INTERNATIONAL DAIRY PRODUCTS COUNCIL


Note by the Secretariat
THE INTERNATIONAL DAIRY ARRANGEMENT

The International Dairy Arrangement entered into its fourteenth year of operation on 1 January 1993. Currently the IDA has sixteen participants: Argentina, Australia, Bulgaria, Egypt, the European Communities (and its twelve member States), Finland, Hungary, Japan, New Zealand, Norway, Poland, Romania, South Africa, Sweden, Switzerland and Uruguay.

The primary objectives of the Arrangement are to achieve the expansion and liberalization of world trade in dairy products under as stable as possible market conditions, on the basis of mutual benefit to exporting and importing countries, and to further economic and social development in developing countries. In adopting these objectives, the economic importance of milk and dairy products to many countries was recognized, as well as the need to avoid surpluses and shortages and to maintain prices at an equitable level.

The objectives are advanced through the activities of the International Dairy Products Council and the Committees of the Protocols. Three Protocols annexed to the Arrangement are integral parts of it: the Protocol Regarding Certain Milk Powders; the Protocol Regarding Milk Fat and the Protocol Regarding Certain Cheeses.

Under these Protocols, minimum export prices have been established for skimmed milk powder, whole milk powder, buttermilk powder, anhydrous milk fat, butter and certain cheeses. The minimum export prices are fixed for pilot products defined in the Arrangement taking account, in particular, of the current market situation, dairy prices in participating producing countries, the need to ensure equitable prices to consumers, and the desirability of maintaining a minimum return to the most efficient producers in order to ensure stability of supply over the longer term. New minimum prices for all pilot products became effective on 20 September 1989 and have since then remained unchanged (Table 1).

Under specific circumstances, the Committees of the Protocols may grant derogations from the minimum export price requirements. Such a derogation was granted in June 1993 by the Committee of the Protocol Regarding Milk Fat for sales of butter and butter oil to countries of the former Soviet Union, and extended in December 1993.
**TABLE 1**
Levels of Minimum Export Prices, 1980-93

(US$/metric ton f.o.b.)

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<tr>
<th>Pilot products</th>
<th>Effective since</th>
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<tr>
<td>Skimmed milk powder</td>
<td>425</td>
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<tr>
<td>Whole milk powder</td>
<td>725</td>
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<tr>
<td>Buttermilk powder</td>
<td>425</td>
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<tr>
<td>Anhydrous milk fat</td>
<td>1,100</td>
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<tr>
<td>Butter</td>
<td>925</td>
</tr>
<tr>
<td>Certain cheeses</td>
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Explanatory Note

The present report has been prepared by the Secretariat in accordance with Article IV:1 of the Arrangement and Rule 29 of the Rules of Procedure. The aim of this report is to facilitate the work of the Council and the Committees at their meetings in March 1994.

In preparing the report, the Secretariat based itself on replies to questionnaires, other information submitted by participants and observers as well as information arising from the operation of the Protocol Regarding Certain Milk Powders, the Protocol Regarding Milk Fat and the Protocol Regarding Certain Cheeses. Furthermore, the Secretariat used supplementary information available from the Food and Agriculture Organization of the United Nations (FAO), the International Dairy Federation (IDF), the UN/Economic Commission for Europe (ECE), the Organisation for Economic Co-operation and Development (OECD), the Commission of the European Communities, Agriculture Canada and the United States Department of Agriculture, Zentrale Markt- und Preisberichtstelle (ZMP), Agra Europe and other selected national and private sources.

Asterisks appearing in the body of this document indicate International Dairy Arrangement participants.

The report provides information on production, consumption, trade, stocks and prices for milk and principal dairy products through the first three quarters of 1993. It covers developments in dairy policies through 1993, and, where possible, the outlook for 1994. The report should be read in conjunction with the statistical information circulated in the following documents:

DPC/W/136 - Milk Deliveries and Production - Statistical Note by the Secretariat
DPC/PTL/W/122 - Committee of the Protocol Regarding Certain Milk Powders - Summary Tables
DPC/PTL/W/123 - Committee of the Protocol Regarding Milk Fat - Summary Tables
DPC/PTL/W/124 - Committee of the Protocol Regarding Certain Cheeses - Summary Tables

Delegations wishing to suggest modifications or corrections, or to provide additional information, are invited to make submissions to the Secretariat, preferably in writing, as soon as possible. Such submissions might cover both the present report and the statistical information mentioned above. The drafting of the present report was completed on 15 February 1994.
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WORLD DAIRY MARKET HIGHLIGHTS

- The downward trend in world production of all types of milk continued with production in 1993 estimated at 518 million tons, 0.6 per cent below the 1992 level. Important production declines continued in Central and Eastern Europe due to economic restructuration, while there was a small decrease in the European Communities’ production as a result of government policies to reduce structural surpluses.

- In 1993, Australia and New Zealand had a second consecutive year of record production. Favourable climatic conditions complemented agricultural resource shifts into dairy farming. Output during the 1993-94 marketing year is expected to remain above the previous year’s level.

- In November 1993, the United States Food and Drug Administration (FDA) approved the commercial use of bovine somatotropin (BST), with the result that the use of BST became legally possible at the beginning of February 1994. In experimental trials, BST increased milk yields by as much as 15 per cent. It is expected that no more than 10 per cent of the US dairy herd will be treated with BST by the end of 1994, due to potentially increased herd management costs as well as possible negative consumer reactions to BST-treated milk.

- Estimated world production of skimmed milk powder declined by 5 per cent in 1993, largely as a result of declines in the European Communities. Following a steady climb in world market prices for milk powders in 1992, prices declined somewhat in 1993, especially in the third quarter.

- While world butter production declined by 2 per cent in 1993, the problem of surplus production and declining commercial demand remained. World consumption also declined. However, in contrast to the long-term trend of declining demand, commercial use of butter increased sharply in Canada and the United States in 1993. This temporary turnaround resulted from price incentives for commercial use. Normal commercial trade has been very limited, and world prices for butter remain at or below the IDA minimum levels. However, stock levels in some major producing countries, including the European Communities, Canada and the United States, were substantially reduced by the end of 1993.

- In June 1993, the Committee of the Protocol Regarding Milk Fat granted a derogation from the minimum price provisions of the Arrangement for butter and butter oil exports to countries of the former Soviet Union. This derogation was valid for a maximum of 50 thousand tons per participant, for contracts concluded before 31 December 1993 and deliveries before 31 March 1994. On 20 December 1993, the Committee extended the derogation for sales contracts until 31 March 1994, and for deliveries until 30 June 1994. The total quantity of sales permitted under the derogation remains unchanged. As of 15 February 1994, a total of 59.8 thousand tons of derogation sales had been notified.

- World consumption of cheese continued to expand in 1993 by approximately 2 per cent and production grew by 1 per cent. However, there were notable output reductions in many Central and Eastern European countries.

- The conclusion of the Uruguay Round negotiations should lead to reduced import barriers for dairy products and increased export opportunities, particularly for cheese, starting in 1995. The phased reduction of export subsidies could result in some increases in the international prices of most dairy products.
WORLD TRADE AND ECONOMIC ACTIVITY

1. The volume growth of world trade in 1993 is estimated at 3 per cent, down from 5½ per cent in the previous year. World output growth was up slightly last year to just below 2 per cent. Both the figures for world trade and output growth remained well below the averages for the previous decade, confirming that the period of slow growth for the world economy, which began in 1989, continued in 1993.

2. World trade on a value basis (the US dollar total) was $3.6 trillion in 1993, down 1½ per cent. The gap between the growth of world trade in volume and in value terms is explained by valuation effects such as declining average fuel and non-fuel commodity prices and the appreciation of the US dollar with respect to major European currencies.¹

3. Last year’s slower pace of world trade activity in volume terms was largely due to recessionary conditions in Western Europe, which led to a sharp decline in total imports of Western Europe, down 3½ per cent.² In contrast, import demand rose 10 per cent in Asia and 11½ per cent in North America. Although Latin America’s import growth slowed sharply in 1993, estimates still point to a figure above the world average. Import volumes also rose at rates well above the world average in Central Europe. For other regions, very preliminary estimates point to a stagnation in the import volumes of Africa, and declines for the Middle East and for the States comprising the former USSR.

4. The recession in Western Europe contributed to a weaker export performance, for which Western Europe is the primary export market. In Asia, the region’s import growth gave a strong stimulus to intra-regional trade and consequently to export volumes, up 7½ per cent, in spite of the continuing weakness in Japan and a sharp deceleration in China’s export growth. Export volume growth in North America slowed due to weakness in the markets of Western Europe and Japan, as well as the slowdown in import demand of Latin America. Preliminary estimates indicate that growth of export volumes in Latin America remained well above the world average, boosted by shipments to trading partners within the region and to North America.

5. In spite of the evidence of a slowing pace of world trade and economic activity in 1993, there are grounds for cautious optimism for the start of a recovery in 1994. Although there appears to be the potential for a slight slowdown in North America, the overall level of economic activity appears to have stabilized in Western Europe, measures taken by the Government of Japan are expected to contribute to restoring the basis for growth, and the pace of growth in developing Asia is expected to remain rapid.

¹In order to make trade figures of countries with different currencies comparable, world trade is denominated in dollars. This affects the comparison with volume figures when currency movements (principally of the yen and ECU), or commodity price changes, are important. Valuation effects in 1993 include the positive effect on world trade values of the appreciation of the yen relative to the United States dollar, and the negative effect of the depreciation of the ECU relative to the US dollar and the decline in US dollar-denominated commodity prices.

²The GATT Secretariat, like all other intergovernmental organizations, includes trade between the members of the European Union (EU) in world trade statistics. Trade between the member States of the EU amounted to roughly one quarter of world merchandise trade in 1993.
6. The conclusion of the Uruguay Round negotiations should have significant but varying effects on different segments of the world dairy industry. Quotas and other non-tariff barriers to imports, whose use is widespread in the dairy sector, must be converted to more transparent tariffs ("tariffication"). The levels of both the converted tariffs and existing tariffs must be reduced and bound. The phased reduction of the tariffs should expand export opportunities for competitive dairy exporters. For products subject to tariffication, minimum import levels of 3 per cent of total consumption must be permitted, rising to 5 per cent at the end of the six-year implementation period. Since imports of dairy products into many potential markets are now severely limited by quotas, these minimum access requirements should also contribute to expanded sales opportunities. Some countries stand to benefit from the requirement that import access should not be more restrictive than what was permitted during the 1986-88 reference period. This provision could, for example, see the European Communities' quota for New Zealand butter increased to as much as the 76.7 thousand ton average of 1986-88.

7. The phased reduction of export subsidies, particularly the 21 per cent reduction of the quantity of product benefiting from export subsidies in the 1986-90 reference period, should affect the international market for some dairy products, particularly cheese. Because exports of cheese have continued to increase since the reference period, the quantitative reduction obligations for a number of subsidizing countries will actually exceed 21 per cent. Recently introduced or expanded export subsidy programmes, such as the US Dairy Export Incentive Program (DEIP), should also be significantly affected.

8. The required reduction of certain types of domestic agricultural support programmes should complement the policies already in place in many dairy producing countries. The European Communities, the Nordic countries and Canada have been pursuing policies aimed at reducing surplus production and public expenditures through restrictive production quotas or reduced support prices.

9. In New Zealand and Australia, however, excellent weather conditions, expanded dairy herds and relatively high export price returns combined to result in record milk production for the second consecutive year. The dairy cow herd in New Zealand has been expanding in the past decade, as dairying has become a more attractive alternative than other traditional (sheep and cattle) operations. Productivity increases in Australia have offset the long-term decline in the national herd size.

10. The dairy sectors of most Central and Eastern European countries continued to suffer from the economic restructuration. Production levels remained low while higher real retail prices and increased availability of competitive imported products discouraged traditional demand. A number of these countries retain the potential to become major dairy producers and exporters, but recovery of the dairy sector is not expected in the coming years.

11. Dairy productivity continues to increase worldwide, through genetic improvements and augmented feed supplies. Many developing countries pursue programmes to expand their dairy industry productivity and yields. In November 1993, the United States approved the commercial use of the yield-enhancing hormone bovine somatotropin (BST). The use of BST, which has met with considerable consumer resistance, has the potential of increasing milk yields in treated dairy cows by as much as 15 per cent. In December 1993, the European Communities extended by one year its ban on the use of BST.

12. The steadily increasing demand for certain dairy products, notably cheese and dairy proteins, and the resultant increase in their prices have stimulated the output and sales of a wide variety of dairy substitutes. Dairy imitations often contain milk components such as casein, whey and skimmed milk powder. Furthermore, in a number of new dairy products, notably light products and flavoured products, milk components (mostly fat) have frequently been replaced by ingredients of vegetable origin.
WORLD MILK PRODUCTION AND CONSUMPTION

13. In 1993 world milk production (including sheep, goat and buffalo milk), is estimated to have fallen by 0.6 per cent to 518 million tons. This follows a 2 per cent decline in 1992, and continues the trend of recent years. The upheavals in the socio-economic situation in Eastern Europe and the former Soviet Republics continued to seriously depress dairy output. Government policies to reduce production resulted in further declines in output in other areas of Europe. In contrast, favourable weather, good herd conditions, higher farm prices and increased supplemental feeding contributed to production exceeding the 1992 record level in New Zealand, and to record output also in Australia. Milk production remained relatively stable in Canada and the United States. Growing demand and changing government policies in a number of Latin American and Asian countries should also encourage a slight expansion in production in those regions. Production in Africa is not estimated to have risen because of reduced herd levels following the drought of 1992.

14. Although the Baltic Republics and Belarus have considerable potential as dairy producers, it is likely to be several more years before the dairy industries in those countries have been restructured and modernized, and are in a position to begin exporting dairy products on the world market. In the medium term, increased dairy production in Russia and the Ukraine may progressively substitute for imports, but it will likely take a few years for milk production to recover to the level of 1990 for these countries.

15. World consumption of liquid milk has been increasing at an average annual rate of 1 per cent since the 1980s. Total world consumption in 1993 is estimated to have increased by a further 1 per cent to 154.5 million tons. Per capita consumption varies widely among different countries and regions of the world. Per capita consumption is generally much higher in developed countries, and in particular in some Northern European countries. Average per capita consumption of milk and dairy products in developed countries was estimated at 200 kgs. in 1992. In developing countries, in contrast, per capita consumption of milk and dairy products averages 36 kgs., and in some cases is estimated to be as low as 2.5 kgs. Milk consumption levels in developing countries are gradually increasing with growing urbanization and income increases. The principal area of growth in consumption has been Asia. Rising incomes and changing food consumption habits provide a strong boost to demand for milk and dairy products. Many countries subsidize school milk and other campaigns to promote milk consumption. As a result, per capita milk consumption has steadily increased in countries such as the Republic of Korea, Thailand, Indonesia, China and India. Consumption also increased in Latin America, particularly in Mexico, Argentina and Chile.

16. In many Central and Eastern European countries, as well as in the former Soviet Union, per capita milk consumption has traditionally been very high. Since 1990, however, reduced milk supplies, rapid increases in retail prices, reduced purchasing power, distribution problems and other structural inefficiencies have led to important reductions in the consumption of milk and fresh milk products. Consumption in these countries continued to decline in 1993, especially in Hungary and the CIS.

17. Per capita demand for milk has ceased to grow in a number of developed countries as a response to concerns about the adverse health effects of too much fat in diets, and as substitute products become increasingly available. Consumers in the European Communities and other Western European countries, as well as in North America, show a growing preference for semi-skimmed types of milk and other reduced-fat or reduced-calorie products. In the European Communities, this has resulted in no overall change in consumption, whereas milk consumption has declined in some other Western European countries and Canada.
18. The consumption of other fresh milk products, such as yogurt and other fermented or flavoured milk, has increased steadily in a number of countries and is expected to continue its upward trend. The consumption of flavoured milk is also developing rapidly. In the European Communities, fresh product output increased by 1 per cent in 1992. It is estimated that more than 30 per cent of the milk collected is now marketed in this form. This development clearly reflects the underlying trend in consumption. There is a potential demand for yogurt and flavoured milk in many developing countries, but consumption continues to be hampered by relatively high prices.

19. The strong demand for milk products has encouraged the development and production of dairy substitutes and imitations, which to a variable degree contain milk components. Market information for such products is difficult to obtain, but it is generally believed that their role in the market still remains limited in quantitative terms. Their increased availability in Central and Eastern European markets is notable, however.
BUTTER AND ANHYDROUS MILK FAT

Butter and Butter Oil

20. World butter and butter oil production is estimated to have declined by a further 2 per cent in 1993, to 6.89 million tons. Butter production declined most sharply in Eastern Europe and the former Soviet Republics because of the overall difficulties posed by the on-going economic transitions. Important declines also occurred in many Nordic countries, in line with measures to reduce production in the dairy sector. Production continued to drop in the European Communities and Canada, as well as in the United States, as the industry adjusted to the trend of declining demand.

21. Throughout the 1980s, world butter consumption showed very little change, and annual world per capita consumption of butter remained at a level of 2.8 kgs. Since 1991, however, world consumption has declined by 2 per cent annually. The drop in consumption reflects a growing consumer preference for blended spreads and low fat spreads in many developed countries. At the same time, demand in Eastern European countries, traditionally large consumers of butter, has dropped steeply in the face of economic difficulties, reduced supplies and higher prices. A few notable exceptions of increased consumption in 1993 can be found particularly in Canada, Finland and Sweden. These increases in demand are considered to be of a temporary nature only, and largely due to promotion programmes. A further decline in world butter consumption is likely in 1994.

22. The continuing decline in demand for butter has led to reduced import demand. World exports of butter followed their diminishing trend in 1992, falling by about 12 per cent to 600 thousand tons. Historically, the Soviet Union was the world’s most important commercial market for butter. However, commercial imports by Russia and the other former Soviet Republics have been significantly reduced because of the economic difficulties facing the region. Much of the butter now being supplied to the former Soviet Union has been offered under special credit terms or as donations. Exports from the United States, which had risen sharply in 1992 as a result of special credit-guarantee sales to Russia, increased further in 1993.

23. At its meeting of 22 June 1993, the Committee of the Protocol Regarding Milk Fat noted that world supplies of butter and anhydrous milk fat continued to exceed existing commercial demand. Stocks remained high and prices at low levels, mainly due to continuing difficulties in the former Soviet Union and to food-aid deliveries and concessional sales. In light of this extraordinary situation and as a short-term solution, the Committee granted a derogation from the provisions of the Protocol in conformity with Article 7:1 with respect to the minimum prices for butter and butter oil for exports to countries of the former Soviet Union up to a maximum quantity of 50 thousand tons per participant for butter and butter oil exclusively for consumption in those countries. This derogation was for sales contracts unconditionally concluded before 31 December 1993 and deliveries completed by 31 March 1994. Other provisions were designed to ensure that butter and butter oil exported under this derogation to countries of the former Soviet Union were not deviated to other countries. At its meeting of 20 December 1993, the Committee noted the continuing seriousness of the situation facing the world butterfat market and the limited quantities of sales that had been made to date under the derogation of 22 June 1993. It decided, as a short-term measure, to extend the period for concluding sales contracts under the derogation until 31 March 1994, and the period for concluding deliveries under the derogation until 30 June 1994. The total quantity of sales permitted under the derogation remained unchanged at 50 thousand tons of butter and butter oil per participant, and all other conditions regarding the sales remained the same.
24. These derogations have permitted an increase in exports from some IDA participants. By 15 February 1994, the following participants had notified the conclusion of contracts: Australia (16,500 tons), Finland (9,636 tons), Hungary (506 tons), New Zealand (29,000 tons) and Poland (4,060 tons).

25. On 1 January 1993, total stocks of butter in the European Communities, North America and Oceania amounted to 561 thousand tons, 2 per cent less than their level one year earlier. At the end of 1993, stocks of butter in the main producing countries remained relatively high, even if substantially below 1992's level. In particular, there were steep decreases in stocks in Canada and the United States, with a smaller decline in the European Communities.

26. World butter prices continued to decline in the first half of 1993 and demand for butter remained weak. In the second half of 1993, the world market situation for butter remained depressed, with demand very low and concessional sales and donations continuing to have a negative effect on commercial demand. Sales of butter below the minimum price have been frequently reported. Butter prices will continue to be under pressure at least during the remainder of 1994. The IDA minimum price for butter has remained unchanged at US$1,350 per ton f.o.b. since September 1989.
Graph 1 - BUTTER PRODUCTION 1980 - 1993*

- World
- IDA

* First three quarters only.

Graph 2 - BUTTER EXPORTS 1980 - 1993*

- World
- IDA

* First three quarters only.
Anhydrous Milk Fat

27. In parallel with butter, international *prices* of anhydrous milk fat remained depressed in 1992. Certain sales had reportedly been made at prices below the minimum export price and prices weakened further in 1993. Future prices and sales of anhydrous milk fat remain sensitive to competition from vegetable oils. However, the minimum export price has been kept at US$1,625 per ton f.o.b. since September 1989.

**Graph 5 - ANHYDROUS MILK FAT PRODUCTION & EXPORTS 1980 - 1993* (IDA participants only)**

* First three quarters only.

**Graph 6 - ANHYDROUS MILK FAT PRICES 1980 - 1993**
MILK POWDERS

Skimmed Milk Powder

28. World production of skimmed milk powder in 1993 is estimated to have declined by a further 5 per cent from the previous year, due mainly to reduced milk supplies in major producing countries. Substantial declines in output are estimated in the European Communities and some reduction is also expected in other Western European countries and Oceania. However, output has recovered in the United States in 1993.

29. World consumption of skimmed milk powder continued to decline in 1992, as production dropped and world prices remained relatively high. Imports increased in some developing countries, most importantly in Mexico.

30. After declining in recent years, world exports of skimmed milk powder increased by 12½ per cent to 900 thousand tons in 1992, but may have declined in 1993. Exports from the European Communities, Poland, New Zealand and Canada declined substantially, whereas those of Australia increased. Increased import demand from a number of traditional customers, and particularly from Mexico and other Latin American countries, fuelled the expansion of trade.

31. World stocks of skimmed milk powder decreased substantially in 1992, reflecting successful efforts to reduce production and increase exports thanks to high world market prices. By the end of 1992, stocks were low in all major producing countries. Stocks continued to remain low at the end of 1993.

32. After a steady increase in 1992, in the first half of 1993, prices for skimmed milk powder dropped slightly in the face of reduced demand, in part due to exchange rate movements and some offers at lower prices. Prices declined more sharply in the third quarter, and offers below the minimum price were reported, mostly of Eastern European origin. In the fourth quarter of 1993, prices firmed and indications are that skimmed milk powder prices may trend up slightly in early 1994. The minimum export price has been maintained at US$1,200 per ton f.o.b. since September 1989.

33. At their September 1993 meetings, the GATT Dairy Committees reviewed the minimum export prices for products covered by the Protocols. New Zealand repeated its proposal to increase the minimum prices specified under the Protocol Regarding Certain Milk Powders, indicating that such an increase remained justified in light of the criteria of Article 3:3(b) of the Protocol. There was, however, no consensus at that time to make any changes in the minimum prices.
Graph 7 - SKIMMED MILK POWDER PRODUCTION
1980 - 1993*

Million Metric Tons

* First three quarters only.

Graph 8 - SKIMMED MILK POWDER EXPORTS
1980 - 1993*

*000 Metric Tons

* First three quarters only.
Graph 9 - SKIMMED MILK POWDER STOCKS 1980 - 1993
IDA Participants and Austria, Canada and the US

Graph 10 - SKIMMED MILK POWDER PRICES 1980 - 1993

International Price
Minimum Price
Whole Milk Powder

34. World whole milk powder production in 1992 is estimated to have remained at the 2.27 million ton level achieved in 1991. This is a 6½ per cent increase over the 1990 level, due to increases in New Zealand production and strong recoveries in the European Communities, Poland and Australia. In 1993, production continued to increase in Australia and Poland, but at a slower rate, while it dropped slightly in the European Communities.

35. World whole milk powder exports are estimated to have further risen in 1992 to 990 thousand tons. Whole milk powder imports by developing countries have been increasing since the end of 1990. There was a further shift in import demand from condensed and evaporated milk to milk powder, especially whole milk powder, in several developing countries. Future demand prospects for whole milk powder are mixed. Algeria and the former Soviet Union, key markets for whole milk powder, still have internal economic difficulties. Counteracting these difficulties is the likely continued growth in demand in Asian and Latin American countries.

36. International prices of whole milk powder continued to increase in 1992. In the first three quarters of 1993, prices declined, in part due to exchange rate movements. In the fourth quarter of 1993, prices remained stable. The minimum export price has been maintained at US$1,250 per ton f.o.b. since September 1989.

Graph 11 - WHOLE MILK POWDER PRODUCTION
1980 - 1993*

* First three quarters only.
Graph 12 - WHOLE MILK POWDER EXPORTS
1980 - 1993*

* First three quarters only.

Graph 13 - WHOLE MILK POWDER PRICES 1980 - 1993

International Price
Minimum Price
CHEESE

37. A 1 per cent expansion in world production of cheese (all kinds including curd) is estimated for 1993, following the 1992 increase by 2 per cent to 14.5 million tons. Cheese production continued to grow in the European Communities, Australia and New Zealand, in response to growing demand and shifts away from butter production. In most Eastern European countries, however, production continued to decline because of the difficulties facing the dairy sectors as a whole. Production also declined slightly in Canada.

38. In contrast to butter, world cheese consumption has grown by about 2 per cent per year since the 1980s. Per capita consumption is particularly high in Western Europe (around 13 kgs.) and in North America (around 11 kgs.). In Western Europe and North America, demand for cheese is expected to expand at an annual rate of 2 to 3 per cent in the 1990s. The demand for specialty cheeses is growing more rapidly than that for traditional cheese, and there has been an increasing variety of cheeses marketed in these developed countries. Consumption of cheese has also been growing substantially in North Africa and the Middle East in recent years. The trend for growth in cheese consumption is expected to continue beyond 1993.

39. World cheese exports reached 905 thousand tons in 1992, remaining at the same level as a year earlier. The decline in exports by the European Communities was offset by growth in exports by Australia, New Zealand and Switzerland. These countries account for over 80 per cent of world cheese exports. Total world cheese trade is estimated to have increased in 1993, as exports from the European Communities recovered, offsetting a slight decline from Switzerland.

40. On 1 January 1993, world cheese stocks were 4 per cent lower than a year earlier, and a further decline was estimated for the end of 1993. Cheese carry-over stocks declined in the European Communities, New Zealand and Canada, but increased somewhat in Australia, Switzerland and the United States. Nonetheless, the domestic consumption and exports of most major cheese producers are expected to grow faster than production.

41. Cheddar cheese prices remained relatively high throughout 1992 and 1993. With demand for cheese growing more rapidly than production, cheese prices are expected to remain high for the remainder of 1994. The IDA minimum export price has been maintained unchanged at US$1,500 per ton f.o.b. since September 1989.

42. The expansion in demand and consumption of cheese has encouraged the development and production of imitation cheeses, but such products still capture only a marginal share of the world market. However, cheese analogues, filled cheese and imitation cheese are, with some success, being marketed as ingredients for making pizzas and for other cooking applications, notably in the United States.
Graph 14 - CHEESE PRODUCTION 1980 - 1993*

- World
- IDA

* First three quarters only.

Graph 15 - CHEESE EXPORTS 1980 - 1993*

- World
- IDA

* First three quarters only.
Graph 16 - CHEESE STOCKS 1980 - 1993
IDA Participants and Austria, Canada and the US

Graph 17 - CHEESE PRICES 1980 - 1993
OTHER DAIRY PRODUCTS

Whey in powder or block or concentrate

43. Whey products are mainly by-products of cheese production. World production of whey powder increased by about 2 per cent to 1.68 million tons in 1992 following developments in production of cheese. The production of other related milk concentrates, including lactose, also continued to expand, but little data is available for such products. In the past, much of the whey went into sewage systems as waste. Many countries have now imposed environmental regulations preventing whey to be disposed of as waste, increasing the commercial availability of whey, notably in Australia, Canada, the European Communities and the United States.

44. Demand for liquid whey and concentrated whey as animal feed (particularly for calves) remained strong in 1992. There is also a growing demand for whey and whey products for use in food products and pharmaceuticals. Import demand for various whey products was further stimulated in 1992 by Japan’s expansion of import quotas. Quotas for prepared whey for infant formula, mineral concentrated whey and whey powder for animal feed will be progressively increased through fiscal year 1994. In the first six months of 1993, however, demand for whey for animal feed was adversely affected by the depressed market for veal calves.

45. Whey powder prices continued to slide in the first six months of 1993. In June 1993, prices in Europe were at US$350 per ton, their lowest level since September 1990; in the United States prices fell to US$340 per ton compared to US$375 in June 1992, a drop by 9½ per cent. This weakness stemmed from abundant whey powder supply due to the widespread rise in cheese production. However, in the second half of 1993, prices recovered in the United States and remained stable in Europe.

Concentrated milk

46. World production of condensed and evaporated milk declined throughout the 1980s, with condensed milk being increasingly replaced by whole milk powder in the market. However, world production of condensed milk recovered in 1991 and remained relatively stable in 1992 at 4.5 million tons. From a peak of nearly 1 million tons in 1985, world trade in condensed milk declined to about 350 thousand tons in 1991. World trade in condensed milk recovered in 1992, with increased exports from the European Communities and Canada.

47. Prices for condensed milk, based on Dutch quotations, increased in 1991 and 1992 to reach Hfl. 3,620 per ton in December 1992, which in light of a lower exchange rate corresponded to US$2,030 per ton. In the first half of 1993, Dutch quotations increased slightly to reach Hfl. 3,690 per ton in June (or US$2,053 per ton). Prices remained near Hfl. 3,690 throughout the second half of 1993.

Casein

48. World casein production increased by 13 per cent to 227 thousand tons in 1992. This was primarily the result of increases in the European Communities and New Zealand. In the European Communities, increases in the casein subsidy encouraged the recent upturn in production. However, the aid to manufacturers was reduced in July 1992 and was further cut in March 1993. Production in the European Communities began to decline sharply in mid-1993, which probably also led to a reduction in world production. World exports of casein in 1992 are estimated to have remained near their 1991 level of 150 thousand tons.
49. Casein prices vary widely with quality. Following substantial declines during most of 1991, casein prices began to strengthen at the end of that year due to strong world demand, a lower than expected increase in the European Communities' production, small New Zealand supplies and hardly any supplies coming from Central and Eastern Europe. Prices continued to strengthen in 1992, reflecting the tighter market conditions for skimmed milk powder in both Europe and North America. United States quotations reached US$5,450 per ton in November, 47 per cent higher than a year earlier. However, prices declined during the first six months of 1993. In July 1993, they were at US$4,730 per ton, 8 per cent lower than a year earlier. They continued to decline in the second half of 1993 to US$4,230 per ton in December 1993, 20 per cent lower than in December 1992.

FOOD AID

50. Food-aid deliveries of dairy products consist mainly of skimmed milk powder and anhydrous milk fat (butter oil). The decline in global surpluses has affected the availability of milk products for food-aid programmes. In recent years, food aid has accounted for about 20 per cent of total exports of dairy products, most of it coming from the United States and the European Communities. In 1990, food-aid shipments of dairy products, which averaged nearly 400 thousand tons (product weight) in the early 1980s, fell below 100 thousand tons. In 1991 and 1992, food-aid deliveries rose again to 220 thousand tons (product weight). In particular, shipments of food aid to Eastern Europe and the former Soviet Union increased in 1991-92. These countries are expected to continue to receive dairy products as food aid in the medium term. World food-aid deliveries of dairy products in 1993 are estimated to have remained around 200 thousand tons. Participants to the International Dairy Arrangement have stressed the need to ensure that food aid and concessional sales do not adversely affect commercial sales opportunities.

51. EC food aid. European Communities' food-aid programmes provided for 5 thousand tons of butter oil in 1993, compared to 6.8 thousand tons in 1992. Actual food-aid deliveries of butter oil in 1992 amounted to 5 thousand tons, half the 1991 level. Annual allocations of skimmed milk powder for food aid were reduced from 150 thousand tons at the beginning of the decade to 50 thousand tons in 1993. In 1992, actual deliveries of skimmed milk powder for food aid amounted to 55 thousand tons, compared to 61 thousand tons in 1991.

52. US food aid. In the first half of 1992, the United States donated 16 thousand tons of butter as food aid to Poland and 21 thousand tons to Russia. In September 1992, the United States announced a fiscal year 1993 Russian food-aid package that included 16.8 thousand tons of butter, 3 thousand tons of baby food and 3.5 thousand tons of milk powder. For the fiscal year starting October 1992, 25 thousand tons of butter/butter oil were made available under the PL 480 Program and 80 thousand tons were allocated under Section 416 (b). In May 1993, the United States announced food-aid programmes for over 60 thousand tons of butter, of which some 50 thousand tons have been allocated for Russia and 10 thousand tons for various Eastern European States. Food-aid deliveries under PL 480 Title II for fiscal year 1992 (as of October 1991) through June 1993 involved only 1.8 thousand tons of skimmed milk powder. At the same time, 11 thousand tons of skimmed milk powder and 16 thousand tons of butter oil were shipped under the Section 416(b) export donation programme.
INTERNATIONAL DAIRY PRICES

53. During the thirteen-year period in which the International Dairy Arrangement has been in operation, market prices have gone through various phases. At the beginning of the 1980s the world dairy market was in reasonable balance. The year 1982 marked the beginning of a period of increased world milk production, not matched by increased demand, and the accumulation of surplus stocks notably of butter and skimmed milk powder. Stocks remained high and continued to have a depressive impact on the prices of all dairy products until 1986-87. Thereafter a general recovery came about, first for powders and cheese and later for butter and anhydrous milk fat. The prices for powder and cheese reached new record levels in 1988 and have generally continued to increase, while those for butter and anhydrous milk fat, although improving appreciably, have not regained their levels of the early 1980s.

54. Milk proteins have few substitutes and have been, even at the higher price level, in a strong competitive position with vegetable proteins. This has not been the situation for milk fat, which has been facing stiff competition from vegetable fat, at the same time as dietary advice has dampened the demand for fats in general. Such advice, in contrast, favours demand for milk protein. This has been evident in the recent developments in powder prices, with good quality skimmed milk powder for recombination commanding a premium. The diverging market trends for the various milk components are clearly reflected in the changed pattern of relative prices, and changes in the established minimum export prices. A number of major producers, including the European Communities, the United States and Canada, have adjusted price relativities in favour of milk proteins. New Zealand recently adjusted the basis for their pricing system to milk solids rather than only milk fat.

| TABLE 2 |
| International Dairy Prices* (1991-93) |

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<td>Skimmed milk powder</td>
<td>1.250-1,800</td>
<td>1.600-1,900</td>
<td>1.800-2,170</td>
<td>1.775-1,950</td>
<td>1.725-1,920</td>
<td>1.650-2,000</td>
<td>1.400-1,650</td>
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<tr>
<td>Whole milk powder</td>
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<td>1.700-1,900</td>
<td>1.625-1,800</td>
<td>1.575-2,000</td>
<td>1.350-1,650</td>
<td>1.400-1,600</td>
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<tr>
<td>Anhydrous milk fat</td>
<td>1.625-2,250</td>
<td>1.625-1,950</td>
<td>1.625-2,200</td>
<td>1.625-1,950</td>
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<td>1.625-1,750</td>
<td>1.625-1,750</td>
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<td>Cheddar cheese</td>
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<td>1.750-2,100</td>
<td>1.800-2,200</td>
<td>1.900-2,100</td>
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<td>1.800-2,150</td>
<td>1.800-1,950</td>
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Ranges as reported by DA participants.
Graph 18 - PRICE INDICES FOR SKIMMED MILK POWDER & WHOLE MILK POWDER

Basis: 1st quarter 1981 = 100

Note: Upper level of international price range

Graph 19 - PRICE INDICES FOR BUTTER & CHEESE

Basis: 1st quarter 1981 = 100

Note: Upper level of international price range
DAIRY PRODUCTION AND POLICIES IN SELECTED COUNTRIES AND REGIONS

NEW ZEALAND*

55. New Zealand milk production increased by 2 per cent to reach a record 8.7 million tons in 1992-93. In the current dairy year, production is set for a new record level. Milk deliveries in September 1993 are estimated to have increased by 20 per cent compared to September 1992. Part of this sharp increase in production has been due to excellent weather and pasture conditions. Another reason underlying this trend appears to be the profitability of dairying vis-à-vis alternative usage of the pastoral sector. Over the past decade there has been - within the overall shrinking pastoral sector - a steady redistribution of traditional sheep, cattle, goat and crop land into dairying, deer and other holdings. Dairy cow numbers have been growing by an average of 1½ per cent over the last decade, and in 1992-93 increased by 3 per cent. This trend is forecast to continue in the foreseeable future.

56. During the last two dairy years (1991-92 and 1992-93), producers have also benefited from rising prices for New Zealand dairy products, as a result of much improved world market returns for milk powders and cheese, sales of higher value-added produce, and a lower valued New Zealand dollar. Since the end of 1990, the New Zealand dollar had steadily depreciated against the US dollar; in February 1993, the New Zealand dollar began to appreciate again. These developments were reflected in farmgate prices, which rose from NZ$3.70 per kg. of milk fat in 1990-91 to NZ$5.65 per kg. in 1992-93. In real terms, however, last year's farmgate prices were lower than in 1989/90. The 1992-93 NZ farmgate price for milk amounts to approximately US$0.15 per kg. of milk, which was slightly higher than Poland's but lower than the producer price in Australia.

57. Export marketing of New Zealand's dairy produce is the responsibility of the New Zealand Dairy Board under the Dairy Board Act of 1961. The Dairy Board averages the export returns and transfers the proceeds to the dairy companies on a milk-solids basis. The Board does not have statutory powers relating to imports. The Dairy Board Amendment Act of 1992 inserted a provision enabling the Board to grant permission for other parties to export dairy produce.

58. Export volumes at 848 thousand tons in 1992-93 were lower than in the previous dairy year. For 1993-94, the New Zealand Dairy Board expects another increase in export earnings. As from the 1993-94 season, the term "milk solids" will replace milk fat as New Zealand's key measure of production. "Milk solids" are defined as those solids (protein and fat) for which payment is made by the Dairy Board's purchase price for milk. The expected final price of manufacturing milk in the 1993-94 season was revised downwards to NZ$3.00/kg. milk solids, in light of the expected weakening of prices in the international market. This is about 8 per cent lower than the final 1992-93 season price of NZ$3.25 for milk solids.

Butter and Butter Oil

59. The New Zealand dairy industry has continued to pursue the objective of reducing the proportion of milk used in butter manufacture in the face of reduced access to traditional markets such as the European Communities and the former Soviet Union. In line with industry goals, butter/butter oil production is estimated to have further declined by 8 per cent in 1992-93 to 240 thousand tons, despite the increase in milk output. Nonetheless, butter output accounts for over 60 per cent of all milk fat.

60. The manufacture and sale of saturated fat margarines and of blended spreads (i.e. margarines with milk fat added) have been legal in New Zealand since 1990. These developments are putting pressure on the market share for butter, which has accounted for 65 per cent of the New Zealand consumer yellow fats market. Butter consumption declined in 1992-93 and a further decline is estimated

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for 1993-94. Greater expenditure on general and branded promotions may reduce the decline in butter consumption to some extent.

61. In 1992, New Zealand exports of butter decreased by 36 per cent to 132 thousand tons. The European Communities remained a major outlet under special arrangements which have permitted the import of New Zealand butter into the United Kingdom and, since January 1993, to all European Communities’ countries. The volume of butter which New Zealand could export to the European Communities has been progressively reduced from 79 thousand tons in 1986 to 51.8 thousand tons in 1993. The arrangement provided for a reduction in the special import levy by 20 per cent to ECU 33.84 per 100 kgs. Under the provisions of the Uruguay Round Agreement on Agriculture, import access should not be more restrictive than what was permitted during the 1986-88 reference period. New Zealand butter access to the European Communities could thus increase to as much as 76.7 thousand tons (the 1986-88 average level). Alternatively, the European Communities and New Zealand might agree on access for a lesser amount but with greater reductions in the import levy. Other important outlets for New Zealand butter in 1992 were Argentina and Morocco.

62. New Zealand exports of butter oil increased by 15 per cent in 1992 to 41.5 thousand tons. This was not sufficient to offset the decline in butter exports. In the first three quarters of 1993, exports of butter recovered to 123 thousand tons; the main destinations were the United Kingdom, Russia and Iran. These sales have alleviated to some extent the problem of excess availability of butter. However, market opportunities for butter remain limited and highly uncertain. For these reasons, New Zealand proposed the derogation for butter sales to the former Soviet Union as a short-term solution to the difficulties in the international butter market. Pursuant to the Decisions taken by the Committee of the Protocol Regarding Milk Fat on 22 June 1993 and 20 December 1993 under Article 7:1 of the Protocol, New Zealand notified contracts for the sale of 29 thousand tons of butter at prices ranging between US$1,115 and US$1,200 per ton to countries of the former Soviet Union.

63. On 1 January 1993, stocks of butter, at 71 thousand tons, were 47 per cent higher than a year earlier. On 1 June 1993, carry-over stocks to the 1993-94 season, estimated at around 40 thousand tons, were of concern due to limited market availabilities. On 1 October 1993, stocks of butter at 42 thousand tons were 3 per cent higher than a year earlier.

*Milk Powders*

64. Production of skimmed milk powder in New Zealand dropped further by 2 per cent to 131.5 thousand tons in 1992-93. Drying capacity constraints and the expansion of whole milk powder production limited the volume of skimmed milk powder production. In 1992, exports were down to only 114 thousand tons, 25 per cent less than in 1991. The main destinations were countries in South-East and Eastern Asia. In the first three quarters of 1993, skimmed milk powder exports declined by 17 per cent to 74 thousand tons. In January 1994, New Zealand notified sales of skimmed milk powder under derogation for feed use and has sold 2,254 tons of skimmed milk powder to Japan at prices between US$953 and US$1,078 per ton f.o.b.

65. New Zealand production of whole milk powder continued to increase strongly with an output of 270 thousand tons in 1992, an increase by 11 per cent compared to 1991. Whole milk powder production has more than doubled in the past ten years. In the 1992-93 dairy year, whole milk powder production increased by 6 per cent to 288 thousand tons. Exports from New Zealand, the world’s second largest exporter, remained almost constant at 254 thousand tons, two and a half times their 1980 level. Malaysia, Mexico and Algeria remained the main outlets. Exports in 1992-93 are estimated to have increased to 260 thousand tons, with annual increases of 50 thousand tons expected in subsequent years.
Cheese

66. In line with the industry's objective to reduce the share of milk used for butter manufacture, New Zealand's cheese production is estimated to have increased in 1992-93 to 136 thousand tons. Much of the increased output ended up in stocks as export markets were weak. In the first three quarters of 1993, production increased by 23 per cent.

67. Cheese exports increased a further 5 per cent in 1992, with the main outlet remaining Japan. In the first three quarters of 1993, cheese exports increased by 9 per cent. New Zealand sold 605 tons of low-quality cheese under derogation in 1992 to destinations in Western Europe at prices ranging from US$445 to US$1,025 per ton f.o.b. In the first eight months of 1993, New Zealand sold 411 tons of cheese to Germany under derogation at prices between US$922 and US$1,255 per ton f.o.b.

Other Dairy Products

68. New Zealand's annual production of casein decreased by 6½ per cent to 66 thousand tons in 1992. Exports decreased by 15 per cent to 66 thousand tons, of which the United States imported 38 thousand tons.

AUSTRALIA*

69. In the dairy year 1992-93, Australian milk production is estimated to have increased to a record 7.3 million litres (up 9 per cent compared to 1991-92). Most of the additional output went into export. In the current dairy year, production is likely to set a new record at 7.8 million litres a 6.5 per cent increase over 1992-93. Seasonal conditions in spring were exceptionally good, yielding excellent feed availability. Milk deliveries were significantly higher in September and October 1993 than in the previous year.

70. After declining for almost thirty years, dairy cow numbers slightly increased in 1992-93 and the herd is forecast to rise further in the years to come. Milk yields have steadily increased, reaching 4.4 thousand litres in 1992-93. Since the beginning of the 1980s, Australia's milk production has expanded, with productivity increases more than offsetting the decline in cow numbers. Australia's production is likely to expand even more strongly in the future, assuming continued improvement in productivity and a further build-up of the cow herd.

71. The Australian dairy industry is divided into two distinct sectors. About 75 per cent of Australian milk production is processed into dairy products (manufacturing milk), while the remainder is used for the supply of fresh milk (market milk). Since a large portion of the manufactured dairy products is exported, manufacturing milk prices are largely determined by world market prices. Farmgate prices for manufacturing milk were at a relatively high level in 1992-93, but are forecast to decline in 1993-94, given the decline in world skimmed milk powder prices. Part of the impact is expected to be offset by a lower-valued Australian dollar against the US dollar.

72. The main policy objective of the present marketing arrangement in Australia is to significantly and progressively reduce assistance to the industry. A levy is collected on all milk produced. The proceeds of the levy are used to make market support payments on exports of all dairy products. In 1991-92, support payments averaged 22 per cent of average export prices for dairy products. Following industry restructuring, this 22 per cent rate was set as the maximum permitted support rate during 1992-93, with this maximum rate to be reduced in equal annual steps to 10 per cent by 1999-2000. In practice, because of constraints on the rate of levy, the actual level of market support was significantly
below this maximum, averaging approximately 15 per cent in 1993. In addition, a levy on all milk production is used by the Australian Dairy Corporation to fund the general promotion of dairy products. This levy was increased to 5.15 cents per kg. milk fat effective 1 August 1992. Promotion of liquid milk for human consumption is also carried out by State government milk authorities.

**Butter and Butter Oil**

73. In 1992-93, production of butter and butter oil continued to expand with the increase in the availability of manufacturing milk. Butterfat production increased by 18 per cent to 127 thousand tons.

74. Domestic sales of butter rose slightly during 1992-93. Due to the rapid growth of the butter blend market, butter has increased its share in the domestic table spread market at the expense of margarine at a time when total retail demand for spreads is gradually declining.

75. Butter exports are estimated at 18.6 thousand tons in 1992-93, compared with 21 thousand tons in 1991-92. However, exports of butter oil increased in 1992, by 24 per cent to 39 thousand tons. In the first three quarters of calendar year 1993, butter exports increased to 25 thousand tons compared with 13 thousand tons in the corresponding period of 1992. Exports of butter oil in that period increased by 26 per cent to 33 thousand tons. Pursuant to the Decisions taken by the Committee of the Protocol Regarding Milk Fat on 22 June 1993 and 20 December 1993, Australia notified contracts for the sale of 16.5 thousand tons of butter at prices ranging from US$850 to US$1,178 per ton to countries of the former Soviet Union.

76. On 1 January 1993, stocks of butter in Australia were 29 thousand tons, 60 per cent higher than a year earlier. Until 1 July 1993, stocks of butter had declined to 13 thousand tons, 31 per cent below the year earlier level.

**Milk Powders**

77. The estimate for 1992-93 production of skimmed milk powder/buttermilk powder is for a further increase by 15 per cent to 172 thousand tons. Skimmed milk powder and buttermilk powder exports are estimated to be 140 thousand tons in 1992-93, compared with 121 thousand tons in 1991-92. This reflects stronger demand coupled with a sustained recovery in prices. In December 1993, the Australian Dairy Corporation contracted to supply 20 thousand tons of skimmed milk powder to Mexico, about 17 per cent of total estimated exports during 1993-94. Shipment was scheduled to occur in the first quarter of 1994.

78. Stocks of skimmed milk powder remained at normal levels throughout 1992. However, at the end of June 1993 stocks had increased to 30 thousand tons, compared to 14 thousand tons a year earlier.

79. Production of whole milk powder continued to increase by 17 per cent in 1992-93 to 80 thousand tons, reflecting a shift away from skimmed milk powder production to whole milk powder for which prices were more attractive. Australian exports rose further by 19 per cent to 65 thousand tons in 1992-93. Demand from buyers in major Asian markets has been particularly strong.

**Cheese**

80. Cheese production is estimated to have further increased by 6 per cent in 1992-93 to 209 thousand tons, favoured by relatively attractive export prices and the increased availability of manufacturing milk. There was a notable recovery in Australian cheese exports in 1991-92, which continued in 1992-93. Cheese exports in 1992-93 are estimated at 80 thousand tons, an increase of 20 per cent
over the previous year’s figure. Exports to Japan, Australia’s major overseas market, increased rapidly, due to growing sales of bulk Cheddar-shred cheese and progress in the development of cream cheese and other specialty cheese lines. Sales also increased to the Middle-East and non-traditional destinations. Australian products dominate domestic cheese consumption, with a share of 82 per cent in 1992-93. Cheese imports (one third comprised of Cheddar) totalled 26 thousand tons in 1992-93, mainly supplied by New Zealand and European countries. Australia does not permit the manufacture of cheese with unpasteurized milk. In early 1994, it enforced a regulation that imported products must meet the same requirements, and, as a consequence, prohibited imports of unpasteurized cheese from Switzerland.

Other Dairy Products

81. Australian concentrated milk production recovered to 96 thousand tons in 1992, an increase by 8 per cent over 1991’s depressed level. Production continued to increase in the first seven months of 1993 by 18 per cent to 60 thousand tons. Whey production remained relatively stable in 1992-93 at 39 thousand tons, while casein production doubled to reach 5 thousand tons.

EUROPEAN COMMUNITIES*

82. Milk deliveries in 1993 are estimated at 101.5 million tons, just ½ per cent less than in 1992. Deliveries for 1994 are forecast to regain their 1992 level. The EC dairy herd contracted by a further 2 per cent in 1993, as policies to encourage dairy farmers to reduce production were continued. The greatest reductions in the last two years have occurred in former East Germany, where deliveries declined by 2 per cent in 1993. As the dairy situation stabilizes in that area, the rate of herd reduction should slow down and production may increase slightly as a result of improved yields. Consumption of fluid milk in the European Communities is estimated to have continued to increase by a further 2 to 3 per cent in 1993, to approximately 33 million tons in 1993.

83. Since December 1992, member States may allow the transfer of dairy quotas and may create a national reserve quota. The 1993-94 quotas of Greece, Italy and Spain were temporarily increased in May 1993 by 100, 900 and 600 thousands tons, respectively. Statistical problems were encountered in these member States and actual deliveries were in excess of those reported. The maintenance of these increased quotas will depend on continued progress in implementing the quota system. The quota in the other nine member States was increased by 0.6 per cent to provide quota for so-called SLOM producers, farmers who had bought or inherited holdings which had been covered by the five-year non-marketing agreement in the late 1970s. The aggregate quota for the twelve member States was thus increased by 2 per cent.

84. The collection of the co-responsibility levy was suspended effective 1 April 1993. Provisions were made for member States to apply a national levy on producers to constitute a fund for promotion and publicity of milk products following the elimination of the co-responsibility levy. In addition, ECU 40 million were made available to member States to buy quotas for restructuring purposes.

85. The scheduled 1 per cent decrease in the quotas was postponed until the 1994-95 marketing year. This 1 per cent will be added to the 1 per cent cut already decided, in principle, for 1994-95. This decision was taken in light of the more urgent need to improve the balance in the milk fat sector. Consequently, the butter support price was further reduced. The net result of the support price reduction for butter and the application of the monetary reduction co-efficient was that, with effect from 1 July 1993, the target price for milk was reduced by 2.8 per cent, the support price for butter by 4.3 per cent and the support price for skimmed milk powder by 1.3 per cent. The new target price of milk containing 3.7 per cent fat is ECU 26.06 per 100 kgs.; the butter intervention price is
ECU 280.33 per 100 kgs. and the skimmed milk powder intervention price is now ECU 170.20 per 100 kgs. Also, as of 1 July 1993, the suspension of the inward processing relief arrangement in the milk sector was lifted.

Butter and Butter Oil

86. Lower output of milk, coupled with further increases in domestic demand for cheese and fresh milk products, led to decreases in European Communities’ butter production in 1992 and 1993. In 1993, production is estimated to be 1 per cent lower than in 1992.

87. Butter from intervention stocks continues to be available at subsidized prices for non-profit organizations. Member States also subsidize butter for social purposes and the European Communities contributes financially to national schemes for school milk. Measures under the milk co-responsibility regime continued until May 1993, providing funds for subsidized butter to be used in pastry products, ice-cream and sugar confectionery. In the period 1 January to 15 September 1993, these disposals of butter increased by 14 per cent to 296 thousand tons. Nonetheless, total subsidized and non-subsidized consumption of butter declined by about 3 per cent. The decline is due to higher prices, increased supply of imitation products in some member States and dietary concerns. Butter consumption is expected to decrease to a level of around 4.4 kgs. per head by 1997. Consumption of margarine seems to be stable at a level of about 4.7 kgs. per head, whereas consumption of spreads appears to be increasing. In an attempt to slow down the decline in butter consumption, a two-year programme of making butter available at reduced prices also to recipients of social security measures has been continued.

88. In the first three quarters of 1993, exports of butter to third countries decreased by 35 per cent to 75 thousand tons. At the same time, exports of butter oil increased by 20 per cent to 72 thousand tons. The provision permitting the importation of New Zealand butter into the European Communities was extended until the end of 1993, but the 1993 quota reduced to 51.8 thousand tons, compared to 55 thousand tons in 1992. A similar quota has been set for 1994. According to the provisions of the Uruguay Round Agreement on Agriculture, access to the European Communities for New Zealand butter should not be reduced below the average of its level in 1986-88. In the coming years, New Zealand may thus benefit from a quota of 76.7 thousand tons, or, alternatively, New Zealand and the European Communities might agree on a smaller quota but with greater reductions in the applied import levy.

89. In 1992, about 120 thousand tons of butter were released from intervention stocks for industrial use, food aid and other exports. In January 1993, public and private stocks of butter stood at 241 thousand tons compared to 302 thousand tons a year earlier. In mid-December 1993, stocks totalled 211 thousand tons of butter.

Milk Powders

90. Skimmed milk powder production increased by 7 per cent in the first nine months of 1993, compared with the corresponding period in 1992. For the year as a whole, production is estimated to increase by 5 per cent. This is in contrast to the 24 per cent decline in 1992. The turn-around is largely due to the sharp decline in casein manufacture in 1993.

91. With effect from 1 February 1993, the minimum inclusion rate for skimmed milk powder in mixed feeds was cut from 50 per cent to 35 per cent. While a return to 50 per cent as of the beginning of 1994 had been under discussion in light of the firm market for skimmed milk powder and the relatively weak market for veal, no change will be made until at least 31 March 1994. Total domestic consumption of skimmed milk powder decreased by 5 per cent to 1.11 million tons in 1992; the use of skimmed
milk powder for animal feed decreased by 6 per cent to 806 thousand tons. The use of skimmed milk powder by the animal feed and casein industries was about 25 per cent lower in the first nine months of 1993 compared with the corresponding period in 1992.

92. Following a 24 per cent decline in 1991, European Communities exports of skimmed milk powder increased by 54 per cent to 390 thousand tons in 1992. However, exports decreased by 18 per cent to 262 thousand tons in the first nine months of 1993.

93. European Communities’ public stocks of skimmed milk powder declined in 1992 to a level of 47 thousand tons in January 1993. Public stocks continued to decline in the first six months of 1993. They amounted to only 29 thousand tons at the end of June 1993, compared to 163 thousand tons a year earlier. About 11 thousand tons were offered to the intervention agencies in August 1993. Public stocks amounted to 33 thousand tons on 15 December 1993.

94. In the first nine months of 1993, whole milk powder production increased by 1½ per cent compared with the corresponding period in 1992, and is estimated to total 910 thousand tons for the year. Exports declined by 5½ per cent to 581 thousand tons in 1992. For the first nine months of 1993, exports are estimated to have increased by 3 per cent compared to the first nine months of 1992.

Cheese

95. Cheese production in the European Communities grew by 3½ per cent to 5.1 million tons in 1992. In 1993, production is estimated to have increased by another 1 per cent given the sustained growth in domestic and export demand.

96. Cheese consumption expanded by 2 per cent in 1992; it is estimated that in 1993 there was further growth of the same order. The great variety of cheese available and further product diversification (i.e. low-fat cheeses) are the main reasons for this trend.

97. In 1992, European Communities’ cheese exports reached 466 thousand tons, 3½ per cent less than in 1991. In the first nine months of 1993 exports recovered to 390 thousand tons, compared to 342 thousand tons in the corresponding period of 1992. For the year 1993 as a whole, exports are estimated to have regained at least their level of 1991. Imports, mostly from Switzerland, remained relatively stable in 1992, and are estimated at 110 thousand tons in 1993.

Other Dairy Products

98. European Communities’ production of whey powder has expanded at a rate of 5 per cent in recent years and now accounts for more than half of world production. Production continued to increase by about 4 per cent to 783 thousand tons in the first ten months of 1993, and continued to grow for the remainder of the year following the expansion in cheese production. Exports of whey remained stable in 1992 at 32 thousand tons.

99. Condensed milk output increased in 1992 by 2½ per cent to around 1.25 million tons. Exports recovered to 343 thousand tons in 1992, following a drop to 316 thousand tons in 1991. This recovery occurred as traditional buyers increased their purchases at the same time as East European countries emerged as buyers. In the first ten months of 1993, condensed milk output decreased by 4½ per cent compared to the corresponding period of 1992.

100. European Communities’ casein production is highly dependent on aid programmes. As from 10 October 1990, the casein subsidy programme was altered to reduce difficulties of controlling end-use, and the production subsidy on casein was increased. European Communities’ production subsequently
increased in 1992 to 138 thousand tons. However, the casein production subsidy was cut from ECU 7.94 to ECU 7 per 100 kgs. of skimmed milk in July 1992 and further reduced to ECU 6.30 per 100 kgs. of skimmed milk as of 1 March 1993. Production decreased substantially in 1993.

FINLAND*

101. Milk deliveries in Finland are estimated at 2.33 million tons in 1993, ½ per cent less than in 1992. Output in 1992 had been reduced in response to a new milk buy-out scheme which operated from March to June 1992. The buy-out scheme covered a total of 110 thousand tons of milk. In 1994, deliveries are expected to remain at levels similar to 1993.

102. Butter production continued to fall by 2½ per cent to 55 thousand tons in 1993, and is forecast to remain at that level in 1994. Consumption, which declined sharply in 1992, recovered in 1993 to 39 thousand tons. Finnish butter exports continued to decrease in 1993, to 13 thousand tons. Pursuant to the Decisions taken by the Committee of the Protocol Regarding Milk Fat on 22 June 1993 and 20 December 1993, Finland notified contracts for the sale of 9,636 tons of butter at prices ranging between US$1,000 and US$1,310 per ton to countries of the former Soviet Union. Exports are expected to recover to about 16 thousand tons in 1994.

103. Skimmed milk powder reached an estimated 14 thousand tons in 1993, down from 15 thousand tons in 1992. Production is not expected to increase in 1994. Total consumption was estimated at 14 thousand tons, but is expected to drop to 12 thousand tons in 1994. 1993 exports totalled 3 thousand tons, with a decline to 2 thousand tons forecast for 1994.

104. Whole milk powder production in Finland is entirely for export. It has declined sharply since 1991 due to the loss of traditional export outlets. Exports to the former Soviet Union declined to 11 thousand tons in 1991, to 3 thousand tons in 1992, and the estimate is for only 300 tons in 1993. In 1993, production declined to almost negligible levels, whereas in the early 1980s production had been over 27 thousand tons.

105. Cheese production is expected to have remained stable at 88 thousand tons, in 1993. For 1994, production is estimated at 86 thousand tons. Cheese consumption continues to increase in Finland as in most Western European countries, and is expected to reach 69 thousand tons in 1994. Exports fell to 25 thousand tons in 1992, down by 11 per cent compared to 1991. In 1993, exports are estimated to have further decreased to 23 thousand tons, but a modest recovery is expected in 1994 to 25 thousand tons.

NORWAY*

106. In Norway, milk deliveries dropped by ½ per cent to 1.84 million tons in 1992. This resulted from a further tightening of the milk quota system, and government policies to buy back some milk production quotas held by dairy farmers. Milk deliveries remained stable at 1.86 million tons, in 1993. This is higher than had previously been forecast, reflecting that the government scheme for buying back milk production quotas had not achieved the expected response.

107. Norwegian producers receive a basic price subsidy equally applicable to all output within the domestic production ceiling. Dairy farmers are paid a subsidy for each litre of milk delivered to the dairy, with the amount depending on the area in which the farm is located. Through June 1993, the
basic price subsidy was NOK 34.3 per litre, while the regionally-differentiated subsidies ranged from NOK 0.11 to NOK 1.60 per litre. Structural income support in the form of a fixed payment is also provided, with the overall objective being the equalization of income between large and small holdings. Consumer subsidies paid on liquid milk and cheese consumed domestically were abolished on 30 June 1993. Consumption of whole, low fat and skimmed milk is estimated at 700 million kgs. in 1993, a decline from the 721 million kgs. consumed in 1992.

108. As in the other Nordic countries, the decrease in Norwegian butter production accelerated in 1992 when production fell by 7½ per cent to 17.3 thousand tons. Output continued to decrease by 4 per cent in the first three quarters of 1993, as compared to the same period of 1992. Consumption in Norway showed a sharp decline in 1992 which continued into 1993. Butter exports recovered somewhat in 1993 to reach 6 thousand tons.

109. Norwegian cheese exports recovered strongly in 1992, increasing by almost 17 per cent to 26 thousand tons. Exports remained stable in 1993. Norwegian cheese production is expected to stagnate or slightly decline in the year ahead, whereas cheese consumption is expected to continue to increase.

**SWEDEN***

110. The 1992 summer drought led farmers to replace home grown hay by forage products of a higher quality. This increased yield, which together with an increase in dairy cow numbers, resulted in an increase in milk deliveries during the first five months of 1993 by 5½ per cent. For 1993, milk deliveries are estimated to increase by 5 per cent to 3.35 million tons. The national dairy herd is forecast to have increased by approximately 1 per cent to 533 thousand head.

111. Consumer subsidies and export subsidies for milk and dairy products have been abolished in Sweden as part of the 1990 food policy reforms. Market prices will no longer be supported if surpluses occur, and the maximum milk price was abolished as of 1 July 1992. Measures have been taken to reduce production to a level which can be disposed of on the internal market or exported without subsidies. Grants will continue to be paid to older dairy farmers (60 to 65 years of age) who cease production. In addition, under a programme effective from September 1990 until May 1993, a one-time payment was also available to farmers younger than 60 years of age who quit milk production. Special price support is granted to producers and dairies in Northern Sweden.

112. Butter production in Sweden declined by 3 per cent to 37 thousand tons in 1992 while consumption stabilized around the 1991 level. Swedish butter exports continued to decrease in 1992 but recovered in 1993. Production of both butter and cheese increased in the first three quarters of 1993, as a result of the rise in milk deliveries.

**SWITZERLAND***

113. In Switzerland, milk deliveries increased by 1 per cent in the first ten months of 1993. In April 1993, the Swiss Government cut the guaranteed producer price of milk by 10 Swiss centimes per kg. to 97 Swiss centimes per kg. as of 1 September 1993 with a resulting decrease in the butter price. In 1994, the butter price will be further reduced by 3 to 5 per cent, depending on the type of butter. Direct income support for dairy farmers will be raised by SwF 200 million to SwF 800 million.
114. **Butter** production declined by 3 per cent to 33 thousand tons in 1992, and dropped almost 2 per cent during the first three quarters of 1993. Consumption which had been increasing marginally the past three years, contrary to the trend in most Western European countries, dropped slightly during the first three quarters of 1993.

115. **Cheese** production in 1993 is estimated to have exceeded 1992’s level of 132 thousand tons, as a result of higher milk deliveries. Cheese consumption continues to increase as in most European countries. Cheese exports by Switzerland were up by 5½ per cent to 64.7 thousand tons in 1992, but forecasts for 1993 indicate a small decline. Swiss imports of cheese stagnated at 27 thousand tons in 1992, but increased by some 11 per cent to 21.8 thousand tons during the first three quarters of 1993. Cheese stocks on 1 October 1993 stood at almost 26 thousand tons, a considerably higher level than in past years.

**POLAND**

116. Milk production in Poland continued to decline during 1993, by 3 per cent, a 21 per cent drop since 1989. The estimated production for 1993 is 12.7 million tons. The dairy cow herd diminished in the third quarter of 1993 to an estimated 3.9 million head, a 5 per cent drop compared to 1992. Livestock production as a whole decreased by 12 per cent during 1993. Despite this, Poland remains one of the major milk producers in the world, surpassed only by the European Communities, the United States, India, Russia, Ukraine and Brazil.

117. In June 1990, the Polish Government established the *Agricultural Market Agency* (AMA), vested with the mandate to engage in purchases, sales, stock management and foreign trade. Since May 1992, the AMA operates an intervention scheme which is triggered when milk prices decline below the floor price. Prices are supported by purchasing butter and skimmed milk powder from those dairies which observe the minimum milk price. The average producer price per 100 kgs. of milk (3.5 per cent fat) during the first three quarters of 1993 has been reported at approximately US$13, compared to US$14 per 100 kgs. of milk in New Zealand.

118. Polish customs duties for dairy products currently range from 10 to 40 per cent ad valorem (with the simple average being 35 per cent). Since mid-December 1992, Poland has applied a temporary import surcharge of 6 per cent in response to balance-of-payments problems caused by the unusually severe drought in the summer of 1992. The surcharge will be reduced to 3 per cent in 1994 and terminated at the end of 1994.

119. Under the Interim Agreement between Poland and the European Communities, the preferential import quotas of the European Communities have been fixed at 6.55 thousand tons of milk powders, 2.4 thousand tons of butter and 4.8 thousand tons of cheese for the period July 1993 to June 1994. For these quotas, variable levies are reduced to 40 per cent of the normal rate.

120. Mainly due to the diminishing cow herd, purchases of milk by Polish dairies have been declining. Whereas in 1987-89 milk deliveries accounted for 72 per cent of all milk produced, this share dropped to 53 per cent in 1992 and remained constant in 1993. In 1993, milk deliveries are expected to reach just over 6.7 million tons, a level 103 thousand tons below that of the previous year. There are hopes that milk supplies will gradually increase again as a result of improvements in milk yield.

121. **Butter** production almost halved between 1989 and 1992. In 1992 alone, production dropped by 20 per cent to 150 thousand tons. By the end of the third quarter of 1993, production had reached 111 thousand tons. For the year as a whole, butter production is likely to have been lower than in 1992.
By 1992, Poland's per capita consumption of butter had dropped to the level of the European Communities, that is 4 kgs., compared to 7 kgs. in 1989. While the consumption of butter continued to decline in 1993, that of cream and milk desserts grew during the year. In 1992, Poland was a sizeable net importer of butter; imports totalled 11 thousand tons. While exports in 1992 were negligible, by the third quarter of 1993 Poland had exported 11 thousand tons of butter and imported just over 6 thousand tons. Under the Decisions taken by the Committee of the Protocol Regarding Milk Fat on 22 June 1993 and 20 December 1993 for sales of butter and butterfat to the former Soviet Union, Poland sold 4 thousand tons of butter to the Ukraine at a price of US$1,017 per metric ton, 60 tons to the Russian Federation at US$1,100 per metric ton, and 105 tons of butter at US$1,150 to Georgia. Stocks rose to 25 thousand tons by the end of the third quarter, mainly due to decreased consumption but also to increased margarine substitution.

Poland's skimmed milk powder production remained almost stable at 150 thousand tons in 1992. Exports, however, doubled to 91 thousand tons, an increase stimulated by relatively high world market prices. Exports continued to climb at the beginning of 1993, but did not reach expected levels because of low-priced export competition from the former Soviet Union. In the first three quarters of 1993, exports of skimmed milk powder decreased by 40 per cent compared to 1992. This resulted in 48 thousand tons in stocks by the end of the third quarter, causing financial difficulties for the industry.

The AMA exported 2.6 thousand tons of skimmed milk powder in the fourth quarter of 1993. No butter was exported on behalf of the AMA. Stocks by the end of 1993 were estimated at 1.4 tons of butter and 5.5 tons of skimmed milk powder.

Cheese consumption increased in Poland in 1992, with demand exceeding domestic production of protocol-type cheeses. Imports thus rose to 22 thousand tons. In addition to 100 thousand tons of the types of cheeses covered by the IDA Protocol Regarding Certain Cheeses, 160 thousand tons of fresh cheeses were produced in 1992. In the first three quarters of 1993, there was an 8 per cent increase in the production of cheese. By the third quarter of 1993, 34 thousand tons of protocol-type cheeses had been imported while 5.3 thousand tons had been exported.

There has been a trend towards a decline of imports of those products which can be most profitably produced in Poland, such as UHT milk, desserts, ice-cream and fermented products. Thus, production of fermented milk, yogurt and kefir, taken together, rose from 40 thousand tons in 1991 to 55 thousand tons in 1992. This trend was re-enforced during 1993 as the share of Polish products in domestic consumption of long-life milk, ice-cream and milk desserts rose. This reflects an improved pattern of domestic supply.

**HUNGARY**

Since 1991, the Hungarian agricultural sector has become one of the most crisis-ridden in the economy. In 1992, agricultural output dropped by 20 per cent. During 1993, agricultural exports fell 39 per cent. This was partly due to poor weather conditions but also, particularly in the dairy sector, to changes in agricultural policy. Compared to 1989, milk production in Hungary has dropped by 46 per cent to a level of 1.5 million tons. The dairy herd has also been diminishing steadily during the past ten years from 743 thousand head to 462 thousand at the end of 1993. Experts consider an additional drop of 50 thousand head to be possible. The productivity of Hungary's dairy herd matches Western European standards, with average yields of about 5 thousand kgs.

Consumer subsidies on milk were removed in 1988 while support to producers was maintained. During 1988-89, the State could relatively easily export the resulting surpluses because of strong world
market dairy prices. But consumption fell in 1990, following weaker prices and a drop in disposable income of households due to economic difficulties succeeding the transition. The milk processing industry began to lose heavily on exports. In January 1991, the government decided to reduce the size of the dairy herd and cut milk production, initially by 15 per cent. In 1992, milk production fell by 8 to 10 per cent.

128. Hungary's agricultural policy is set forth in *Act VI on Agricultural Market Regulation*, which came into force on 1 March 1993. The policy instruments include target prices, sluicegate prices for imports, variable import levies, and export subsidies. In order to avoid a further fall in milk deliveries, dairies receive government subsidies amounting to between Ft 1 and Ft 1.5, if they pay producers a minimum milk price of Ft 20 to Ft 22 per litre depending on quality (valid between June and December 1993). There is no government intervention to support the price level. In 1992, one-third of cheese production (excluding fresh cheese) and 22 per cent of butter production were exported. These exports were subsidized. In 1992 and 1993, export subsidy rates amounted to 30 per cent of the f.o.b. price for butter and cheese and 15 per cent for milk powder. There were no subsidies for exports of milk, cream and yogurt.

129. The objective set for the dairy industry in 1992 was to reach self-sufficiency plus 10 per cent for exports. However, by August 1993, imports of dairy products had increased four-fold since 1991 and reached 10 per cent of Hungarian consumption. Hungary, a traditional exporter of fresh milk and cheese became suddenly a net importer of dairy products. This led the government to introduce restrictions on imports of dairy products as of 1 January 1994 with the objective of supporting the country's ailing dairy industry. The new measures require the acquisition of a licence to import dairy products. As a result, no products may be imported in excess of a fixed quota. This quota is currently set at 70 per cent of the average imports in the last three years at a value close to US$33-34 million.

130. During the first nine months of 1993, Hungary's production of *skimmed milk powder* declined 46 per cent, while that of *whole milk powder* dropped by 5 per cent as compared to the same period in 1992. Consumption of skimmed milk powder fell drastically by 55 per cent to 3 thousand tons. There were no significant imports or exports. In contrast to skimmed milk powder, consumption of whole milk powder increased from 1.3 to 3 thousand tons. Imports of whole milk powder doubled, while exports dropped to 1.5 thousand tons.

131. Production of *butter* also dropped, by 18 per cent, during the first three quarters of 1993. Butter consumption followed suit, declining by 24 per cent to 8 thousand tons, partly reflecting a shift in domestic demand to cheap local and imported margarines. Imports of butter were insignificant in the past two years. Exports for the first nine months of 1993 amounted to 3.9 thousand tons, sold at a price of US$1,500 per ton. Under the Decisions taken by the Committee of the Protocol Regarding Milk Fat on 22 June 1993 and 20 December 1993, Hungary sold 450 tons of butter to the Russian Federation at US$1,300 per ton and 56 tons to Uzbekistan at US$1,232 per ton.

132. Conditions were more favourable in the cheese sector in 1993. Production reached 35.7 thousand tons by the end of the third quarter of 1993, a 9 per cent increase. Stimulated by a larger variety of cheese available, not least in the form of imports (up by 3 thousand tons over the previous year), Hungary's cheese consumption rose to 28 thousand tons.
ROMANIA*

133. The 9 per cent drop in Romania’s agricultural output during 1992 was mainly due to problems associated with privatization, lost export markets in former Yugoslavia (embargo) and the drought in 1992. In mid-1993, the livestock sector was reportedly in a catastrophic state without precedent since 1938. However, by the end of 1993, agricultural production had recovered well above the drought-affected levels recorded in 1992. The harvest in 1993 was good, and, after a long period of decline, livestock numbers were on the rise. In October 1993, the dairy herd was estimated at around 2.2 million head.

134. During 1992 total milk production was 4.6 million tons, including buffalo and sheep milk. Production of cow milk continued to decline during the first nine months of 1993 to 2.1 million tons, 28 per cent lower than during the same period in 1992. Production of fresh milk products also fell during the first nine months of 1993, down 14 per cent compared to the same period of 1992.

135. The main agricultural support instruments are price subsidies and loans, mainly for industrial inputs (spare parts, fuels, fertilizers, etc.). Subsidies on consumer goods, already reduced in 1992, were eliminated in May 1993. Following this, prices of dairy products increased by 105 per cent.

136. Romania maintains a temporary export ban on commodities in short supply, including live animals, butter, milk powder and fresh milk. Furthermore, last year’s imports of dairy products were granted certain reductions of the statutory import tariffs (20 or 25 per cent). Foreign trade has remained largely under Government control.

137. Butter production continued to decline in Romania in 1993. Production decreased by 40 per cent to only 10.3 thousand tons. It is expected that Romania will have to import around 8 thousand tons of butter and 4 thousand tons of powdered milk per quarter in order to cover domestic demand in 1994. The results of a recent government survey show that only 35 per cent of Romanians are in a position to buy what they consider "adequate" quantities of butter.

138. Milk powder production dropped from 16 thousand tons in 1991 to 10 thousand tons in 1992. During 1993 production of cheese dropped to 30.7 thousand tons, 14.5 per cent below the level of the first three quarters of 1992.

BULGARIA

139. Bulgaria has traditionally not been a large dairy producer, except for cheese. Its milk production was 2.3 million tons in 1990. Since 1990, output began to decline. Milk production between January and September 1993 was 1.1 million tons, a 15 per cent decrease from last year. This drop reflected developments in the State farm sector. On private farms, production reached 727 thousand tons, a 29 per cent increase from the same period last year. Milk deliveries during the first three quarters of 1993 amounted to 228 thousand tons. For the year as a whole, deliveries are estimated to have decreased by around 15 per cent. During 1993 the average yield per cow remained unchanged at 2.2 thousand litres per year.

140. Price liberalization has proceeded gradually and the dairy market is now largely liberalized. Milk, yogurt and white cheese, considered as essential products, remain under government price monitoring. Butter imports are subject to an import duty of 25 per cent. As of August 1993, Bulgaria has applied an import surcharge of 3 per cent, which will be reduced to 2 per cent in 1994.
141. In 1990, Bulgaria's protocol-type cheese production totalled 142 thousand tons, i.e. more than Switzerland's or New Zealand's production. Production of cheese during 1993 continued the steep downward trend of the past few years. During the first nine months of 1993, 53 thousand tons were produced, 27 per cent less than in the corresponding period in 1992. Cheese exports decreased to less than half of the 1992 level. The average export price was US$2,735 per ton. According to the Interim Agreement between the European Union and Bulgaria, 1 thousand tons of Bulgarian cheese can be imported into the European Communities under quota from January to June 1994, with a reduction of 40 per cent of the current levy.

142. Bulgarian imports of cheese increased from zero in 1991 (first three quarters) to 7.9 thousand tons in 1993. The major suppliers were Lithuania, Norway, Estonia, Poland, France and Denmark.

143. Figures for Bulgaria's skimmed milk powder production for 1993 are not yet available. For the first nine months of 1993, skimmed milk powder imports from Poland, Hungary, Macedonia, France, Greece and Sweden amounted to 2.7 thousand tons. Whole milk powder production was 1.3 thousand tons and imports, mainly from Macedonia and the former Soviet Union, reached 1.7 thousand tons.

144. Bulgaria's Butter production halved to 3.7 thousand tons during the first three quarters of 1993. Exports during the same period amounted to 300 tons and were destined for Azerbaijan and Greece. Imports were 1.3 thousand tons. In 1994, Bulgaria is to receive 4 thousand tons of butter as food aid from the United States.

CZECH REPUBLIC AND SLOVAK REPUBLIC

145. Total output of the agricultural sector declined by 5 per cent in 1993, but is forecast to stabilize in 1994 and 1995. The co-operatives suffered 60 to 70 per cent of the total losses to Czech agriculture in 1993. On 30 December 1993, it was decided that the State Fund for Market Regulation (SFMR) will, beginning in 1994, systematically regulate markets for grains, beef, milk and dairy products. About US$227 million will be available for market regulation in 1994. The SFMR will also subsidize milk exports in 1994. The guaranteed milk price was increased to US$0.20 per kg. as of January 1994.

146. Milk production during the first nine months of 1993 fell by 11 per cent (both private and public sector). The estimated total production of cow milk for 1993 is 3.5 million tons. Milk deliveries by September 1993 totalled 2.4 million tons, 16 per cent up from the same period last year. Milk consumption fell by 15 per cent to 77.2 kgs. per capita in 1993. Consumption of cheese fell by 8.1 per cent to 6.7 kgs. in 1993.

147. Between January and June 1993, the Czech Republic exported 16.2 thousand tons of butter, of which slightly over 10 per cent went to Slovakia. Some 2.5 thousand tons of cheese were exported as well, with 57 per cent destined for Slovakia.

148. Slovakia's total agricultural output is expected to continue to decline during 1994, by 3 per cent compared to 1993. This is an improvement compared to the 13 per cent decline recorded in 1993. The number of dairy cows in Slovakia fell 6½ per cent as compared with 1992. At the end of 1993, the dairy herd numbers were estimated at 406 thousand head, continuing the sharp fall from 1990, when numbers stood at 548.7 thousand head.

149. Milk consumption stabilized during 1993. Production of cheese, butter and cream is likely to have been higher during 1993 compared to 1992. In particular, by the end of 1993 the production of processed cheese was at its highest level for the past four years.
150. At the request of Slovak farmers and the food industry, the government decided to introduce a 10 per cent import surcharge on all goods from all sources, including the Czech Republic. However, the imposition of the surcharge has been suspended for the time being.

COMMONWEALTH OF INDEPENDENT STATES

151. The principal dairying States in the Commonwealth of Independent States (CIS), in terms of production volume, are Russia, Ukraine and Belarus. Their production adds up to 86 per cent of the total milk output of the CIS. Russia is one of the largest milk producers in the world, superseded only by the European Communities, the United States and India.

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<th>TABLE 3</th>
<th>Milk Deliveries in the CIS. 1992-93</th>
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Source: Agrarinformationsdienst Osteuropa, Agra Europe.

152. Throughout the CIS, milk production fell by 9 per cent in 1993 to an estimated 82 million tons. There are several reasons behind this decrease, including poor feeding conditions - in quality as well as volume - which lowered milk yields. In addition, the cow herd continued to decline. Rising retail prices for dairy products adversely affected domestic demand. In Russia, Belarus and Moldova consumption of meat and milk is estimated to have fallen to the levels of the 1960s. Furthermore, rising production costs and a general shortage of fuels have aggravated the situation.

153. The former Soviet Union figured as the single most important buyer in the world butter market, until its imports on commercial terms ceased almost entirely in 1992. Although it still continues to be the largest importer of butter, a large part is obtained as food aid or purchased on concessionary terms. In the 1980s, the former Soviet Union absorbed about one-third of total world market supplies, albeit at great annual variation. The European Communities and New Zealand were the main suppliers. The United States first appeared in the butter market of the former Soviet Union in 1989, with sales totalling 6 thousand tons that year and 44 thousand tons in 1990 (no exports in 1991). In 1992, only the United States shipped sizeable sales to Russia, equalling 35 thousand tons. Overall imports of butter by the Commonwealth of Independent States fell by 47 per cent during in 1992. One estimate puts total butter imports in 1993, including food aid, at 150 thousand tons with the expectation that imports will remain at that level during 1994. Butter manufacture in the CIS may have declined by about
10 per cent during 1993, including a drop of about 5 to 6 per cent in the Russian Federation. Cheese output may have declined by 8 per cent.

154. In June 1993, the Committee of the Protocol Regarding Milk Fat granted a derogation from the minimum price provisions of the Protocol for butter and butter oil exports to the countries of the former Soviet Union. This derogation was valid up to a maximum of 50 thousand tons per participant, under contracts concluded before 31 December 1993 and for deliveries before 31 March 1994. On the 20 December 1993, the Committee extended the derogation to cover sales until 31 March 1994 and deliveries until 30 June 1994. As of February 1994, a total of 59.8 thousand tons of butter sales had been notified. The prices ranged from US$850 to US$1,310 per metric ton with the average price being US$1,100 per ton.

Russia

155. About 40 per cent of the former Soviet Union is under permafrost. Most of these areas, which are unsuited for agriculture, lie within what is presently the Russian Federation. Unlike Ukraine, Russia has relatively little fertile soil and this is especially valid for the northern regions. Thus the northern areas concentrate mainly on animal husbandry while southern parts and western Siberia produce grain. Russia is also prone to drought which occurs on average every three years.

156. There remain major disincentives to private farming in Russia. Improvement in the structure of the agricultural sector is the key factor to any expansion in Russian food production. In 1992, a privatization law was passed under which land title was passed from the State to the collectivized farms. By October 1993, the process of re-registering Russia’s 25.8 thousand former state and collective farms had almost been concluded. 24 thousand farms (93 per cent of the total) had chosen a new legal status under Russia’s farm privatisation programme. The most popular form (around 11 thousand) is the limited or mixed company in which employees hold shares in the farm’s capital. A third of all re-registered farms opted to remain State or collective farms.

157. Before the breakup of the former Soviet Union, Russia’s self-sufficiency ratio in milk was about 90 per cent, with the Baltic Republics and Belarus covering part of the shortfall. In 1990, about half of Russia’s dairy imports came from outside the former Soviet Union. In 1992, milk production in Russia amounted to 47 million tons. During the first half of 1993, milk production reached 15.7 million tons, which is 8 per cent lower than during the same period last year. Cow numbers declined by 14 per cent and milk yields dropped by 1 to 2 per cent during the same period. Butter production fell by 5 per cent to 353 thousand tons during the first half of 1993. Cheese production remained almost unchanged at 147 thousand tons, only 1 per cent lower than the corresponding level during 1992.

Graph 20 - BUTTER EXPORTS TO RUSSIA*
January-September 1993 (US, January-June)

<table>
<thead>
<tr>
<th>Country</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>22.6</td>
</tr>
<tr>
<td>EC</td>
<td>16</td>
</tr>
<tr>
<td>Australia</td>
<td>12.9</td>
</tr>
<tr>
<td>New Zealand</td>
<td>35</td>
</tr>
</tbody>
</table>

* All figures are preliminary estimates. Notified food aid only. US: Food aid included.
158. New Zealand exported 35 thousand tons of butter to Russia between January and June 1993. During the second half of the year, sales of 29 thousand tons of butter were made under derogation, for delivery between December 1993 and March 1994. The butter was sold at an average price of US$1,130 per metric ton. Total US dairy product donations to Russia during 1993 were about 21.4 thousand tons of butter, 3.3 thousand tons of dry whole milk and 6.5 tons of butter oil. According to official Russian statistics total butter imports amounted to 65.4 thousand tons during 1993 as compared to 25 thousand tons in 1992. Total food aid (all categories) received by Russia during the first half of 1993 amounted to 1 million tons, mainly originating from Germany, the United States and Italy.

159. Ad valorem tariffs on milk products are presently zero in Russia. In 1994, however, a 15 per cent duty is expected to be introduced on butter and other milk fats.

Ukraine

160. The Ukraine used to be a net exporter of dairy products to other Republics of the former Soviet Union. Since 1992, the Ukraine has had to rely on imports, notably for butter. Output of butter fell by 10.4 per cent during the first half of 1993. Overall food production declined 17 per cent during the same period. Milk production dropped from 22.7 million tons in 1991 to around 18 million tons in 1992. Milk deliveries followed suit, declining 11 per cent during 1993 to a level of 10.5 million tons. In 1992, average yields per cow fell from an estimated 2.7 tons the previous year, to 1.46 tons (down 46 per cent). The per capita milk supply declined to 350 kgs., which roughly equals the level of Poland.

161. Butter exports, which totalled 24 thousand tons in 1991, dropped to nil in 1992. Imports in 1992 were estimated at 7 thousand tons. By the end of August 1993, Poland had shipped 581 tons of butter to the Ukraine, as part of a sale under the derogation from the minimum price.

162. As of January 1993, import duties on dairy products were set at 10 per cent, or 5 per cent if the product is destined for children's consumption.

Belarus

163. The soils of Belarus are well suited to livestock production, which accounts for 60 per cent of the country's agricultural output. Output from the cattle herds is still negatively affected by the Chernobyl accident in 1986. Belarus has, however, remained a net exporter of dairy products. Given the high per capita supply of milk, exports are likely to increase in the years to come. In 1992, when production was estimated to have reached its lowest level, annual output per capita still amounted to 546 kgs. - greatly exceeding that of the European Communities. Milk production declined from 7.46 million tons in 1990 to 6.8 million tons in 1991 (down 9 per cent), and dropped a further 18 per cent in 1992 to reach 5.6 million tons. In 1993, milk production is estimated to have increased by 5 per cent to 5.88 million tons. Milk deliveries for 1993, however, remained at 3 million tons. Butter production in 1992 was estimated at 160 thousand tons, half of which was exported to other States of the former Soviet Union. During 1993, the United States shipped 4 thousand tons of butter to Belarus as food aid.

BALTIC REPUBLICS

164. The three Baltic Republics have natural conditions which are generally favourable for milk production, with about 40 per cent of their agricultural land consisting of meadows and pasture. The Baltic States have traditionally been net dairy exporters and continue to have large milk surpluses.
Lithuania is the largest dairy producer of the three Baltic States, followed by Latvia and Estonia. Together they produced around 5 millions tons of milk during 1992, but, during 1993, their combined production is estimated to have fallen to 4 million tons. Cattle numbers also fell in all three States during the first half of 1993.

165. In Estonia, milk production fell from 1.3 million tons in 1992 to 600 thousand tons in 1993. The situation was exacerbated by a severe drought in 1992. In Latvia, the sharp 1992 decline within the livestock sector continued during the first half of 1993. Production of milk declined by 21 per cent compared to the same period of the previous year. According to a law adopted in Lithuania in August 1993, farmers have been granted the right to buy or lease land for the first time in 50 years.

166. In the Baltic States, butter production has been the prime use of milk. Production in the three Republics during 1992 was estimated at 107 thousand tons, 45 thousand tons of which were exported to other states of the former Soviet Union. Traditionally, the Baltic States have been important suppliers of butter to Russia, receiving oil and feed grains in exchange. At present, their reliance on imported feedstuffs poses a major constraint on production. In Estonia, feed grain imports from other States of the former Soviet Union, once amounting to over 1 million tons per year, have been severely reduced. In order to be able to compete on the world market, the Baltic States will have to overcome quality problems, as will most Central and Eastern European countries. Lower quality standards resulted in export sales at prices lower than those achieved by other suppliers.

JAPAN*

167. During the third quarter of 1993, production of raw milk was slightly lower than for the comparable period of the previous year, the first decline since August 1991. Production declined in particular in Hokkaido, the principal producing region. The demand for drinking milk declined even further, as a result of poor weather conditions and economic recession. This resulted in increased quantities of milk destined for processing. However, milk production in Japan is not expected to rise much in the near future and increased imports are expected to meet any growth in demand. Japan is one of the world's largest net importers of dairy products in terms of both quantities and value.

168. For the fiscal year beginning April 1992, a temporary programme was introduced to compensate dairy farmers for reduced income from the sale of calves for beef production. This programme provided for higher payments for milk sold to manufacturers. The 1993-94 guaranteed price for raw milk used for processing remained unchanged. However, the standard transaction price (price paid by dairies) was lowered. As a result, the 1993-94 government per unit payment (difference between guaranteed price and standard transaction price) was increased. However, as the total quantity benefiting from this payment declined, total government outlays were reduced.

169. Given the rise in manufacturing milk supplies, butter output continued to increase in 1993. In contrast Japan's butter consumption continued its downward trend in 1993, despite falling wholesale prices for butter. This resulted in a significant increase in butter stocks. To address this stock increase, measures to reduce the dairy herd and to encourage greater use of milk for calf feed were taken. Furthermore, the reference quantity for the control of production was revised in September 1993, from 100.9 per cent to 98.5 per cent. Intervention purchases of butter began in August 1993.

170. In the first three quarters of 1993, skimmed milk powder production continued to increase in Japan by 12 per cent to 174 thousand tons. Total consumption decreased in that period. Imports also decreased by 26 per cent to 57 thousand tons in the first nine months of 1993.
171. Japanese *cheese* production increased in 1992, and a further increase of 5 per cent is estimated for 1993. Domestic consumption of cheese has nearly doubled in ten years and is likely to continue to increase. In the first three quarters of 1993, Japanese cheese imports increased by 4 per cent to 96 thousand tons. The European Communities, New Zealand and Australia remained the main suppliers.

172. In late September 1992, Japan announced increases in import quotas for various *whey* products. Import quotas for prepared whey for infant formula and for mineral concentrated whey are increased by 2 thousand tons each fiscal year from 1992 through 1994. The fiscal year 1991 quota levels were 19 thousand tons for prepared whey for infant formula and 8 thousand tons for mineral concentrated whey. The quota for whey powder for animal feed is increased by 3 thousand tons each fiscal year, starting from the 1991 level of 8 thousand tons. The quota for other dairy products was set at 91 thousand tons for fiscal year 1992, with increases of 10 thousand tons annually through 1994.

173. *Condensed milk* production decreased by 4 per cent in 1992, reaching 63 thousand tons. There was a further decrease in production of the same order in the first three quarters of 1993.

**ARGENTINA***

174. In Argentina, all restrictions on production and marketing, other than sanitary regulations of dairy products, have been abolished. There is no guaranteed or support price for either producers or manufacturers. In addition, following the trade liberalization measures implemented in April 1991, imports of dairy products increased, putting further competitive pressure on domestic producers.

175. Production of *butter* continued to expand in 1993, and by the end of the third quarter reached 37 thousand tons, 60 per cent more than in the corresponding period of 1992. Consumption also increased, by 20 per cent, during the first nine months of 1993. Exports of butter of Argentina, which were negligible in 1992, increased to 920 tons during the first three quarters of 1993. Imports of butter dropped by 70 per cent to 2 thousand tons.

176. Production of *whole milk powder* increased in the first nine months of 1993, while consumption declined slightly. Exports, which had declined sharply in 1992, began to recover during the first three quarters of 1993. Argentinian whole milk powder imports dropped. *Skimmed milk powder* production fell to 24 per cent below the comparable level of the first three quarters of 1992. Consumption dropped more steeply, by 49 per cent to 15 thousand tons for the first nine months. Skimmed milk powder exports also recovered from the steep decline of 1992, to 6.4 thousand tons by the end of September 1993. Imports dropped by as much as 68 per cent during that period. The decline in imports of milk powders was mainly due to the imposition of countervailing duties, as of October 1992, on imports of milk powders, soft cheese, semi-hard cheese and blue cheese originating in the European Communities.

177. Cheese production grew by 10 per cent during the first nine months of 1993 to 234 thousand tons. Consumption also grew, by almost 8 per cent, to 237 thousand tons during January to September 1993. Exports in the first three quarters of 1993 increased to 2.5 thousand tons compared to 2 thousand tons in the same period of 1992. Imports decreased from 6 thousand tons in the three quarters of 1992 to 2.5 thousand tons in the first three quarters of 1993, also in response to the countervailing duties.
URUGUAY*

178. In Uruguay, milk production in 1992 reached 669 thousand tons, a decrease by 6 1/2 per cent over 1991. The producer price of milk for consumption is fixed every four months in relation to movements in production costs. Higher producer prices combined with favourable weather conditions stimulated production in 1993.

BRAZIL

179. Milk production recovered in 1992 from the previous year's drought, increasing by about 4 per cent to 14.8 million tons. A further 2 per cent increase is estimated for 1993. Milk yields in Brazil average 750 kgs. per cow, although in some regions yields are as high as 2.6 thousand kgs. Currently, the Brazilian dairy herd numbers an estimated 18 million head. Consumption of dairy products has declined since 1988, largely as a result of worsening economic conditions.

180. Brazil reformed its tariff schedule in March 1990, and subsequently reduced import tariffs on dairy products. However, in August 1992, Brazil imposed countervailing duties of 20.7 per cent on imports of milk powders from the European Communities. This action gave rise to a dispute subject to examination by a panel established by the GATT Committee on Subsidies and Countervailing Duties.

181. Brazilian milk powder production is estimated to have increased by as much as 45 per cent to 80 thousand tons in 1992, and to have remained unchanged at that level in 1993. Imports decreased to 10 thousand tons in 1992, due to the continuing general decline in demand for dairy products. Reduced funding for government-operated feeding programmes resulted in diminished imports also in 1993.

UNITED STATES

182. Milk production. Latest estimates indicate that milk production in the United States remained roughly stable at 69 million tons in 1993. This was the result of increased yields per cow (up 1 per cent) offsetting the effects of a declining herd (down 1 per cent). The United States thus continued its long term structural adjustment in milk production with dairy cow numbers declining year after year. Decreasing real milk prices contributed to this development. A 1 per cent increase in yields per cow followed an almost 4 per cent increase in 1992, due to excellent fodder quality that year.

183. In 1994, milk production is forecast to increase by 1 per cent. This forecast is, however, subject to a number of uncertainties, including the impact of the use of bovine somatotropin (BST) on output. The 1993 Budget Act required a ninety-day moratorium on the sale of BST after it was approved by the Food and Drug Administration (FDA) in November 1993. As of February 1994, the Monsanto company has thus begun to market the first BST product. It is expected that farmers will adopt the product only gradually as they assess the risks involved, such as consumers' reactions to BST-treated milk. USDA projects that 10 per cent of the national herd will be treated by the end of 1994, resulting in a 820 kg. increase in yields per treated cow. Average milk yields are forecast to rise by 2 per cent in 1994. In 1992, average yields per cow in the major producing areas of the United States (twenty-one States) were 7,058 kgs.
184. In the United States, surplus production had become a pressing problem since the early 1980s. USDA Commodity Credit Corporation (CCC) owned dairy stocks peaked between 1981 and 1983 at a level of 6 to 8 million tons of milk equivalent on a milk fat basis. Since then, the support price for milk has been reduced continuously from US$13.10 per hundredweight in 1983 (US$0.29 per kg. of milk) to US$10.10 per hundredweight (US$0.22 per kg.) currently. The price support mechanism takes the form of CCC purchases of cheese, butter and non-fat dry milk from dairies at prices designed "to enable plant operators to pay dairy farmers, on the average, a price equal to the support level". In July 1993, the CCC purchase price for butter was reduced by 15 per cent to US$1,432 per ton while the support price for non-fat dry milk was raised by 6 per cent to US$2,278 per ton. There are no quota constraints to output, but United States dairy farmers have to pay a 3 per cent assessment on milk marketings, which is refunded if they certify that they did not increase milk marketings over the previous year's level. In 1993, farmgate prices for milk averaged about US$12.80 per hundredweight (US$0.28 per kg. of milk), 3 per cent less than in 1992. In 1994, milk prices are forecast to drop further as there is expected to be a sizeable surplus of both milk fat and skim solids.

185. In the period 1987 to 1992, commercial use of skim solids grew by more than 2.2 per cent annually, while growth in milk fat sales slowed to 1.1 per cent annually. This trend led to dramatically altered relative prices. However, in 1993 there was a sudden change in the cream and skim solids markets, with butter sales exceeding 454 thousand tons for the first time since the mid-1960s. Commercial butterfat use is estimated to have grown by 2 to 3 per cent in 1993. The USDA considers this a long-delayed adjustment to the steady shift in the valuation of milk away from cream and towards skimmed milk. As a result, CCC net removals of milk fat (including DEIP) dropped from 454 thousand tons in 1992 to 90-140 thousand tons in 1993. In fact, from August to year end 1993, CCC was selling butter back to the industry. Net removals of skim solids, on the other hand, were substantial throughout the year. They are estimated to have increased from 90 thousand tons in 1992 to 140 thousand tons in 1993. In 1994, USDA expects a milk fat surplus in the magnitude of 270 to 320 thousand tons, and a skim solids surplus as large. Such projected equivalence last happened in 1987.

186. Trade policy. The United States dairy industry is protected by import quotas as required by Section 22 of the 1933 Agricultural Adjustment Act. Imports of dairy products are limited to 111 thousand tons and cover mainly cheese but also apply to butter, certain dried milk products, malted milk and other milk and cream products. Most-favoured-nation tariffs on dairy products averaged 10 per cent in 1992, ranging from zero to 25 per cent. Most cheeses were dutiable at the maximum rate. Under NAFTA, the United States will receive duty-free access into Mexico for 40 thousand tons of milk powder, increasing by 3 per cent annually over a fifteen-year transition period. This quota equals United States subsidized sales of nonfat dry milk under the DEIP in 1992. The United States will establish an aggregate initial duty-free quantity of 5.5 thousand tons for cheese. For dairy products other than cheese, the United States will establish several "basket" quotas totalling about 5 per cent of current US quota imports. The agreement includes provisions on reprocessing and rules of origin in order to prevent Mexico becoming an "export platform" for non-NAFTA parties. (See also section on Mexico.)

187. Dairy Export Incentive Program. The DEIP provides cash subsidies (called bonuses) to private exporters for a range of dairy products for sale in targeted countries and regions. After the sharp increase of subsidized exports in 1992, which coincided with a significant build-up of CCC stocks, sales remained at that level in 1993. Subsidy awards totalled 156.8 thousand tons compared to 155.5 thousand tons in 1992. Sales of skimmed milk powder and whole milk powder remained almost unchanged at 117 thousand tons and 16 thousand tons, respectively. Butterfat sales decreased slightly to 20 thousand tons. Total awards were thus considerably smaller than initial allocations for the 1993 DEIP, which provided for 204 thousand tons of milk powders. The main export destinations were again Algeria (77 thousand tons), followed by Mexico (37 thousand tons). DEIP expenditure totalled
US$143 million in 1993 (US$140 million in 1992); the average subsidy per ton of dairy product was US$911. As of mid-February 1994, the DEIP allocations for 1994 had not yet been announced.

Butter and Butter Oil

Butter production is estimated to have declined about 2 per cent in the first nine months of 1993, as surplus milk supplies declined and the output of cheese continued to grow. New domestic food labelling rules may contribute to the increased production of lower fat versions of products with high milk fat content, such as butter.

In the period from early 1993 to August 1993, United States sales and donations to the former Soviet Union under the various programmes approximated 98 thousand tons of dairy products, 72 thousand tons of which were butter. Two-thirds of these sales and aid shipments, almost exclusively butter and butter oil, were destined for Russia. A further donation of 2.5 thousand tons of butter and 5.5 thousand tons of butter oil to Russia has recently been reported.

Butter stocks on 1 September 1993 were estimated at 224 thousand tons, as compared to 326 thousand tons one year earlier. However, by the end of 1993, stocks had decreased to 128 thousand tons. CCC butter stocks totalled 87 thousand tons at the end of January 1994, less than half their level of one year before.

Milk Powders

Non-fat dry milk production in 1993 is estimated to have recovered to 430 thousand tons. This follows the decline to 396 thousand tons in 1992 as larger quantities of milk were diverted to cheese production. Domestic consumption of skimmed milk powder regained its 1990 level of about 340 thousand tons in 1992, but declined again to 263 thousand tons in 1993.

In the first three-quarters of 1993, exports of skimmed milk powder increased by 4 per cent to 63 thousand tons. CCC mandated sales totalled 36 thousand tons in fiscal year 1992. Total stocks of skimmed milk powder declined throughout 1992 and by the end of September 1992 were at 51 thousand tons, then dropped further to 37 thousand tons by the end of 1992. Stocks at the end of December 1993 were estimated at 22 thousand tons.

Whole milk powder production was up sharply in 1992, to 76 thousand tons, and is estimated to have remained at that level in 1993. Exports continued to rise during the first nine months of 1993.

Cheese

United States’ cheese production increased slightly in 1993 to 2.96 million tons. The United States market continued to show strong growth in cheese consumption with annual gains around 4 per cent in 1992 and cheese consumption continued to grow, albeit at a slower rate, in 1993. Cheese exports increased by 26 per cent to 15 thousand tons in 1992, and grew by a further 9 per cent during the first nine months of 1993.

United States’ cheese imports reached 95 thousand tons during the first nine months of 1993 (up 10 per cent). For the year 1993 as a whole, imports are estimated to have increased by 4½ per cent to 135 thousand tons. The bulk of the imports was from the European Communities and New Zealand.
Other Dairy Products

196. Whey powder production increased by 7½ per cent in 1992, to 550 thousand tons and continued to increase by 2 per cent to 471 thousand tons in the first ten months of 1993.

197. In 1992, concentrated milk production increased to 268 thousand tons, 6½ per cent more than in 1991. However, production decreased slightly in the first ten months of 1993.

198. The United States is the world’s largest importer of casein. Imports increased by 6½ per cent in 1992 to 91.3 thousand tons. Their value increased by 24 per cent from US$294 million in 1991 to US$366 million in 1992, reflecting a substantial increase in average import prices. In the first ten months of 1993, however, casein imports declined by 16 per cent to 63 thousand tons, and their value declined by 13 per cent compared to the same period of 1992. The main suppliers remained the European Communities and New Zealand.

CANADA

199. In Canada, milk is marketed either as industrial milk or as fluid milk. Industrial milk (some 59 per cent of total production) is milk destined for the manufacture of dairy products such as butter, cheese, yogurt, and ice-cream. Fluid milk includes table milk and fresh cream. Canada’s supply management in the dairy sector at the national level is aimed at balancing domestic industrial milk production with domestic requirements, measured in terms of butterfat. Milk production is constrained by the National Market Sharing Quota (MSQ), which is adjusted periodically to reflect changes in demand. The production quotas are individual farm quotas. Over-quota production is discouraged by high over-quota producer levies, and exports are financed by in-quota levies. For fluid milk, delivery entitlements are established at the provincial level, with part of the MSQ serving as a reserve for unforeseen requirements. Dairy imports are limited to 20.4 thousand tons of cheese under quota (unchanged since 1978) and small volumes of other dairy products.

200. The Canadian government supports the prices for industrial milk received by dairy farmers in two ways. The Canadian Dairy Commission, a government agency, purchases butter and skim milk powder at prices sufficient to maintain a target return for dairy farmers. In addition, the Agriculture Stabilization Board pays a direct subsidy on deliveries within the MSQ. A 10 per cent subsidy cut in August 1993 will be followed by further 5 per cent cuts in the next two dairy years. No decision has been made so far as to whether producers will have to absorb the income effects of the subsidy reduction or whether they will be offset through higher prices to consumers. In August 1993, the target return was raised to Can$50.84 per litre, while the support prices were further adjusted in favour of skim solids. The butter support price was lowered by 0.7 per cent to Can$5,324 per ton and the skimmed milk powder support price was increased by 4.8 per cent to Can$3,498 per ton.

201. In Canada, milk deliveries are estimated to have remained stable or to have increased slightly in 1993. This development is contrary to the past trend of decreasing production as a result of successive MSQ cuts. Milk deliveries until November 1993 declined marginally to 6.48 million tons (½ per cent less than in the corresponding period of 1992). However, since August 1993, the MSQ for 1993-94 has been increased twice in order to counter butterfat shortages. As of November 1993, the MSQ is 4.19 billion litres. The scarcity situation is considered only temporary because milk production and milk fat yields in Ontario in summer 1993 were unusually low. In October and November 1993, milk deliveries increased 5 per cent compared to year earlier levels. Delivery forecasts for the 1993-94 dairy year (beginning in August) indicate that farm sales will remain stable at around 7.7 million tons. Production and consumption of fluid milk are forecast at 3 million litres.
202. The increase in the MSQ, albeit temporary, is noteworthy because since 1988 the MSQ had consistently been adjusted downward in line with the long-term trend of declining milk fat demand. In fact, in the 1992-93 dairy year, Canada was operating very close to the cross-over point when domestic requirements were no longer driven by the demand for butterfat, with a resulting structural surplus of non-fat solids.

203. In the second half of 1993, demand for butterfat showed a significant increase, particularly for industrial use. By the end of 1993, butter stocks were so low that Canada may have to import 2 thousand tons of butter from the United States in early 1994. It is expected that butter stocks will be replenished as production increases. The increase in consumption for industrial use was due to price incentives offered through the Canadian Butterfat Utilization Program and the Rebate Program for Further Processors. These schemes, aimed at boosting demand, are expected only to delay the problem of structural surpluses of butter.

204. In the 1993-94 dairy year, domestic use of butter is expected to increase from 81 thousand to 83 thousand tons. Butter stocks are forecast to decline to 16 thousand tons by July 1994 (end of 1993-94 dairy year). In the medium term, however, Canada will be faced with growing butterfat surpluses unless industrial milk production declines, as continuing growth in the consumption of low-fat fluid milk and other low-fat dairy products will generate increased skim-off available for butter production. At the same time, butter consumption can be expected to decrease further, as Canadians become an ageing and more health-conscious population.

205. Skimmed milk powder production was about 5 per cent lower in the first nine months of 1993, compared to the same period of 1992. Exports are expected to be low in the 1993-94 dairy year, down to 14 thousand tons. This compares with 61 thousand tons in 1991-92 and 17 thousand tons in 1992-93. Due to the close supply-demand balance between solids-non-fat and butterfat, skimmed milk powder exports are forecast to drop further to 10 thousand tons by 1994-95. Whole milk powder exports remained unchanged at 5.5 thousand tons during the first three-quarters of 1993, with Algeria as the main destination.

206. Canadian cheese production, for the 1993-94 dairy year is forecast at 110 thousand tons for Cheddar, and 162 thousand tons for specialty cheeses. Cheese exports, as well as exports of butter and sweetened condensed milk, benefit from the Dairy Export Assistance Programme of the Canadian Dairy Commission. Exports of cheese decreased to 6 thousand tons in the first three quarters of 1993.

MEXICO

207. Mexico's economic crisis began in 1982. Real incomes fell by 2½ per cent annually between 1983 and 1988. With a certain time lag, Mexico's dairy sector followed the economic downturn. Milk production peaked at 7,474 million litres in 1985 and then declined sharply. Production dropped to as low as 5,704 million litres in 1989 and has since then recovered rapidly. For 1992, milk production is estimated at 7,122 million litres (up 4 per cent from the previous year), with a cow herd of 7 million head.

208. One of the reasons for the contraction of Mexico’s milk production in the 1980s was the policy of government procurement and milk price controls during 1982-88, which had the effect of heavily taxing dairy farmers (i.e., the producer subsidy equivalent was negative). Until 1988, delivery prices were 45 per cent less than in the United States. Many dairies diversified into the production of cheese, butter, yoghurt and other products whose prices were not controlled. Since 1989, the government’s policy has been to align prices paid to producers in Mexico with producer prices in the southern
United States. This price alignment has almost been achieved but there remains scope for improved herd management and reduced production costs. Bovine somatotropin (BST) was approved for use in Mexico in July 1990. Specialized dairies use it and yield increases are reportedly in the magnitude of those obtained in the United States.

209. Per capita consumption of fluid milk declined from 113 litres in 1980 to 46 litres in 1990. Per capita consumption of dairy products in Mexico is less than half that in most developed countries, but consumption has been expanding at a faster rate than domestic supply. The bulk of dairy consumption, both from production and imports, is in the form of milk. In 1992, about 32 per cent of consumption was in the form of processed dairy products and 2 per cent in the form of cheese. For 1992, milk consumption is estimated at 9,569 million litres (fluid milk equivalents), of which 7,122 million litres were from domestic production and the remainder was rehydrated milk powder.

210. The Mexican Government has traditionally been a major participant in the marketing of powdered milk. LICONSA, CONASUPO's dairy affiliate, intervened as the sole importer and as the major wholesaler to industry, retailers and consumers. The social milk supply program of LICONSA provides reconstituted milk to poor families at subsidized prices (about 5 million litres per day). Though private traders are allowed to import milk powders, LICONSA’s share remains high, 86 per cent in 1992.

211. Mexico has been one of the world’s largest importers of skimmed milk powder in recent years. During the 1980s, when Mexico’s dairy price policy had a strong consumer bias, imports rose sharply in line with the fall in domestic production. Imports of milk powders peaked in 1990 at 300 thousand tons, and are estimated at 185 thousand tons in 1992. Mexico has been a major beneficiary of the United States Dairy Export Incentive Program (DEIP). In 1993, DEIP sales to Mexico totalled 37 thousand tons of skimmed milk powder. Australia has reportedly contracted for the sale of 20 thousand tons of milk powders to Mexico in early 1994. New Zealand’s exports of whole milk powder to Mexico totalled 23.5 thousand tons in the first nine months of 1993, compared with 27 thousand tons for the whole of 1992.

**TABLE 4**

Dairy Exports to Mexico in 1993 by Main Suppliers (in metric tons)

<table>
<thead>
<tr>
<th></th>
<th>Period</th>
<th>SMP</th>
<th>WMP</th>
<th>Butter</th>
<th>Butter Oil</th>
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<tr>
<td>US Dairy Export Incentive Program</td>
<td>Sales in CY 1993</td>
<td>37,200</td>
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<tr>
<td>European Communities</td>
<td>Jan.-June 1993 exports</td>
<td>72,200</td>
<td>1,400</td>
<td>-</td>
<td>6,300</td>
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<tr>
<td>New Zealand</td>
<td>Jan.-Sept. 1993 exports</td>
<td>23,500</td>
<td>-</td>
<td>-</td>
<td>8,600</td>
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<tr>
<td>Australia</td>
<td>Jan.-Sept. 1993 exports</td>
<td>221</td>
<td>-</td>
<td>-</td>
<td>2,637</td>
</tr>
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</table>
212. Under NAFTA, trade in agriculture will be governed by three separate bilateral undertakings between Canada, Mexico and the United States. Mexico and Canada decided to make no market access concessions. The US-Mexico agreement provides for gradually increased market access culminating in complete trade liberalization. For its part, Mexico eliminated its import licensing scheme effective 1 January 1994, and introduced tariff rate quotas. The United States was granted duty-free access for 40 thousand tons of milk powder to be increased by 3 per cent annually over a fifteen-year transition period. The over-quota tariff is 139 per cent ad valorem (US$1,160 per ton) and will be phased out as well over fifteen years. For other products, such as evaporated milk and cheeses, the previous 20 per cent tariff will be reduced by 2 percentage points over ten years. (See also section on the United States.)

SOUTH AFRICA*

213. Until the beginning of 1992, stabilization measures and the determination of a minimum producer price for milk were implemented by the South African Dairy Board as part of the Dairy Scheme. The Dairy Board was abolished as of 1993. Like other countries, as a result of the Uruguay Round, South Africa will be replacing dairy import quotas by tariffs.

214. Production of milk has fallen since 1990, and this trend seems likely to continue at least in the medium term. The expected milk production of 1.92 million tons for 1993-94 is 2 per cent lower than in 1992-93. Fresh milk consumption decreased by 1 per cent to 972 thousand tons in 1992.

215. In South Africa, butter supplies were short in 1992, and 1 thousand tons had to be imported in 1992-93. For 1993, both butter production and consumption are estimated to remain stable. Further increases in South African cheese production are estimated for 1993, in the order of 10 per cent. Consumption of skimmed milk powder is expected to fall in line with the long-term trend, while consumption of whole milk powder is likely to increase in the 1993-94 season.

EGYPT*

216. Efforts are being made in Egypt to develop and increase milk production. The target for milk production in the year 2000 is 4 million tons, and the aim is to achieve full self-sufficiency in liquid milk and fresh milk products. These objectives are being pursued through increased production of feed, genetic improvement and advances in cattle health and fertility. In addition, attempts are being made to establish an efficient processing, storage and marketing system. More than half of the milk produced in Egypt is buffalo milk. Total production of milk reached 2.02 million tons in 1992, 4 per cent down from the previous year. Although production is expected to recover in 1993, the growth in demand was greater and imports increased. A mere 4 thousand tons of butter was manufactured in Egypt in 1991 and 1992 due to poor climatic conditions. Consequently, Egypt imported 44.1 thousand tons of butter and butter oil in 1992, up 16.3 thousand tons on 1991. Imports of skimmed milk powder totalled 25.3 thousand tons in 1992, up 4.8 thousand tons on 1991. However with 22 thousand tons, imports of cheese in 1992 were 5.6 thousand tons lower than in 1991. Domestic production of cheese totalled 324 thousand tons in 1992. Per capita consumption of cheese is around 6-7 kgs. per head. Egypt was the third largest beneficiary of the DEIP in 1993. United States sales to Egypt under DEIP totalled 9 thousand tons, 5.5 thousand tons of which were skimmed milk powder.
ISRAEL

217.  Milk production in Israel declined by 1/2 per cent to 995 thousand tons in 1992. This decrease was due to cuts in milk production quotas and subsidies in the face of a sharp decline in domestic demand for all dairy products except fresh cheese. Average milk yields in Israel, at 9,073 kgs. per cow in 1992, are the highest in the world.

ALGERIA

218.  Algeria continues to be an important import market for dairy products, and in particular for milk powders and butter. In 1992, Algeria imported an estimated 220 thousand tons of milk powders, and 43 thousand tons of butter, despite internal economic difficulties. Algeria was the most important destination for United States dairy exports under the DEIP in 1992 and 1993. In 1993, United States sales under DEIP reached 77 thousand tons (see table below). Algeria, already considered one of the largest dairy importers in the world, is expected to continue to increase its demand for imported dairy products as domestic cow milk production continues to be hampered by low productivity due to poor feed, lack of inputs and technical knowledge, as well as the general instability in the agricultural sector. In addition, the Algerian Government has designated milk as a principal source of protein for Algerians, it is classified as an essential commodity and its consumer price remains heavily subsidized. The Algerian population is increasing at a rate of 2.5-2.7 per cent annually and 65 per cent of the population is less than twenty-five years old.

TABLE 5
Dairy Exports to Algeria in 1993 by Main Suppliers (in metric tons)

<table>
<thead>
<tr>
<th>Period</th>
<th>SMP</th>
<th>WMP</th>
<th>Butter</th>
<th>Butter oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Dairy Export Incentive Program</td>
<td>Sales in CY 1993</td>
<td>60,000</td>
<td>-</td>
<td>3,000</td>
</tr>
<tr>
<td>European Communities</td>
<td>Jan.-June 1993 exports</td>
<td>19,400</td>
<td>49,100</td>
<td>1,200</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Jan.-Sept. 1993 exports</td>
<td>2,000</td>
<td>23,000</td>
<td>-</td>
</tr>
</tbody>
</table>

INDIA

219.  India is the largest producer among the developing countries and has been pursuing an active programme of development of its dairy industry. About 50 per cent of milk produced in India is buffalo milk. Cow milk production in India is estimated to have increased by about 5½ per cent to 28.5 million tons in 1992. Improved pasture and fodder supplies stimulated milk output. Following difficulties with deliveries to co-operative dairies in 1991 as increased amounts of milk were processed
at the village level into ghee due to the increased price of that product, measures were introduced in mid-1992 to limit the expansion of private dairies and define the areas from which they can collect milk. Cow and buffalo milk production expanded by a further 4 per cent in 1993 to 58.2 million tons compared to 56 million tons in 1992. This is the result of increasing yields, stemming from genetic improvements and favourable pasture conditions. Production is expected to be further stimulated by higher milk prices following the increased involvement of private firms in dairy processing, stemming from the easing of government regulations regarding access to the sector. Total milk output is projected to reach 61 million tons in 1995. Annual per capita consumption is forecast to increase from its present level of 58 kgs. to about 68 kgs. by that time.

220. *Skimmed milk powder* output in India decreased by 10 per cent in 1991 to 65 thousand tons and remained unchanged in 1992. However, in 1993 output is estimated to have recovered to 75 thousand tons.

**CHINA**

221. *Dairy* production in China continued to expand by an estimated 7 per cent in 1992, to approximately 7.5 million tons. Government policies continue to encourage further expansion, and another substantial increase in output, by about 8 per cent, is estimated for 1993; however, there is a possibility that higher feed grain prices may restrain future growth.

**KOREA**

222. In the Republic of Korea, *milk* production increased steadily until 1990, when it declined slightly to 1.74 million tons. The stagnation in production is apparently due to the limited pasture available and to the high costs of milk production in Korea. The milk industry of Korea is characterized by a low level of processing - about 70 per cent of total milk production is consumed in its liquid form. Total milk consumption in 1991 reached 1.9 million tons, as the government relaxed import restrictions and foreign products were permitted to meet rising demand. Per capita consumption of milk products has trebled over the past ten years to 45 kgs. of milk equivalent in 1991. Per capita consumption is expected to continue to expand to 70-80 kgs. by the year 2000.