	2.43	2.29	2.37	2.62
	Consumer NAC	1.87	1.23	1.24	1.29	1.16
Rice	PSE (CHF mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (CHF mn)	85	71	71	70	71
	Percentage PSE	85	83	78	86	85
	Producer NPC	6.62	3.54	3.57	4.85	2.19
	Producer NAC	6.89	6.06	4.59	6.94	6.64
	Percentage CSE	-83	-67	-69	-77	-54
	Consumer NPC	6.62	3.54	3.57	4.85	2.19
	Consumer NAC	6.02	3.23	3.19	4.30	2.19
Sugar	PSE (CHF mn)	101	147	134	133	173
	Percentage PSE	74	75	71	75	78
	Producer NPC	4.51	3.25	2.95	3.17	3.64
	Producer NAC	3.87	3.98	3.49	3.96	4.50
	Percentage CSE	-67	-63	-61	-62	-67
	Consumer NPC	4.51	3.25	2.95	3.17	3.64
	Consumer NAC	3.05	2.74	2.55	2.61	3.05
Milk	PSE (CHF mn)	3 100	2 976	3 081	2 961	2 884
	Percentage PSE	82	77	78	77	77
	Producer NPC	5.90	3.89	4.28	3.97	3.43
	Producer NAC	5.51	4.43	4.54	4.39	4.35
	Percentage CSE	-76	-63	-63	-64	-63
	Consumer NPC	5.82	3.59	4.11	3.61	3.06
	Consumer NAC	4.25	2.72	2.68	2.77	2.71
Beef and Veal	PSE (CHF mn)	1 570	1 145	1 017	1 091	1 328
	Percentage PSE	75	72	69	72	77
	Producer NPC	3.79	2.56	2.23	2.40	3.05
	Producer NAC	4.14	3.68	3.23	3.54	4.27
	Percentage CSE	-72	-60	-55	-58	-67
	Consumer NPC	3.67	2.56	2.23	2.40	3.05
	Consumer NAC	3.65	2.54	2.21	2.38	3.04

Table III.41 **Switzerland: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (CHF mn)	42	45	48	48	40
	Percentage PSE	72	61	63	63	57
	Producer NPC	5.42	2.61	2.83	2.73	2.27
	Producer NAC	3.57	2.59	2.71	2.72	2.33
	Percentage CSE	-81	-61	-65	-63	-56
	Consumer NPC	5.42	2.61	2.83	2.73	2.27
	Consumer NAC	5.41	2.61	2.82	2.73	2.27
Wool	PSE (CHF mn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (CHF mn)	763	699	693	729	674
	Percentage PSE	44	53	49	58	51
	Producer NPC	2.12	2.14	2.02	2.42	1.97
	Producer NAC	1.79	2.12	1.96	2.37	2.04
	Percentage CSE	-52	-53	-50	-59	-49
	Consumer NPC	2.12	2.14	2.02	2.42	1.97
	Consumer NAC	2.11	2.13	2.01	2.42	1.97
Poultry	PSE (CHF mn)	134	176	157	183	189
	Percentage PSE	79	80	77	82	82
	Producer NPC	7.88	6.03	5.13	6.42	6.54
	Producer NAC	4.82	5.12	4.27	5.45	5.65
	Percentage CSE	-87	-83	-80	-84	-85
	Consumer NPC	7.88	6.03	5.13	6.42	6.54
	Consumer NAC	7.86	6.02	5.12	6.42	6.53
Eggs	PSE (CHF mn)	208	166	173	167	159
	Percentage PSE	80	79	79	81	77
	Producer NPC	6.41	4.99	5.22	5.63	4.13
	Producer NAC	4.97	4.75	4.70	5.28	4.27
	Percentage CSE	-84	-79	-80	-81	-75
	Consumer NPC	6.41	4.99	5.22	5.63	4.13
	Consumer NAC	6.19	4.80	5.02	5.40	3.98
Other commodities	PSE (CHF mn)	1 058	1 252	1 144	1 248	1 363
	Percentage PSE	71	69	67	70	69
	Producer NPC	3.86	3.06	3.06	3.19	2.93
	Producer NAC	3.43	3.20	3.03	3.30	3.28
	Percentage CSE	-75	-66	-67	-68	-64
	Consumer NPC	3.93	2.96	3.01	3.13	2.76
	Consumer NAC	3.93	2.96	3.01	3.13	2.76
All commodities	PSE (CHF mn)	7 944	7 319	7 264	7 194	7 501
	Percentage PSE	73	71	70	72	71
	Producer NPC	3.86	3.06	3.06	3.19	2.93
	Producer NAC	3.66	3.45	3.28	3.58	3.49
	Percentage CSE	-69	-60	-59	-62	-59
	Consumer NPC	3.93	2.96	3.01	3.13	2.76
	Consumer NAC	3.18	2.52	2.43	2.65	2.46

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.15. **Switzerland: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed 0.7 percentage points to the 4.3 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.42. **Turkey: Estimates of support to agriculture**
(TRL billion)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**18 179**	**13 498 990**	**9 798 507**	**13 163 278**	**17 535 185**
of which share of MPS commodities (%)	*57*	*65*	*64*	*64*	*66*
Total value of consumption (at farm gate)	**14 795**	**11 602 956**	**7 805 461**	**11 638 158**	**15 365 250**
Producer Support Estimate (PSE)	**2 514**	**2 719 833**	**2 593 033**	**3 199 483**	**2 366 981**
Market Price Support (MPS)	1 603	2 012 715	2 084 178	2 341 494	1 612 472
of which MPS commodities	*916*	*1 298 491*	*1 337 140*	*1 494 459*	*1 063 875*
Payments based on output	12	135 810	30 318	140 297	236 815
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	900	571 308	478 537	717 692	517 694
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	**14**	**20**	**25**	**23**	**13**
Producer NPC	**1.12**	**1.23**	**1.30**	**1.25**	**1.13**
Producer NAC	**1.16**	**1.26**	**1.34**	**1.30**	**1.15**
General Services Support Estimate (GSSE)	**331**	**1 637 726**	**1 011 862**	**1 864 758**	**2 036 559**
Research and development	58	12 714	10 026	11 774	16 343
Agricultural schools	3	1 928	1 789	1 997	1 997
Inspection services	55	31 334	19 936	28 069	45 996
Infrastructure	7	3 142	2 487	3 469	3 469
Marketing and promotion	114	1 583 536	973 762	1 815 562	1 961 284
Public stockholding	0	0	0	0	0
Miscellaneous	93	5 073	3 861	3 887	7 471
GSSE as a share of TSE (%)	**11.1**	**37.0**	**28.1**	**36.8**	**46.2**
Consumer Support Estimate (CSE)	**-1 769**	**-2 164 517**	**-1 972 226**	**-2 563 447**	**-1 957 878**
Transfers to producers from consumers	-1 883	-2 343 304	-2 122 835	-2 715 916	-2 191 161
Other transfers from consumers	-18	-33 002	-36 984	-88 686	26 663
Transfers to consumers from taxpayers	0	0	0	0	0
Excess feed cost	132	211 789	187 593	241 155	206 620
Percentage CSE	**-13**	**-20**	**-25**	**-22**	**-13**
Consumer NPC	**1.17**	**1.29**	**1.38**	**1.32**	**1.16**
Consumer NAC	**1.15**	**1.26**	**1.34**	**1.28**	**1.15**
Total Support Estimate (TSE)	**2 845**	**4 357 559**	**3 604 895**	**5 064 241**	**4 403 540**
Transfers from consumers	1 901	2 376 306	2 159 819	2 804 602	2 164 498
Transfers from taxpayers	962	2 014 255	1 482 060	2 348 325	2 212 379
Budget revenues	-18	-33 002	-36 984	-88 686	26 663
TSE as a share of GDP (%)	**3.5**	**5.7**	**6.9**	**6.5**	**3.5**
GDP deflator 1995 = 100	**1.4**	**926.7**	**567.2**	**884.7**	**1328.3**

Notes: See Part II.4for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for Turkey are: wheat, maize, other grains, oilseeds, potatoes, tomatoes, sugar, milk, beef and veal, sheepmeat, tobacco, grapes, apples, cotton, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.43. **Turkey: Main indicators by commodity**

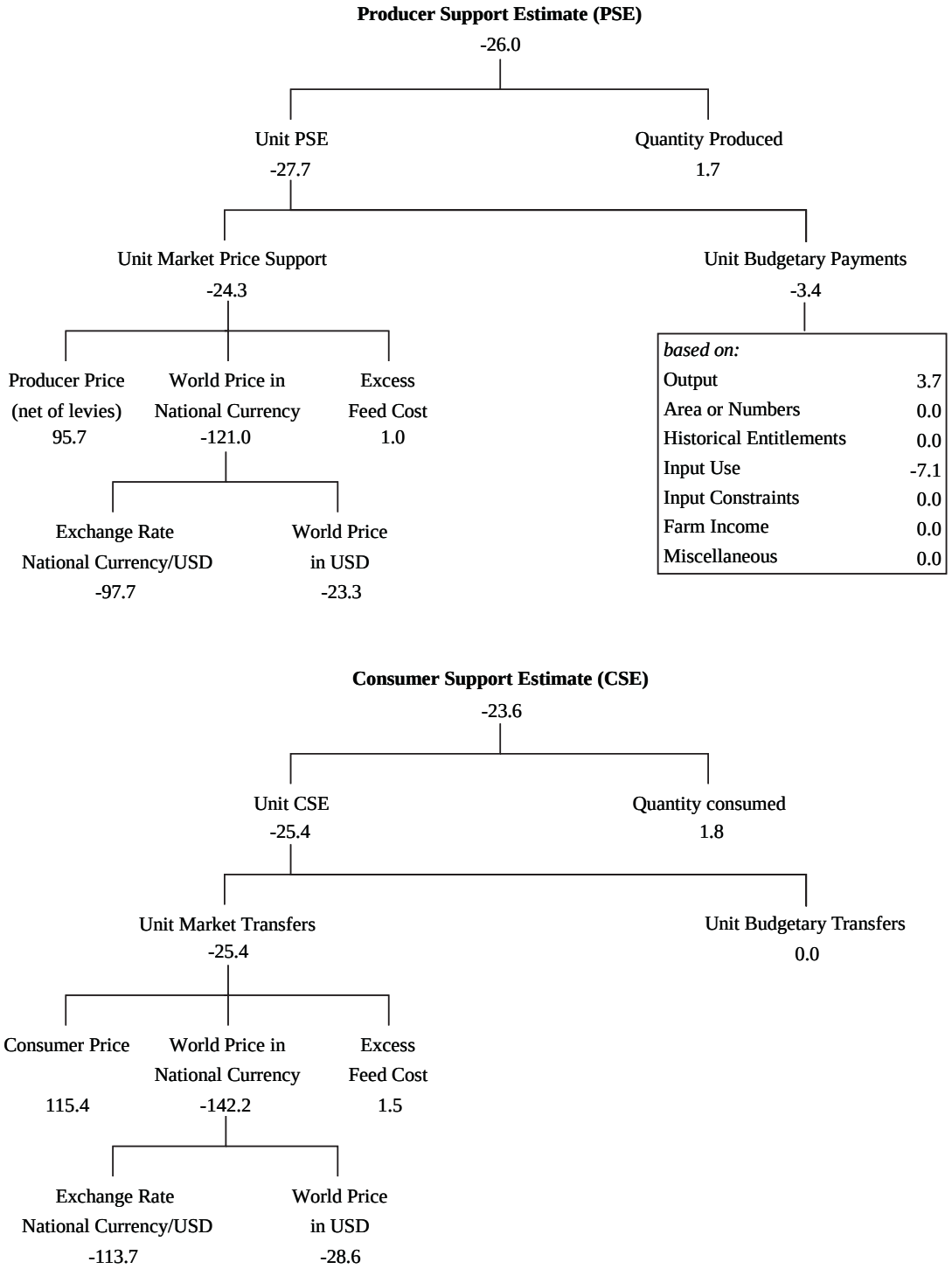
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (TRL bn)	817	456 539	431 611	535 800	402 205
	Percentage PSE	34	35	42	42	22
	Producer NPC	1.36	1.43	1.53	1.54	1.20
	Producer NAC	1.57	1.58	1.72	1.73	1.29
	Percentage CSE	-22	-27	-32	-33	-16
	Consumer NPC	1.36	1.43	1.53	1.54	1.20
	Consumer NAC	1.32	1.38	1.48	1.48	1.19
Maize	PSE (TRL bn)	58	62 944	50 319	60 406	78 108
	Percentage PSE	21	38	45	39	31
	Producer NPC	1.16	1.52	1.65	1.50	1.40
	Producer NAC	1.27	1.63	1.81	1.64	1.46
	Percentage CSE	-7	-11	-13	-11	-10
	Consumer NPC	1.16	1.52	1.65	1.50	1.40
	Consumer NAC	1.07	1.12	1.14	1.12	1.11
Other grains	PSE (TRL bn)	142	196 530	192 346	220 102	177 142
	Percentage PSE	28	44	55	48	28
	Producer NPC	1.34	1.69	2.03	1.73	1.33
	Producer NAC	1.46	1.84	2.22	1.91	1.40
	Percentage CSE	-3	-2	-3	-3	-2
	Consumer NPC	1.34	1.69	2.03	1.73	1.33
	Consumer NAC	1.03	1.02	1.03	1.03	1.02
Rice	PSE (TRL bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Oilseeds	PSE (TRL bn)	45	60 633	36 783	69 837	75 280
	Percentage PSE	20	40	35	43	41
	Producer NPC	1.14	1.55	1.40	1.64	1.62
	Producer NAC	1.27	1.67	1.54	1.75	1.70
	Percentage CSE	-10	-35	-29	-39	-38
	Consumer NPC	1.14	1.55	1.40	1.64	1.62
	Consumer NAC	1.14	1.55	1.40	1.64	1.62
Sugar	PSE (TRL bn)	72	413 703	295 468	425 539	520 101
	Percentage PSE	23	68	65	70	67
	Producer NPC	1.10	2.99	2.76	3.27	2.94
	Producer NAC	1.31	3.09	2.86	3.37	3.05
	Percentage CSE	-9	-66	-64	-69	-66
	Consumer NPC	1.10	2.99	2.76	3.27	2.94
	Consumer NAC	1.10	2.99	2.76	3.27	2.94
Milk	PSE (TRL bn)	294	424 250	295 116	403 077	574 556
	Percentage PSE	35	46	52	44	42
	Producer NPC	1.61	2.09	2.50	1.93	1.84
	Producer NAC	1.58	1.87	2.10	1.77	1.74
	Percentage CSE	-34	-51	-60	-48	-46
	Consumer NPC	1.61	2.09	2.50	1.93	1.84
	Consumer NAC	1.61	2.09	2.50	1.93	1.84
Beef and Veal	PSE (TRL bn)	-49	405 461	257 773	441 598	517 012
	Percentage PSE	0	49	48	51	47
	Producer NPC	1.00	2.02	2.03	2.07	1.97
	Producer NAC	1.02	1.95	1.91	2.02	1.90
	Percentage CSE	4	-51	-51	-52	-49
	Consumer NPC	1.00	2.02	2.03	2.07	1.97
	Consumer NAC	1.00	2.02	2.03	2.07	1.97

Table III.43 **Turkey: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (TRL bn)	79	65 612	46 388	99 913	50 534
	Percentage PSE	12	19	21	25	10
	Producer NPC	1.17	1.22	1.26	1.29	1.11
	Producer NAC	1.14	1.23	1.26	1.33	1.11
	Percentage CSE	-14	-18	-20	-23	-10
	Consumer NPC	1.17	1.22	1.26	1.29	1.11
	Consumer NAC	1.17	1.22	1.26	1.29	1.11
Wool	PSE (TRL bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Pigmeat	PSE (TRL bn)	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage PSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Producer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
	Percentage CSE	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NPC	n.c.	n.c.	n.c.	n.c.	n.c.
	Consumer NAC	n.c.	n.c.	n.c.	n.c.	n.c.
Poultry	PSE (TRL bn)	92	117 641	72 363	121 042	159 519
	Percentage PSE	24	28	25	30	29
	Producer NPC	1.11	1.47	1.42	1.49	1.51
	Producer NAC	1.33	1.39	1.34	1.42	1.42
	Percentage CSE	-9	-32	-30	-33	-34
	Consumer NPC	1.11	1.47	1.42	1.49	1.51
	Consumer NAC	1.11	1.47	1.42	1.49	1.51
Eggs	PSE (TRL bn)	44	100 628	62 204	92 013	147 667
	Percentage PSE	16	33	30	32	36
	Producer NPC	1.14	1.73	1.69	1.74	1.77
	Producer NAC	1.19	1.49	1.43	1.48	1.57
	Percentage CSE	-12	-42	-41	-43	-43
	Consumer NPC	1.14	1.73	1.69	1.74	1.77
	Consumer NAC	1.14	1.73	1.69	1.74	1.77
Other commodities	PSE (TRL bn)	920	415 892	852 662	730 156	-335 144
	Percentage PSE	8	6	13	9	-3
	Producer NPC	1.07	1.21	1.31	1.23	1.10
	Producer NAC	1.16	1.26	1.34	1.30	1.15
	Percentage CSE	-12	-6	-15	-8	6
	Consumer NPC	1.14	1.07	1.17	1.09	0.95
	Consumer NAC	1.14	1.07	1.17	1.09	0.95
All commodities	PSE (TRL bn)	2 514	2 719 833	2 593 033	3 199 483	2 366 981
	Percentage PSE	14	20	25	23	13
	Producer NPC	1.07	1.21	1.31	1.23	1.10
	Producer NAC	1.16	1.26	1.34	1.30	1.15
	Percentage CSE	-13	-20	-25	-22	-13
	Consumer NPC	1.17	1.29	1.38	1.32	1.16
	Consumer NAC	1.15	1.26	1.34	1.28	1.15

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.16. **Turkey: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -24.3 percentage points to the -26.0 per cent change in PSE.
See Part II.4. for detailed explanations.

Table III.44. **United States: Estimates of support to agriculture**
(USD million)

	1986-88	1998-2000	1998	1999	2000p
Total value of production (at farm gate)	**143 537**	**188 686**	**190 496**	**185 661**	**189 901**
of which share of MPS commodities (%)	*69*	*65*	*65*	*65*	*66*
Total value of consumption (at farm gate)	**134 562**	**172 530**	**172 147**	**171 876**	**173 567**
Producer Support Estimate (PSE)	**41 859**	**50 884**	**48 935**	**54 762**	**48 957**
Market Price Support (MPS)	19 551	20 271	23 598	21 544	15 670
of which MPS commodities	*13 491*	*13 248*	*15 421*	*14 053*	*10 271*
Payments based on output	2 921	7 909	4 697	9 799	9 229
Payments based on area planted/animal numbers	11 313	3 052	2 846	2 794	3 517
Payments based on historical entitlements	0	9 979	8 471	10 936	10 531
Payments based on input use	6 526	6 429	6 116	6 510	6 661
Payments based on input constraints	637	1 913	1 954	1 808	1 977
Payments based on overall farming income	912	1 331	1 252	1 371	1 371
Miscellaneous payments	0	0	0	0	0
Percentage PSE	**25**	**23**	**23**	**25**	**22**
Producer NPC	**1.22**	**1.19**	**1.19**	**1.21**	**1.17**
Producer NAC	**1.34**	**1.30**	**1.29**	**1.33**	**1.28**
General Services Support Estimate (GSSE)	**15 233**	**22 172**	**22 258**	**21 763**	**22 495**
Research and development	1 457	1 748	2 095	1 532	1 618
Agricultural schools	0	0	0	0	0
Inspection services	384	642	621	626	679
Infrastructure	3 027	2 681	2 782	2 748	2 514
Marketing and promotion	9 266	15 375	15 055	15 128	15 942
Public stockholding	0	58	38	62	75
Miscellaneous	1 098	1 667	1 667	1 667	1 667
GSSE as a share of TSE (%)	**22.4**	**23.8**	**24.4**	**22.6**	**24.4**
Consumer Support Estimate (CSE)	**-9 142**	**-1 840**	**-5 586**	**-3 727**	**3 794**
Transfers to producers from consumers	-19 060	-20 259	-23 567	-21 542	-15 668
Other transfers from consumers	-1 518	-1 845	-1 995	-2 159	-1 382
Transfers to consumers from taxpayers	11 142	20 263	19 970	19 974	20 844
Excess feed cost	294	2	7	0	0
Percentage CSE	**-8**	**-1**	**-4**	**-2**	**2**
Consumer NPC	**1.19**	**1.15**	**1.17**	**1.16**	**1.11**
Consumer NAC	**1.08**	**1.01**	**1.04**	**1.03**	**0.98**
Total Support Estimate (TSE)	**68 235**	**93 319**	**91 163**	**96 499**	**92 296**
Transfers from consumers	20 578	22 104	25 562	23 701	17 050
Transfers from taxpayers	49 174	73 060	67 596	74 957	76 628
Budget revenues	-1 518	-1 845	-1 995	-2 159	-1 382
TSE as a share of GDP (%)	**1.4**	**1.0**	**1.0**	**1.0**	**0.9**
GDP deflator 1995 = 100	**79.2**	**107.0**	**105.2**	**106.8**	**109.1**

Notes: See Part II.4 for detailed explanations. p: provisional. Market price support is net of producer levies and excess feed costs. MPS commodities for the United States are: wheat, maize, other grains, rice, oilseeds, sugar, milk, beef and veal, sheepmeat, wool, pigmeat, poultry and eggs. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
Source: OECD, PSE/CSE database 2001.

Table III.45. **United States: Main indicators by commodity**

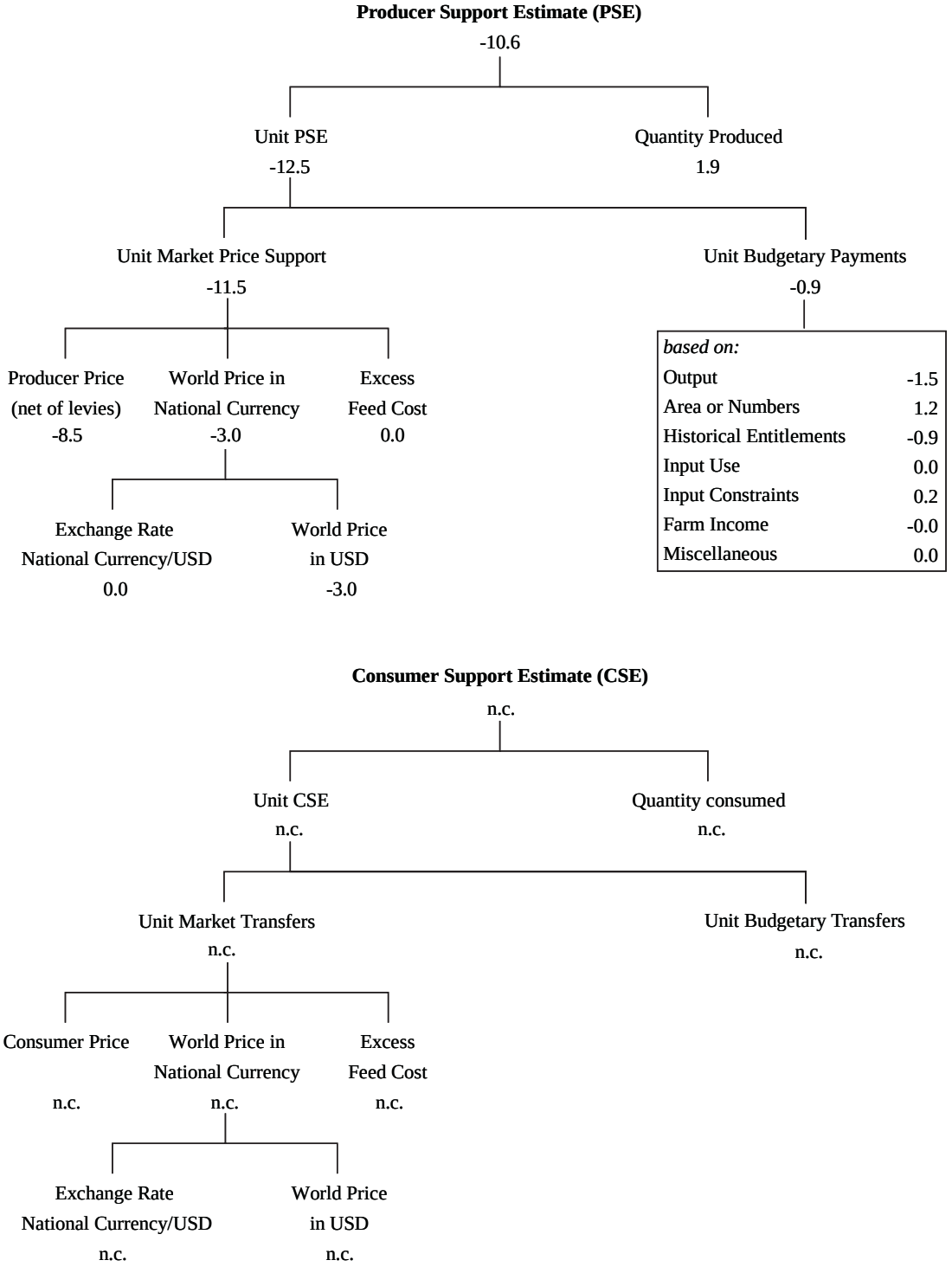
		1986-88	1998-2000	1998	1999	2000p
Wheat	PSE (USD mn)	4 801	5 127	4 185	5 712	5 484
	Percentage PSE	49	45	38	49	49
	Producer NPC	1.33	1.13	1.08	1.17	1.15
	Producer NAC	2.06	1.85	1.62	1.97	1.95
	Percentage CSE	3	25	24	25	25
	Consumer NPC	1.20	1.00	1.00	1.00	1.00
	Consumer NAC	0.98	0.80	0.81	0.80	0.80
Maize	PSE (USD mn)	8 239	8 434	7 253	8 863	9 186
	Percentage PSE	38	31	28	33	33
	Producer NPC	1.13	1.12	1.08	1.14	1.14
	Producer NAC	1.64	1.46	1.38	1.49	1.49
	Percentage CSE	10	17	16	16	18
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	0.91	0.86	0.86	0.86	0.85
Other grains	PSE (USD mn)	1 306	1 049	1 017	1 081	1 049
	Percentage PSE	40	41	40	41	41
	Producer NPC	1.35	1.12	1.10	1.13	1.14
	Producer NAC	1.73	1.68	1.66	1.71	1.69
	Percentage CSE	3	17	16	17	18
	Consumer NPC	1.22	1.06	1.05	1.08	1.05
	Consumer NAC	0.97	0.85	0.86	0.85	0.85
Rice	PSE (USD mn)	867	582	293	685	769
	Percentage PSE	52	31	15	36	41
	Producer NPC	1.45	1.24	1.01	1.28	1.43
	Producer NAC	2.21	1.48	1.18	1.55	1.70
	Percentage CSE	15	22	21	24	22
	Consumer NPC	1.01	1.00	1.00	1.00	1.00
	Consumer NAC	0.87	0.82	0.83	0.80	0.82
Oilseeds	PSE (USD mn)	891	3 411	2 376	3 844	4 012
	Percentage PSE	8	20	15	23	23
	Producer NPC	1.01	1.18	1.09	1.22	1.21
	Producer NAC	1.08	1.26	1.18	1.30	1.30
	Percentage CSE	2	4	4	4	4
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	0.98	0.96	0.96	0.96	0.96
Sugar	PSE (USD mn)	1 152	1 278	1 267	1 571	995
	Percentage PSE	58	61	56	79	47
	Producer NPC	1.87	1.69	1.58	1.99	1.50
	Producer NAC	2.46	2.95	2.26	4.71	1.89
	Percentage CSE	-65	-63	-61	-83	-47
	Consumer NPC	2.26	1.73	1.62	2.06	1.51
	Consumer NAC	2.96	3.41	2.53	5.81	1.87
Milk	PSE (USD mn)	11 641	13 410	15 389	13 792	11 049
	Percentage PSE	60	55	61	56	50
	Producer NPC	2.59	2.18	2.45	2.18	1.90
	Producer NAC	2.64	2.27	2.54	2.28	1.99
	Percentage CSE	-54	-46	-54	-48	-37
	Consumer NPC	2.59	2.15	2.43	2.17	1.84
	Consumer NAC	2.36	1.88	2.15	1.91	1.59
Beef and Veal	PSE (USD mn)	1 456	1 162	943	1 237	1 306
	Percentage PSE	6	4	3	4	4
	Producer NPC	1.02	1.00	1.00	1.00	1.00
	Producer NAC	1.06	1.04	1.04	1.04	1.04
	Percentage CSE	5	10	11	10	9
	Consumer NPC	1.46	1.66	1.71	1.59	1.67
	Consumer NAC	0.96	0.91	0.90	0.91	0.91

Table III.45 **United States: Main indicators by commodity (cont'd)**

		1986-88	1998-2000	1998	1999	2000p
Sheepmeat	PSE (USD mn)	27	45	17	58	59
	Percentage PSE	6	12	5	15	16
	Producer NPC	1.01	1.09	1.01	1.13	1.14
	Producer NAC	1.06	1.14	1.05	1.18	1.19
	Percentage CSE	-1	-6	-1	-9	-9
	Consumer NPC	1.01	1.07	1.01	1.10	1.10
	Consumer NAC	1.01	1.07	1.01	1.10	1.10
Wool	PSE (USD mn)	82	1	1	1	1
	Percentage PSE	49	4	4	4	5
	Producer NPC	1.01	1.01	1.01	1.02	1.02
	Producer NAC	2.16	1.04	1.04	1.05	1.05
	Percentage CSE	-1	-1	-1	-2	-2
	Consumer NPC	1.01	1.01	1.01	1.02	1.02
	Consumer NAC	1.01	1.01	1.01	1.02	1.02
Pigmeat	PSE (USD mn)	401	369	438	301	366
	Percentage PSE	4	4	5	4	4
	Producer NPC	1.00	1.00	1.00	1.00	1.00
	Producer NAC	1.04	1.04	1.05	1.04	1.04
	Percentage CSE	10	26	26	29	24
	Consumer NPC	1.00	1.00	1.00	1.00	1.00
	Consumer NAC	0.91	0.79	0.80	0.77	0.81
Poultry	PSE (USD mn)	1 159	704	661	716	734
	Percentage PSE	13	4	4	4	4
	Producer NPC	1.11	1.00	1.00	1.00	1.00
	Producer NAC	1.16	1.04	1.04	1.04	1.04
	Percentage CSE	-1	10	10	9	10
	Consumer NPC	1.11	1.00	1.00	1.00	1.00
	Consumer NAC	1.01	0.91	0.91	0.91	0.91
Eggs	PSE (USD mn)	294	167	163	170	169
	Percentage PSE	9	4	4	4	4
	Producer NPC	1.06	1.00	1.00	1.00	1.00
	Producer NAC	1.10	1.04	1.04	1.04	1.04
	Percentage CSE	1	9	9	9	9
	Consumer NPC	1.06	1.00	1.00	1.00	1.00
	Consumer NAC	0.99	0.92	0.92	0.92	0.92
Other commodities	PSE (USD mn)	9 543	15 146	14 931	16 729	13 777
	Percentage PSE	20	21	21	23	19
	Producer NPC	1.22	1.19	1.19	1.21	1.17
	Producer NAC	1.25	1.27	1.27	1.31	1.24
	Percentage CSE	-6	0	-3	-2	4
	Consumer NPC	1.19	1.15	1.17	1.16	1.11
	Consumer NAC	1.07	1.00	1.03	1.02	0.97
All commodities	PSE (USD mn)	41 859	50 884	48 935	54 762	48 957
	Percentage PSE	25	23	23	25	22
	Producer NPC	1.22	1.19	1.19	1.21	1.17
	Producer NAC	1.34	1.30	1.29	1.33	1.28
	Percentage CSE	-8	-1	-4	-2	2
	Consumer NPC	1.19	1.15	1.17	1.16	1.11
	Consumer NAC	1.08	1.01	1.04	1.03	0.98

Notes: See Part II.4 for detailed explanations. p: provisional; n.c.: not calculated; PSE: Producer Support Estimate.
CSE: Consumer Support estimate. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient.
The PSE/CSE for "other commodities" is the residual of the PSE/CSE for all commodities minus the PSE/CSE for the commodities listed above.
Source: OECD, PSE/CSE database 2001.

Figure III.17. **United States: Decomposition of PSE and CSE changes, 1999 to 2000. All commodities – total**



Notes: The number shown under each PSE/CSE component is the contribution in the overall change. For example, the change in Unit Market Price Support contributed -11.5 percentage points to the -10.6 per cent change in PSE.
See Part II.4. for detailed explanations. n.c.: not calculated because the CSE changed from negative (-) to positive (+) between 1999 and 2000.

GLOSSARY OF AGRICULTURAL POLICY TERMS

This glossary provides definitions of policy measures and PSE/CSE terms. The list is not exhaustive. The terms defined here are mainly generic or 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. Some country-specific terms are included (for example, "Contract crops" in the United States), especially those that appear repeatedly in the text.

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, and are explained in further detail in Part II.4 of this volume.

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***Administered price*:** A price 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 a 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.

***Ad valorem tariff*:** A charge levied on imports, defined in terms of a fixed percentage of value.Contrast with *Specific-rate tariff*.

***Agenda* 2000** (EU)**:** A package of measures, involving changes to common EU policies, including the CAP, for the 2000-06 period agreed by EU Heads of State at the March 1999 European Summit in Berlin. The other elements of the Agenda 2000 package deal mainly with a framework for new quinquennial structural programmes, specific measures for candidate countries to EU accession and budgetary discipline. The agreement is based on proposals by the European Commission put forward in March 1998.

***Aggregate* Measurement *of* Support, AMS:** The indicator on which the domestic support discipline for the *Uruguay Round Agreement on Agriculture* is based. It is determined by calculating a market price support estimate for each commodity receiving such support, plus non-exempt direct payments or any other subsidy not exempted from reduction commitments, less specific agricultural levies or fees paid by producers. It differs from the *Producer Support Estimate* in many respects. The most important difference is that price gaps in the AMS calculation are estimated by reference to domestic administered prices and not to 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 included in PSEs are excluded from the AMS.

***Agri-environmental indicator*:** A summary measure, combining raw data, used to describe the state of the environment, a risk to the environment, a change in the environment, or a driving force behind such a change, that can be attributed wholly or in part to an agricultural activity or activities.

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 *euro*.

Agrochemical**:** A commercially produced, usually synthetic, chemical compound used in farming – such as a fertiliser, pesticide or soil conditioner.

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").

Asia-Pacific Economic Co-operation**, APEC:** A forum of 21 countries formed in 1989 to promote free trade and investment flows, economic growth and stability in the Asia-Pacific region.

Applicant country (EU)**:** A country that is being considered for membership of the European Union. Negotiations are currently being held between the EU and the following 12 applicants: Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.

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, an upper limit is set on 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 *land 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 South-East 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.

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 *land set-aside* which increases the level of mandatory set-aside during the following year.

Basic price (EU)**:** It provides a reference point for the triggering of intervention measures. It is set in the same way as the *target price* in the sheep, goat, pig and sugar beet sectors. It is adjusted on a seasonal basis in the sheep and goat sector.

Border price**:** See *Reference price*.

Bovine somatotropin**, BST:** A naturally occurring hormone that stimulates milk production.

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 variant 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.

Broadacre: A term used, mainly in Australia, to describe farms or industries engaged in the production of grains, oilseeds and other crops (especially wheat, barley, peas, sorghum, maize, hemp, safflower, and sunflower), or the grazing of livestock for meat or wool, on a large scale (*i.e.*, using extensive parcels of land).

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.

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 effective since July 1994. Slovenia (1996), Romania (1997) and Bulgaria (1999) have since joined CEFTA. 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.

***Coarse grains:** Generally refers to cereal grains other than wheat and rice – in the OECD countries, those used primarily for animal feed or brewing. 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. In Mexico, most maize is produced for human consumption rather than animal feed.

Codex Alimentarius: An international code for food developed and administered by the United Nations' *Codex Alimentarius Commission*. Sometimes simply referred to as "the Codex".

Codex Alimentarius Commission: An international body charged with developing the standards, guidelines and recommendations that comprise the *Codex Alimentarius*. Created in 1963 by two agencies of the United Nations – the *Food and Agriculture Organization* (FAO) and the World Health Organization (WHO) – the Commission concerns itself with all important aspects of food pertaining to the protection of consumer health, as well as to fair practices in the international food trade. The Commission also encourages food-related scientific debate and technological research.

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).

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).

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 of the former Soviet Union, with the exception of Estonia, Latvia and Lithuania.

***Consumer Nominal Assistance Coefficient* (NAC*c*):** an indicator of the nominal rate of assistance to consumers measuring the ratio between the value of consumption expenditure on agricultural commodities domestically produced including support to producers and that valued at world market prices without support to consumers.

***Consumer Nominal Protection Coefficient* (NPC*c*):** an indicator of the nominal rate of protection for consumers measuring the ratio between the average price paid by consumers (at farm gate) and the border price (measured at farm gate level).

***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 (first consumer) 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 transfers from consumers 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). It is **net** of any payment to consumers to compensate them for their contribution to market price support of a specific commodity (consumer subsidy from taxpayers); and the producer contribution (as consumers of domestically produced crops) to the market price support on crops used in animal feed (*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/subsidy, 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 (consumer subsidies). The nomenclature and definitions of this indicator replaced the former Consumer Subsidy Equivalent as from 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.

***Creutzfeldt-Jakob Disease* (CJD):** A rare but fatal brain disease with unusually long incubation periods (measured in years) and which usually strikes people over 65. Its cause is currently unknown. Surveillance of CJD in the UK was reinstituted in 1990 after the outbreak of bovine spongiform encephalopathy (BSE or "mad cow disease") in cattle, to see if there was a link between the two. In 1996, the British government announced a possible link, prompted by the discovery of several atypical cases of CJD in Great Britain. In contrast to the classic form of CJD, the new variant form predominantly affects younger persons and has atypical clinical features. This new variant of CJD raises the possibility that they are causally linked to BSE.

***Crop year*:** A twelve-month period used for collecting data on a particular crop – generally corresponding to the natural planting and marketing cycle for that crop. Usually, a crop year begins in a month other than January.

***Decoupled payment*:** A budgetary payment made to eligible recipients that is not linked to the production of specific commodities or to 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.

***Euro* (EU):** 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 Agricultural Guidance and Guarantee Fund, EAGGF (EU): A fund within the overall EU budget for the financing of the CAP. It has two sections: the EAGGF Guarantee section and the EAGGF Guidance section. The EAGGF Guarantee finances the expenditure of the common organisations of the market (the measures intended to regularise the agricultural markets and the refunds for exports to third countries). Depending on the products, the operations may take the form of intervention prices, production aid or premiums, compensatory aid for withdrawal of products from the market or storage aid. It also provides the financing for non-Objective 1 rural development activities, with the exception of the EU rural development initiative (LEADER PLUS), specific veterinary measures, plant health measures and information campaigns relating to CAP. With Agenda 2000, the EAGGF Guarantee Section has become almost the only source of funding for agricultural expenditure. The EAGGF Guidance Sectionfinances rural development measures covered by activities under *Objective* 1 and the EU rural development initiative (LEADER PLUS). 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 of EU member countries. With the creation of the *euro* on 1 January 1999, the ECU was abolished. See also *Agri-monetary system* and *euro*.

European Economic Area (EEA): An agreement which entered into force on 1 January 1994 that links Iceland, Norway and Liechtenstein to the EU Internal Market through the creation of a "European Economic Area". Within the EEA, uniform rules regarding the four freedoms, competition, state-aid and public procurement apply. The relevant Community legislation for the Internal Market and the EEA-specific adaptations are integrated into the 22 Annexes and 48 Protocols to the EEA Agreement and subsequently transposed into national legislation of the three EFTA States. These Annexes and Protocols are constantly updated as relevant new or amended EU legislation is adopted.

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:** A supplementary cost resulting from *market price support* on quantities of crops domestically produced and consumed as feed by livestock producers. It is deducted from the PSE for livestock and the CSE for crops. This avoids double-counting when aggregating the PSE and CSE for crops and livestock.

Export credits: Government financial support, direct financing, guarantees, insurance or interest rate support provided to foreign buyers to assist in the financing of the purchase of goods from national exporters.

Export refunds (EU): 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, such as through the EU *export* refunds and the US Export Enhancement Program. Export subsidies are now subject to value and volume restrictions under the *Uruguay Round Agreement on Agriculture*.

FAIR Act (US) Federal Agriculture Improvement and Reform Act of 1996. This US legislation replaces the 1990 Farm Act and governs almost all aspects of food and agriculture policy during the period 1996-2002.

Farm-gate price: See *Producer price*.

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.

Foot and Mouth Disease, FMD: A highly infectious viral disease that affects mainly cloven-hoofed ruminants such as cattle, sheep, pigs, goats and deer. The symptoms are fever and blister-like sores in

mainly the mouth and feet areas, and although death is not usual, effected animals stop gaining weight, and the yield of dairy cattle falls. FMD does not usually pose a health risk to humans. It can spread rapidly if uncontrolled as it is easily transmitted on clothes, vehicle tires and even the wind.

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:** An indicator of the annual monetary value of gross transfers to services provided collectively to agriculture and 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 taxpayer 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); improving 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); and 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 *Total Support Estimate*.

Genetically Modified Organisms, GMO: A plant oranismal micro-organism or virus, which has been genetically engineered or modified.

Greenhouse gas, GHG: A gas such as carbon dioxide or methane that reflects infra-red radiation emitted by the earth, thereby heating the earth's atmosphere and contributing to global climate change.

Hazard Analysis and Critical Control Points, HACCP: A 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 subject to an upper limit on the number of livestock eligible per holding, or constraints on stocking densities.

In-quota tariff: The tariff applied on imports within a *tariff-rate quota*. The in-quota tariff is less than the *over-quota tariff*.

Integrated Pest Management, IPM: An approach to the management and control of agricultural pests which relies on site- and condition-specific information to manage pest populations below a level that causes economic injury and that minimises risks to humans and the natural environment. Although any among a wide range of pest control agents may be used (including chemical sprays), IPM generally stresses the use of alternatives, such as crop rotations, mechanical cultivation, and biological agents, where such methods are deemed to be effective.

Interest concession: A reduction, compared with commercial interest rates on 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).

Intervention price: 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 price

(assuming that the 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 purchase: 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 I*ntervention stocks*.

Intervention stocks: 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* or sold on the world market with the aid of *export subsidies*.

Land set-aside, or land diversion: The removal of land from production, usually for supply control, regional development or environmental purposes. Set-aside is sometimes required as a condition for farmers to receive support payments.

Less-favoured area, LFA: In the EU, a term used to describe an area with natural handicaps (lack of water, climate, short crop season and tendencies of depopulation), or that is mountainous or hilly, as defined by its altitude and slope. LFAs 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, these are areas with less favoured conditions for agricultural production. These areas benefit from specific area and headage payments, and additional interest rate subsidies to support investment. In Hungary, these are areas with less favoured conditions for agricultural production (low quality land), which are defined in terms of the "Golden Crown Standard", reflecting its productive potential.

***Levies on output:** Taxes on farm output which reduce the price received by producers. See also *Market Price Support*.

Loan deficiency payments (United States)**:** In the United States, these are a type of *non-recourse* loan whereby, for wheat, feed grain, upland cotton, rice and oilseeds, 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 producing *programme crops*. 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, as well as 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: 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: The conditions under which a country permits imports. The market access provisions of the U*ruguay* R*ound* A*greement on* A*griculture* relate to bindings and reductions of *tariffs*, *tariffication* and

special safeguard provisions. The URAA maintained and opened new access to markets for agricultural products.

***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 *producer prices* and *reference 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 for total 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 penalties for not respecting regulations such as production quotas (*levies on output*). In the case of livestock production, it is net of the market price support on domestically produced coarse grains and oilseeds used as animal feed (*excess feed cost*).

***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 soybeans 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. They are used especially for fruits, vegetables and nuts. Marketing orders do not control pricing or production directly, but are binding on the entire industry in the area regulated. A 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.

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 benefit from full *market price support*. Over-quota volumes may be penalised by a levy (as in the EU, where the "superlevy" is 115% 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*.

***Modulation of aid** (EU): With effect from 1 January 2000, EU member States may decide to reduce direct aid (by a maximum of 20%) in cases where: the labour employed in the holding falls below a threshold set by national authorities; the overall prosperity of the holding is above certain limit; and the total payments granted under support schemes exceed a limit which is also set at national level The savings which result and those from cross-compliance (observance of environmental criteria) may be used by the member Stateto supplement EU funding for early retirement measures, payments for less favoured areas and areas subject to environmental restrictions, agri-environmental provisions, afforestation and rural development.

***Multifunctionality, or multifunctional agriculture:** Terms used to indicate generally that agriculture can produce various non-commodity outputs in addition to food. The working definition of multifunctionality used by the OECD associates multifunctionality with particular characteristics of the agricultural production process and its outputs: *i*) the existence of multiple commodity and non-commodity outputs that are jointly produced by agriculture; and that *ii*) some of the non-commodity outputs may exhibit the characteristics of externalities or public goods, such that markets for these goods function poorly or are non-existent.

Nominal Assistance Coefficient (NAC): See *Consumer Nominal Assistance Coefficient* and *Producer Nominal Assistance Coefficient*.

Nominal Protection Coefficient (NPC): See *Consumer Nominal Protection Coefficient* and *Producer Nominal Protection Coefficient*.

Non-recourse loan (United States): The major instrument used by the Commodity Credit Corporation to support the price of *programme crops*. 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.

Objectives 1, 2, and 3 (EU)**:** Priority objectives for allocating structural funds for the 2004-06 period. Objective 1 seeks to promote the developmen and adjustment of regions whose development is lagging behind (defined as those areas with a GDP of less than 75% of the EU average) including sparsely populated regions (defined as the regions north of the 62nd parallel with population density less than 8 inhabitants per $km^{2)}$ in Finland and Sweden which were eligible to receive Objective 6 funding for 1995-99.Objective 2 supports economic and social conversion in areas in structural difficulties. A maximum 18% of the EU's population is covered by this Objective, of whom 5% in rural areas. Objective 3 seeks to support the adjustment and modernisation of education, training and employment policies. It applies outside Objective 1 regions. In addition, there are four EU initiatives: INTERREG (transfrontier, transnational and interregional cooperation); EQUAL (transnational cooperation to combat discrimination and inequality on the labour market); LEADER (rural development); URBAN (economic and social renewal of towns and urban areas in crisis to encourange sustainable development). 69.7% of the structural funds' funding is allocated to Objective 1, 11.5% to Objective 2, 12.3% to Objective 3 and 5% to EU initiatives.

***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), soybeans 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 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 either 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 predators to flourish and through the use of disease-resistant crop varieties and mechanical weeding.

Over-quota tariff: The tariff applied on imports in excess of the *tariff-rate quota* volume. The over-quota tariff is greater than the *in-quota tariff*. 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, raise the tariff-rate quota level, or both.

Private storage (EU)**:** This measure, which aims to stabilise the market, requires the establishment of a storage contract, concluded with the intervention board of the EU member State concerned. The amount of payment takes into account the storage costs and the foreseeable trend in prices of the product in question. It applies to cereals, sugar, milk and dairy products, isoglucose, wine, sheepmeat, goatmeat, pigmeat, textile plants and silkworms. In the beef and veal sector after 1 July 2002 the decision to grant such aid may be made when the average price on the EU market is likely to remain less than 103% of the *basic price*.

P*hytosanitary regulations*: Government regulations that restrict or prohibit the importation and marketing of certain plant species, or products of these plants, so as to prevent the introduction or spread of plant pests or pathogens that these plants may be carrying. See also S*anitary regulations*.

***Producer price*:** The average price or unit value received by farmers in the domestic market 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 where the commodity leaves the farm – and therefore does not incorporate the costs of transport and processing.

***Producer Nominal Assistance Coefficient* (NAC*p*):** An indicator of the nominal rate of assistance to producers measuring the ratio between the value of gross farm receipts including support and gross farm receipts valued at world market prices without support.

***Producer Nominal Protection Coefficient* (NPC*p*):** An indicator of the nominal rate of protection for producers measuring the ratio between the average price received by producers (at farm gate), including payments per tonne of current output, and the border price (measured at farm gate level).

***Producer Support Estimate*, PSE:** An indicator of the annual monetary value of gross transfers from consumers and taxpayers to support 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 transfers. 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.

Programme crop (United States)**:** A crop covered by the federal *loan rate* programme. These crops are wheat, corn (maize), barley, grain sorghum, oats, rye, extra-long staple and upland cotton, rice, soyabeans, tobacco, peanuts (groundnuts) and sugar.

***Recombinant bovine somatotropin*, *r*BST:** A genetically engineered version of a naturally occurring hormone that stimulates milk production.

***Reference (border) price*:** The import (c.i.f.) or export (f.o.b.) price of a commodity used for calculating the *market price support* price gap, measured at the farmgate level. An implicit border price may be calculated as, for example, the unit value of imports or exports.

***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 P*hytosanitary regulations*.

***Special Accession Programme for Agriculture and Rural Development* (SAPARD)** (EU, *Czech Republic*, *Hungary*, *Poland*, *Slovakia*)**:** A programme created by the EU to support the efforts of the Central and Eastern European candidate countries to prepare for participation in the common agricultural policy and the single market in the pre-accession period. The programme involves delegating the responsibility for managing EU funds for rural development and decentralised programmes to the candidate countries. The Regulation on SAPARD implementation, adopted by the Commission in 1999, sets out the conditions and areas for assistance, including investment in agricultural holdings and processing and marketing of products. The Programme is co-financed by the EU and the candidate countries. The annual EU budget during the programme's seven-year run (2000-06) is euro 520 million.

***Special* [*Agricultural*] *Safeguard* SSG:** A provision of the U*ruguay* R*ound* A*greement on* A*griculture* that may be invoked by a WTO Member for a product subject to *tariffication* and for which application of the special safeguard is designated in the Member's Schedule. It allows WTO Members to impose additional tariffs on agricultural products if their import volume exceeds defined trigger levels or if

prices fall below specified trigger level. It is designed to prevent disruption on domestic markets due to import surges or abnormally low import prices, and can apply only to imports that exceed *tariff-quota* volumes. The special agricultural safeguard clause is an alternative to the general safeguard provisions in the GATT, and is much easier to invoke because it does not require a test of injury.

Specific-rate tariff: A *tariff* that is levied at a specific rate per physical unit of the particular item (*e.g.* USD 100 per tonne). Contrast with A*d valorem tariff*.

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 payment: A budgetary payment made to compensate farmers for falling farm prices incomes, or both. 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 Agricultural Intervention Fund (SAIF) (*Czech Republic*)**:** SAIF was created in 2000 to replace the *State Fund for Market Regulation* (SFMR), which had operated since 1992. In addition to regulating markets (through direct intervention in the domestic market and export refunds), the new legislation gives SAIF the power to introduce production quotas, set-aside schemes and to provide direct payments to producers.

State Trading Enterprise (*or body*), STE: An enterprise authorised to engage in trade that is owned, sanctioned, or otherwise supported by the government. Many STEs enjoy monopoly control over imports or exports.

Structural funds (EU): Funds intended to facilitate structural adjustment of specific sectors, regions, or combinations of both, in the EU. They include the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Guidance Section of E*uropean Agricultural Guidance and Guarantee Fund* (EAGGF) and the Financial Instrument for Fisheries Guidance (FIFG). Assistance is concentrated on three priority objectives, two regional and a horizontal objective for human resources (see O*bjectives* 1, 5*a*, 5*b and* 6).

Substantial equivalence: A concept, first described in an OECD publication in 1993, which stresses than an assessment of a novel food, in particular one that is genetically modified, should demonstrate that the food is as safe as its traditional counterpart.

Supply control: Any among a wide range of measures designed to affect the level of production or supply, including measures that restrict output directly (such as milk quotas) and those that restrict the use of an input. See also, *buy-out schemes* and *land, set-aside*.

Supply quotas: Limits on acreage, production or marketed quantities of a particular commodity in the context of a supply control programme.

Support price: See A*dministered 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.

Target price (EU, Switzerland)**:** 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, a non binding target price is set annually for milk to provide market guidance.

***Tariff*:** A duty (or tax) imposed on commodity imports. A tariff may be a specific rate per unit of product imported (*specific-rate tariff*), a fixed percentage of value (*ad valorem tariff*), or a combination of both.

***Tariffication*:** The process of converting non-tariff trade barriers to bound tariff that took place in the *Uruguay Round Agreement on Agriculture*. This is done to improve the transparency of existing agricultural trade barriers and facilitate their proposed reduction.

***Tariff quota*:** A term used interchangeably with the term *tariff-rate quota*.

***Tariff-rate quota*, TRQ:** Quantitative limit (quota) on imported goods, above which a higher *tariff* rate is applied. A lower *tariff* rate applies to any imports below the quota amount. Imports above this specified quantity face a higher tariff rate.

***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 impact 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 transfers associated with 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 as from 1999.

***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 136 participating countries ("contracting partners") and came into effect in 1995.

***Uruguay Round Agreement on Agriculture*, URAA:** The Agreement on Agriculture that was negotiated in the Uruguay Round and ratified in 1994.The URAA contains commitments in the areas of *market access*, domestic support (see AMS) and *export subsidies*, and general provisions concerning monitoring and continuation. Reduction commitments are implemented over the period 1995-2000 for developed countries and over 1995-2004 for developing countries.

***World price*:** See *Reference price*.

***World Trade Organisation*, WTO:** The successor body to the *General Agreement on Tariffs and Trade* (GATT), established formally on 1 January 1995 as part of the final agreement of the *Uruguay Round* of multilateral trade negotiations. Its main objectives include: *i*) to administer trade agreements; *ii*) to act as a forum for trade negotiations; *iii*) to settle trade disputes; *iv*) to review national trade policies; and *v*) to assist developing countries in trade policy issues.

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