

**GENERAL AGREEMENT  
ON TARIFFS AND TRADE**

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**International Dairy Arrangement**

**INTERNATIONAL DAIRY PRODUCTS COUNCIL**

**Status Report on the World Market for Dairy Products**

**Note by the Secretariat**

### THE INTERNATIONAL DAIRY ARRANGEMENT

The International Dairy Arrangement entered into its fifteenth year of operation on 1 January 1994. 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 remained unchanged. The minimum export prices for butter and anhydrous milk fat were suspended on 4 May 1994 for a period of up to twelve months (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 twice, in December 1993 and in March 1994.

**TABLE 1**  
**Levels of Minimum Export Prices, 1980-94**

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

Pilot products	Effective since									
	1 Jan. 1980	1 Oct. 1980	1 Oct. 1981	5 June 1985	2 Oct. 1986	25 June 1987	23 Sept. 1987	23 March 1988	21 Sept. 1988	20 Sept. 1989
Skimmed milk powder	425	500	600	600	680	765	825	900	1,050	1,200
Whole milk powder	725	800	950	830	880	900	950	1,000	1,150	1,250
Buttermilk powder	425	500	600	600	680	765	825	900	1,050	1,200
Anhydrous milk fat*	1,100	1,200	1,440	1,200	1,200	1,200	1,200	1,325	1,500	1,625*
Butter*	925	1,000	1,200	1,000	1,000	1,000	1,000	1,000	1,250	1,350*
Certain cheeses	800	900	1,000	1,000	1,030	1,030	1,120	1,200	1,350	1,500

\*Minimum export prices were suspended on 4 May 1994 for a period of up to twelve months.

### **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 September 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, the United States Department of Agriculture, Zentrale Markt- und Preisberichtsstelle (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 in 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/141 - Milk Deliveries and Production - Statistical Note by the Secretariat
- DPC/PTL/W/143 - Committee of the Protocol Regarding Certain Milk Powders - Summary Tables
- DPC/PTL/W/144 - Committee of the Protocol Regarding Milk Fat - Summary Tables
- DPC/PTL/W/145 - 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 August 1994.

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\* Participant in the International Dairy Arrangement.

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## WORLD DAIRY MARKET HIGHLIGHTS

- World production of milk continued its declining trend in 1993. Production of all types of milk (including sheep, goat and buffalo milk) declined by 1½ per cent to 517 million tons.
- Production continued to decline throughout Europe. In the European Communities and other Northern and Western European countries, modest declines resulted from governmental policies to reduce production. There were steeper drops in dairy production in most of the Central and Eastern European countries and the former Soviet Union. Continuing difficulties arising from the economic restructuring of these countries has prevented dairy output from reaching its pre-transition levels.
- As a result of favourable weather, good herd conditions, higher farm prices and increased supplemental feeding, Australian and New Zealand production in 1993 reached record levels, the second consecutive year for New Zealand. High output is expected to be maintained in both countries also for 1994.
- World production of skimmed milk powder remained stable in 1993, but is expected to decline by 4 per cent in 1994. Production of whole milk powder increased slightly in 1993. World market prices of both milk powders have declined somewhat from their relatively high 1992 levels. Exports of skimmed milk powder returned to their declining trend in 1993, whereas those of whole milk powder increased.
- World production of butter and butter oil continued its long-term diminishing trend in 1993, in spite of a slight increase in production in the European Communities. World consumption also continued to decline, although this trend seemed to be levelling off in a number of countries. Prices for butter and butter oil declined further in 1993, and sales of butter below the IDA minimum price level were frequently reported. Exports of butter continued to decline.
- In June 1993, the Committee of the Protocol Regarding Milk Fat granted a derogation from the minimum price provisions for sales of butter and butter oil to the former Soviet Union. The duration of the derogation was twice extended (in December 1993 and March 1994) and the quantity eligible for the derogation increased. As a result, participants to the International Dairy Arrangement were exempted from the minimum price provisions for a total of 66,500 tons of butter or butter oil exports per participant contracted before the end of May 1994, and delivered before the end of August 1994. Under these derogations, sales totalling 85,500 tons had been notified by 31 May 1994.
- As of 4 May 1994, the Committee of the Protocol Regarding Milk Fat decided to suspend the minimum export prices for butter and anhydrous milk fat for a period of up to twelve months. World market prices for butter and butter oil will be kept under review, to permit re-introduction of an appropriate minimum price level as soon as feasible.
- World cheese production continued to expand in 1993, encouraged by the continuing rise in demand. Prices for Cheddar cheese remained relatively high throughout 1993 and the first half of 1994. With demand for cheese growing more rapidly than production, high price levels and continuing export growth are expected to be sustained in the near future.

## WORLD TRADE AND ECONOMIC ACTIVITY

1. The *volume* growth of world trade in 1993 was 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 was US\$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.<sup>1</sup>

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.<sup>2</sup> 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, 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 Soviet Union.

4. The recession in Western Europe contributed to a weaker export performance for regions 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. Evidence available as of mid-1994 points to the start of economic recovery in Western Europe, mainly due to growth of exports. Growth in domestic demand, and consequently import demand, remains weak. Encouraging signs of a turnaround are also appearing in Japan. Together with the continuing moderate pace of growth being recorded in North America, Australia and New Zealand, the broader basis of economic activity among the OECD countries points to a rebound of economic and trade activity in 1994 and beyond for the OECD as a whole. In turn, recovery in the OECD countries will help sustain the dynamic level of trade and economic activity in developing countries as a whole. On a global basis, trade growth in 1994 is expected to be double the 1993 pace, in the vicinity of 7 per cent.

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<sup>1</sup>In order to make trade figures of countries with different currencies comparable, world trade is denominated in US 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 US dollar, the negative effect of the depreciation of the ECU relative to the US dollar, and the decline in US dollar-denominated commodity prices.

<sup>2</sup>These world trade statistics include trade between the members of the European Union. Trade between the member States of the EU amounted to roughly one quarter of world merchandise trade in 1993.

## AN OVERVIEW OF DAIRY POLICIES

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, will be converted to more transparent tariffs ("tariffication"). The levels of both the converted tariffs and existing tariffs will 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 will 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. Under this provision, for example, the European Communities' quota for New Zealand butter will be increased to the 76,700 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, will 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. Austria, Finland, Norway and Sweden concluded negotiation of the terms for their accession to the European Communities in March 1994. Approval of the accession is being sought through public referendum (decided positively in Austria on 12 June 1994, scheduled for Finland in October and Norway and Sweden in November). The application of the Common Agricultural Policy to the dairy sectors of these countries will lead to considerable changes. In particular, on-going policies to reduce dairy production and support to farmers in the Nordic countries may be reversed.

10. In New Zealand and Australia excellent weather conditions, expanded dairy herds and relatively high export price returns combined to result in record milk production for the second consecutive year in 1993. 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. Expanded output is expected to be maintained in 1994.

11. The dairy sectors of most Central and Eastern European countries continued to suffer from the economic restructuring. 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 their dairy sectors is not expected in the coming years.

12. The US DEIP allocation for 1994 is for a total of 169,850 tons of dairy products. This is substantially below the initial allocations provided in 1993 (258,235 tons) and in 1992 (197,300 tons). The 1994 allocation, however, is much closer to what actual export levels have been: 156,800 tons in 1993 and 155,500 tons in 1992. The 1994 DEIP makes available 136,900 tons of milk powder,

27,450 tons of butterfat and 5,500 tons of cheese. In 1993, Algeria and Mexico were the major DEIP recipients, although DEIP sales to these two countries in the first half of 1994 have been minimal.

13. 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. Since February 1994, the yield-enhancing hormone bovine somatotropin (BST), has been available for commercial use in the United States. The use of BST has the potential of increasing milk yields in treated dairy cows by as much as 15 per cent. The extent of actual use of BST, which has met with considerable consumer resistance, is not yet known. In December 1993, the European Communities extended by one year its ban on the use of BST.

14. 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

15. In 1993 world milk *production* (including sheep, goat and buffalo milk) fell by 1½ per cent to 517 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 record production levels in New Zealand and 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 encouraged a slight expansion in production in those regions. Production in Africa did not rise because of reduced herd levels following the drought of 1992.

<u>TABLE 2</u>	
MAJOR MILK PRODUCERS	
1993 estimates	
(Million M.T.)	
EC	114.7
United States	69.0
India <sup>(1)</sup>	60.9
Russia	47.0
Ukraine	18.1
Brazil	15.2
Poland	11.9
New Zealand <sup>(2)</sup>	9.4
Japan	8.6
Australia <sup>(3)</sup>	8.1
Canada <sup>(4)</sup>	7.6
China <sup>(5)</sup>	7.5
Mexico	7.5

16. For 1994, a slight decrease in world milk production is forecast. Production in the developed countries is anticipated to decline as a result of lower output in Europe and in the countries of the former Soviet Union. Among developing countries, overall production is forecast to rise by 2 per cent, with Asia accounting for most of the increase. The aggregate output in Africa is expected to remain depressed due to herd reduction stemming from the 1992 drought in Southern Africa.

17. 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 significant quantities of dairy products. While milk production continued to decline in both the Baltic Republics and Belarus in 1993, the first quarter of 1994 showed a slight increase in output in Belarus. Production in Russia stabilized during 1993, although the Commonwealth of Independent States as a whole showed a slight decline in milk output. Production is expected to make a steeper fall in 1994.

18. 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 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 205 kgs. in 1993. In developing countries, in contrast, per capita consumption of milk and dairy products averages 37 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

<sup>(1)</sup> Cow and buffalo milk.

<sup>(2)</sup> 1993/94 dairy year (June-May).

<sup>(3)</sup> 1993/94 dairy year (July-June).

<sup>(4)</sup> 1993/94 dairy year (August-July).

<sup>(5)</sup> Production estimate. Deliveries reported as 101.4 million m.t.

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.

19. 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.

20. 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.

21. 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 1993. 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.

22. 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.

## MILK POWDERS

### Skimmed Milk Powder

23. World *production* of skimmed milk powder is expected to decline by 4 per cent in 1994. In 1993, production remained stable at 3.20 million tons. Increases in output in the European Communities, the United States and Australia were offset by declines in other Western European countries and Canada.

24. World *consumption* of skimmed milk powder continued to decline in 1993, as world prices remained relatively high. Imports increased in some developing countries.

25. After having increased in 1992, world *exports* of skimmed milk powder returned to their declining trend of recent years and dropped to 800,000 tons in 1993. Exports from the European Communities, New Zealand and Canada declined substantially, whereas those of Australia and the United States increased.

26. World stocks of skimmed milk powder decreased substantially in 1992, reflecting successful efforts to reduce production and increase exports. Stocks remained low in all major producing countries in 1993 and throughout the first half of 1994.

27. 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. Prices firmed in the fourth quarter of 1993, but then declined slightly in the first half of 1994. The minimum export price has been maintained at US\$1,200 per ton f.o.b. since September 1989.

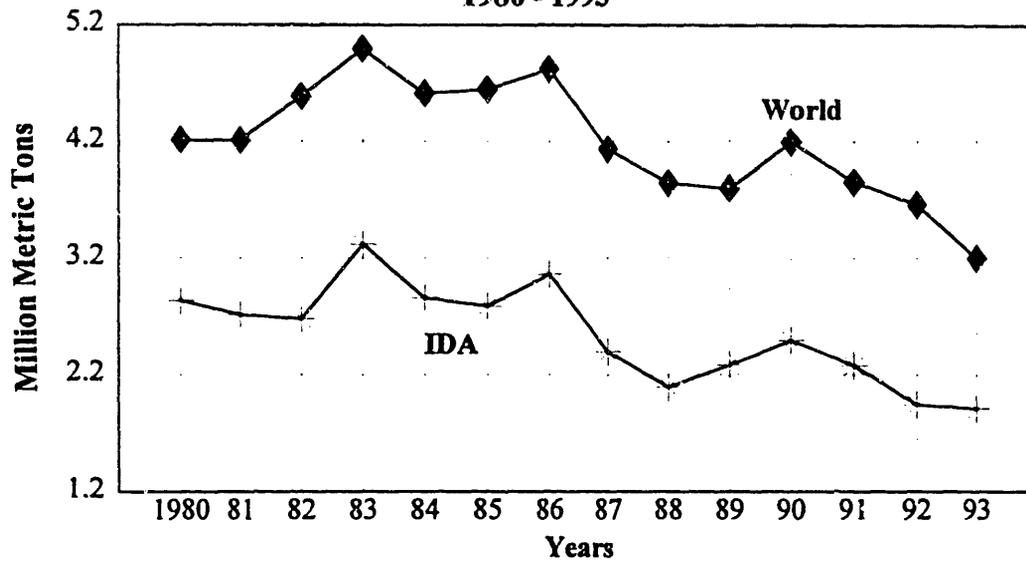
28. At their September 1993 meetings, the GATT Dairy Committees reviewed the minimum export prices for products covered by the Protocols. New Zealand repeated its proposal to increase the minimum prices specified under the Protocol Regarding Certain Milk Powders, indicating that such an increase remained 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.

TABLE 3	
MAJOR SKIMMED MILK POWDER EXPORTERS	
1993 estimates	
(Thousand M.T.)	
EC <sup>(1)</sup>	299
Australia	118
New Zealand	107
Poland	86
United States	76

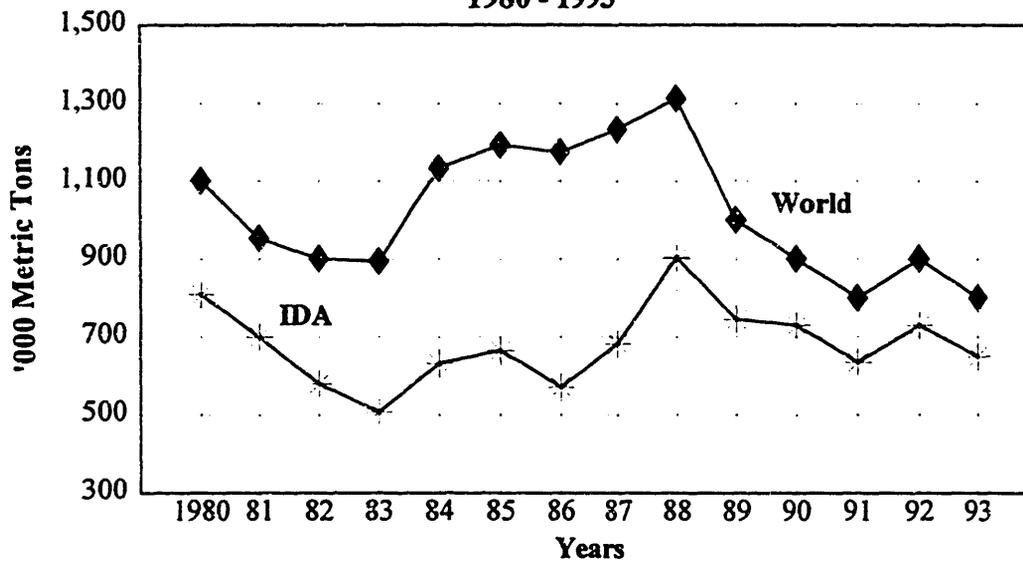
TABLE 4	
MAJOR SKIMMED MILK POWDER IMPORTERS	
1993 estimates	
(Thousand M.T.)	
Mexico	160
Algeria	150
Japan	74
India	25
Brazil	23

<sup>(1)</sup> Excluding EC intra-trade.

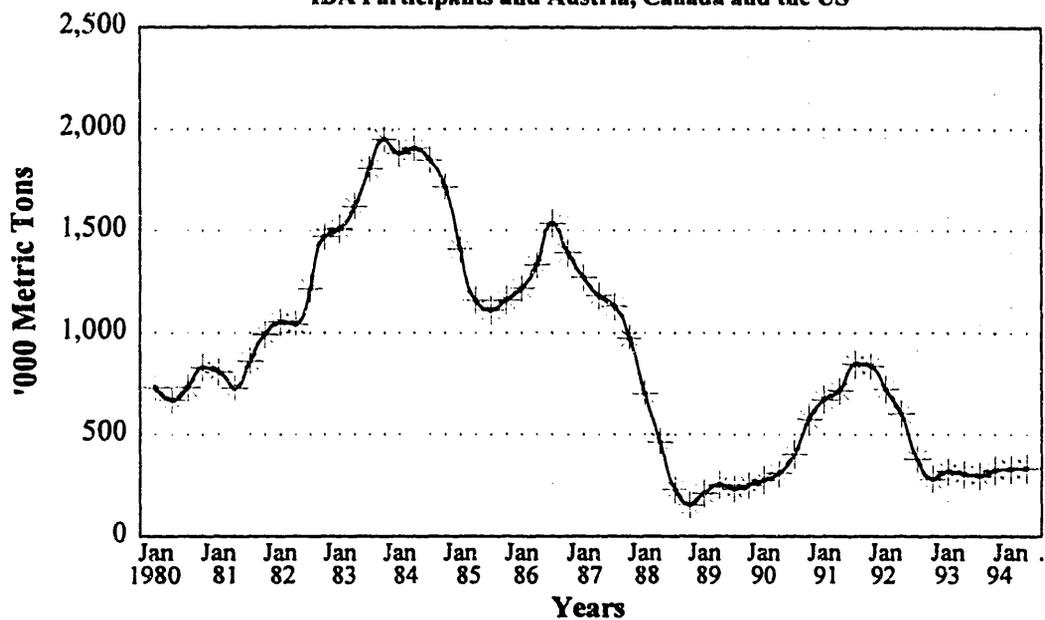
**Graph 1 - SKIMMED MILK POWDER PRODUCTION  
1980 - 1993**



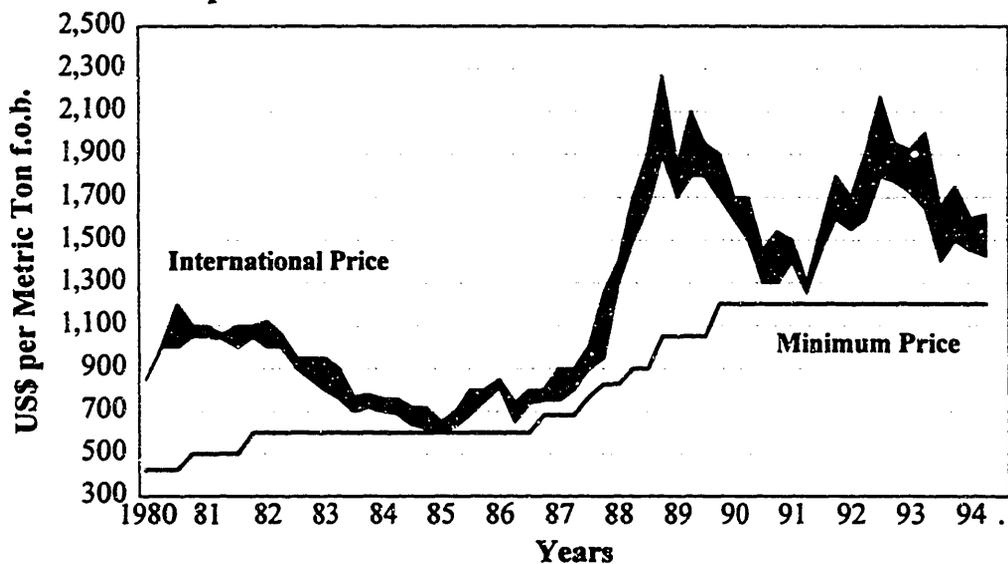
**Graph 2 - SKIMMED MILK POWDER EXPORTS  
1980 - 1993**



**Graph 3 - SKIMMED MILK POWDER STOCKS 1980 - 1994**  
IDA Participants and Austria, Canada and the US



**Graph 4 - SKIMMED MILK POWDER PRICES 1980 - 1994**



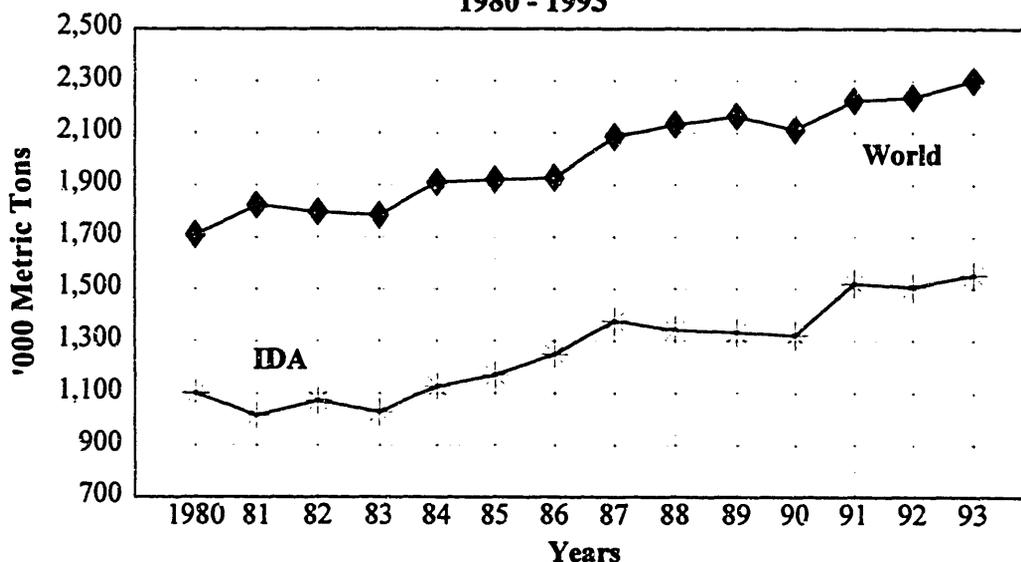
### Whole Milk Powder

29. World whole milk powder *production* increased slightly in 1993 to 2.30 million tons. Production continued to increase in Australia and New Zealand and remained relatively stable in the European Communities and Poland.

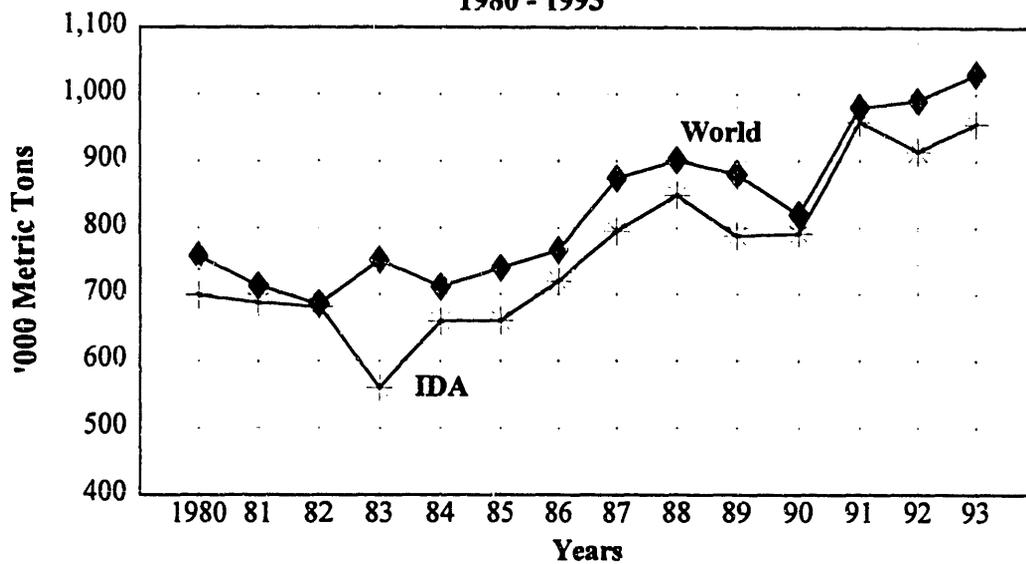
30. World whole milk powder exports rose further in 1993 to 1.03 million tons. Whole milk powder imports by developing countries have been increasing since the end of 1990. There was a further shift in import demand from condensed and evaporated milk to milk powder, especially whole milk powder, in several 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.

31. International *prices* of whole milk powder declined in the first three quarters of 1993, in part due to exchange rate movements. In the fourth quarter of 1993, and in the first half of 1994, prices remained stable. The minimum export price has been maintained at US\$1,250 per ton f.o.b. since September 1989.

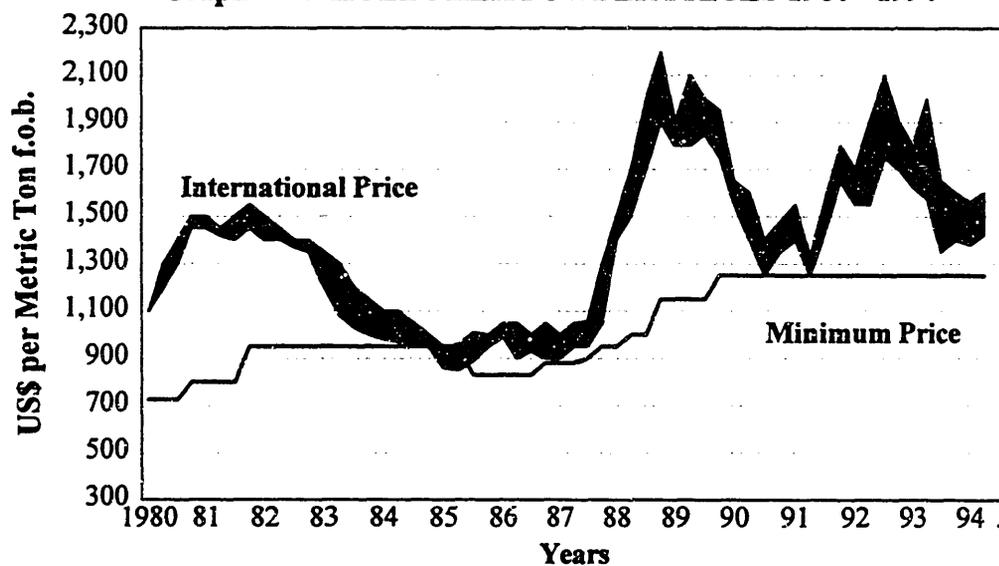
**Graph 5 - WHOLE MILK POWDER PRODUCTION  
1980 - 1993**



**Graph 6 - WHOLE MILK POWDER EXPORTS  
1980 - 1993**



**Graph 7 - WHOLE MILK POWDER PRICES 1980 - 1994**



## BUTTER AND ANHYDROUS MILK FAT

### Butter and Butter Oil

32. World butter and butter oil *production* declined by a further ½ per cent in 1993, to 7.02 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 Canada, as well as in the United States, as the industry adjusted to the trend of declining demand. However, production increased in the European Communities.

33. 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 in Canada, Finland and Sweden. Some of these increases in demand are considered to be of a temporary nature only, and largely due to promotion programmes. However, the trend of declining consumption seems to have levelled off in some countries.

34. The continuing decline in world demand for butter has led to reduced import demand. 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 rose sharply in 1992 as a result of special credit-guarantee sales to Russia, and increased further in 1993. However, world *exports* of butter in 1993 declined by a further 8 per cent to 550,000 tons. World exports of butter and butter oil combined (in butter equivalent) were estimated at about 800,000 tons in 1993.

35. 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 situation, the Committee granted a derogation from the price provisions of the Protocol in conformity with Article 7:1. The derogation was for exports to countries of the former Soviet Union up to a maximum quantity of 50,000 tons per participant for butter and butter oil exclusively for consumption in those countries.

<u>TABLE 5</u>	
MAJOR BUTTER PRODUCERS	
1993 estimates	
(Thousand M.T.)	
EC	1,530
India <sup>(1)</sup>	1,110
Russia	700
United States	598
Pakistan <sup>(1)</sup>	334
Ukraine	325
New Zealand	198
Poland	139

<sup>(1)</sup> Including ghee.

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 under the derogation of 22 June 1993. It decided 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. All other conditions regarding the sales remained the same. At its meeting on 29 March 1994, the Committee decided to again extend the derogation in view of limited opportunities for sales above the existing minimum prices into the countries of the former Soviet Union. The extension of the derogation applied to sales contracts unconditionally concluded before 31 May 1994 and deliveries to be completed by 31 August 1994, and for a maximum of 16,500 metric tons (butter equivalent) in addition to the 50,000 tons per participant permitted under the previous Decisions.

36. These derogations permitted an increase in exports from some IDA participants. By 31 May 1994, the following participants had notified the conclusion of contracts: Australia (16,500 tons), Finland (11,108 tons), Hungary (506 tons), New Zealand (50,000 tons) and Poland (7,388 tons).

37. At a special meeting on 2-3 May 1994, the Committee of the Protocol Regarding Milk Fat reviewed the level of the minimum prices. It noted the continuing structural imbalance facing the world market for butterfats, and its Decisions to grant a derogation from the minimum price obligations for sales to the former Soviet Union area in light of the lack of the opportunities for sales above the minimum price levels to that important market. The Committee noted the differing analyses of the market situation by participants and the difficulties of reaching agreement on an appropriate level of minimum prices in the current market situation. In light of these considerations, the Committee decided to suspend the minimum prices for butter and anhydrous milk fat for a period of up to twelve months as of 4 May 1994.

38. On 1 January 1994, total *stocks* of butter in the European Communities, North America and Oceania amounted to 417,000 tons, 25 per cent less than their level one year earlier. On 1 April 1994, stocks in these countries amounted to 370,000 tons, 24 per cent less than on 1 April 1993. In particular, there were steep decreases in stocks in the United States and New Zealand, with a smaller decline in the European Communities. On 1 July 1994, stocks of butter in the main producing countries remained relatively high, even if substantially below 1993's level.

39. 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 were frequently reported. In the first quarter of 1994, prices were in the range of US\$1,350-US\$1,500 per ton. They declined to the range of US\$1,100-US\$1,500 per ton in the second quarter of 1994. Butter prices will continue to be under pressure at least during the remainder of 1994.

**TABLE 6**

**MAJOR BUTTER EXPORTERS**  
1993 estimates  
(Thousand M.T.)

New Zealand	196
US <sup>(1)</sup>	121
EC <sup>(2)</sup>	99
Australia	41
Sweden	21
Finland	17
Poland	17

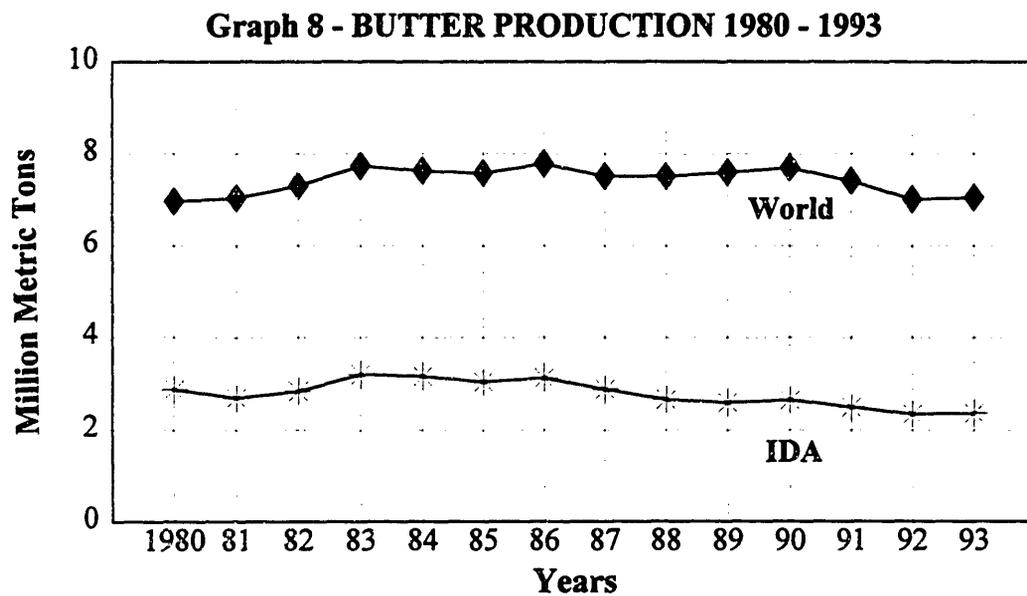
**TABLE 7**

**MAJOR BUTTER IMPORTERS**  
1993 estimates  
(Thousand M.T.)

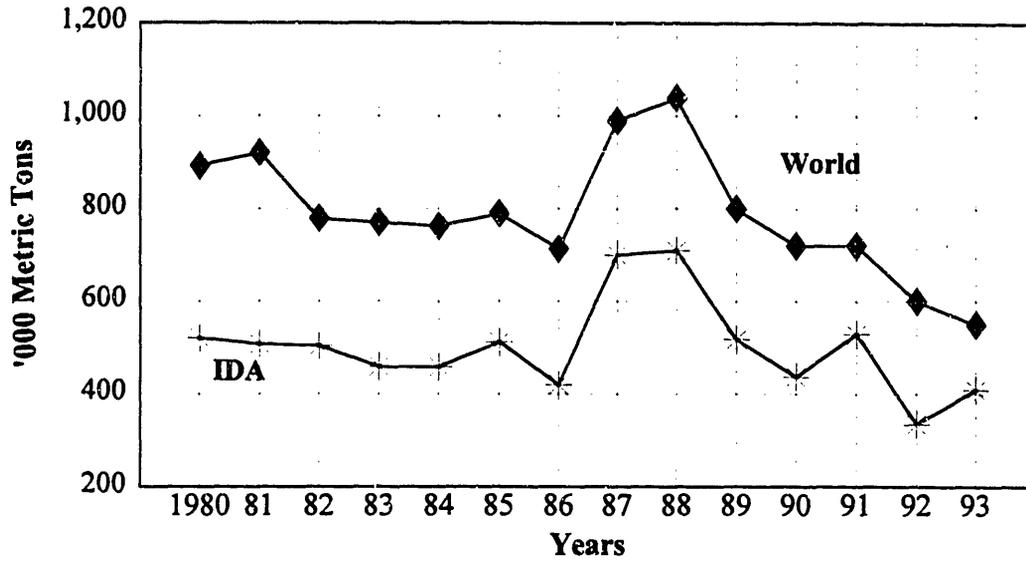
Former Soviet Union	160-180
EC <sup>(2)</sup>	60
Egypt	45
Algeria	43
Poland	6
Switzerland	6

<sup>(1)</sup> Exports of butter and milk fat in butter equivalent.

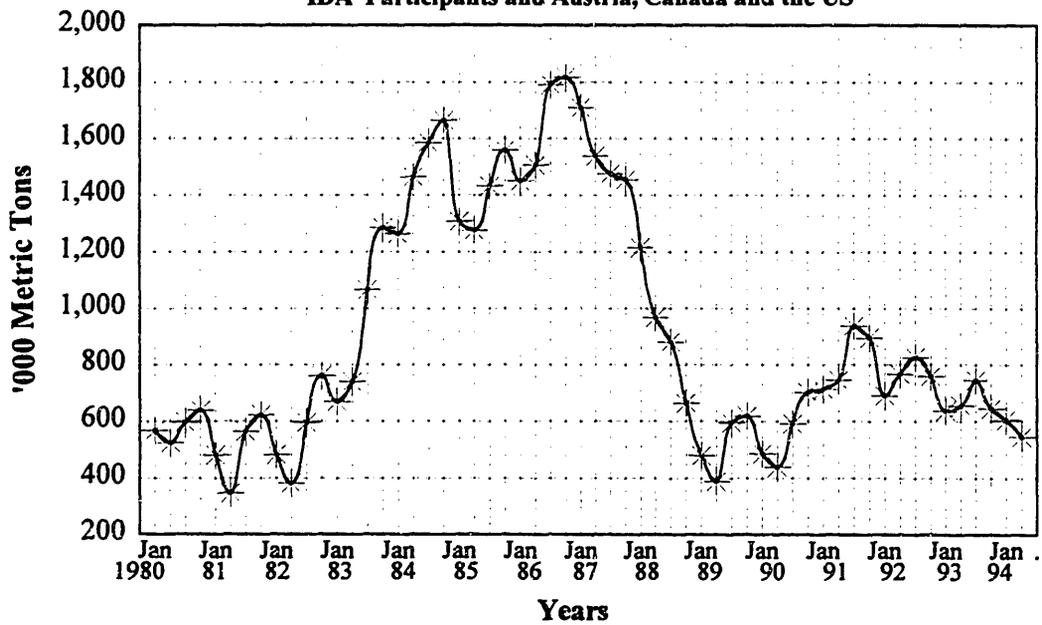
<sup>(2)</sup> Excluding EC intra-trade.



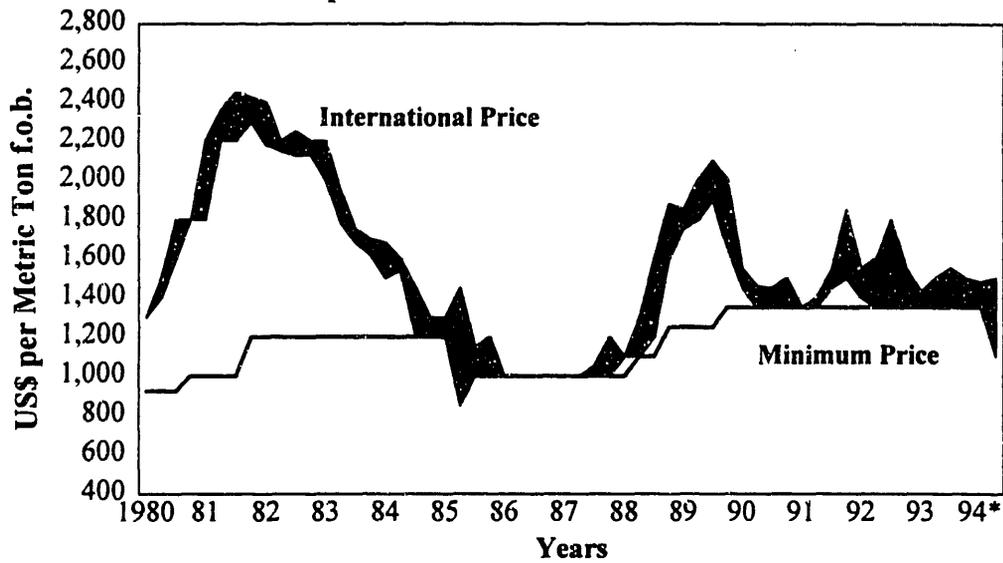
**Graph 9 - BUTTER EXPORTS 1980 - 1993**



**Graph 10 - BUTTER STOCKS 1980 - 1994**  
IDA Participants and Austria, Canada and the US



**Graph 11 - BUTTER PRICES 1980 - 1994**

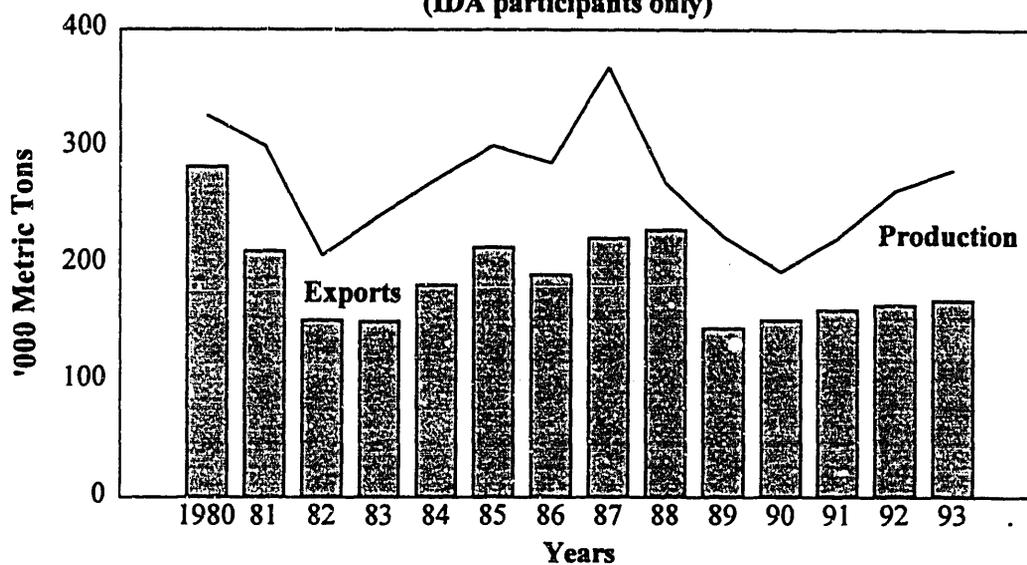


\* Butter minimum price suspended, effective 4 May 1994.  
\* Butter minimum price suspended from 16 November 1984 to 5 June 1985.

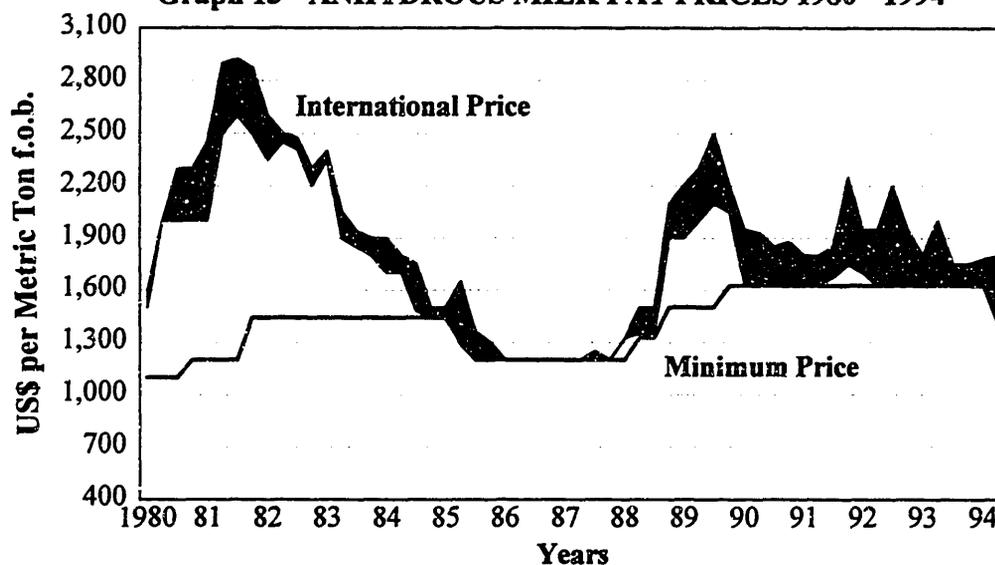
### **Anhydrous Milk Fat**

40. In parallel with butter, international *prices* of anhydrous milk fat weakened further in 1993 and in the first half of 1994. Certain sales were reportedly made at prices below the minimum export price. Future prices and sales of anhydrous milk fat remain sensitive to competition from vegetable oils.

**Graph 12 - ANHYDROUS MILK FAT  
PRODUCTION & EXPORTS 1980 - 1993  
(IDA participants only)**



**Graph 13 - ANHYDROUS MILK FAT PRICES 1980 - 1994**



\* Anhydrous Milk Fat minimum price suspended, effective 4 May 1994.

\* Anhydrous Milk Fat minimum price suspended from 16 November 1984 to 5 June 1985.

## CHEESE

41. There was 1 per cent expansion in world *production* of cheese (all kinds including curd) in 1993, to 14.9 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 declined because of the difficulties facing the dairy sectors as a whole. Production also declined slightly in the United States.

TABLE 8

MAJOR CHEESE PRODUCERS  
1993 estimates

(Thousand M.T.)

EC	5,550
United States	2,932
Egypt	325
Argentina	321
Russia	280
Canada	265
Australia	213
New Zealand	163
Ukraine	140
Switzerland	136

42. 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 these regions, 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 1994.

43. World cheese *exports* increased by 8 per cent in 1993, reaching 980,000 tons. Exports from the European Communities recovered, offsetting a slight decline from Switzerland. Australian and New Zealand cheese exports continued to grow. These countries account for over 80 per cent of world cheese exports.

44. On 1 January 1994, world cheese *stocks* were 9 per cent lower than a year earlier, and a further decline was forecast for the end of 1994. Cheese carry-over stocks declined in the European Communities, the United States, Canada, Argentina and Australia but increased somewhat in New Zealand and Switzerland. On 1 July 1994, stocks of cheese in the main producing countries were lower than a year earlier. The domestic consumption and exports of most major cheese producers are expected to grow faster than production.

45. Cheddar cheese *prices* remained relatively high throughout 1993 and the first half of 1994. 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.

46. 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.

**TABLE 9**

**MAJOR CHEESE EXPORTERS**  
1993 estimates  
(Thousand M.T.)

EC <sup>(1)</sup>	524
New Zealand	127
Australia	87
Switzerland	61

**TABLE 10**

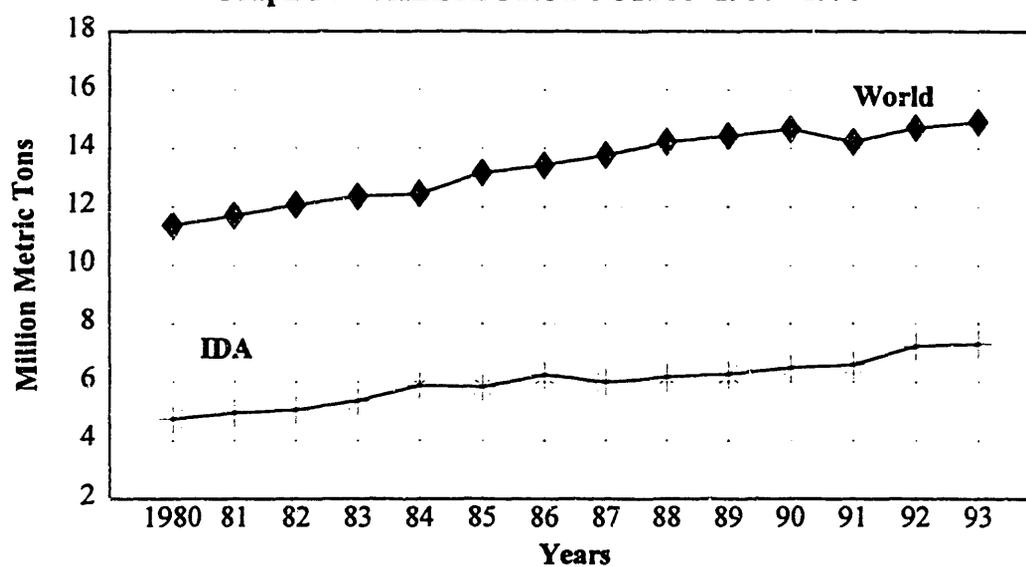
**MAJOR CHEESE IMPORTERS<sup>(2)</sup>**  
1993 estimates  
(Thousand M.T.)

United States	145
Japan	134
EC <sup>(1)</sup>	106
Iran	82
Poland	37
Switzerland	30

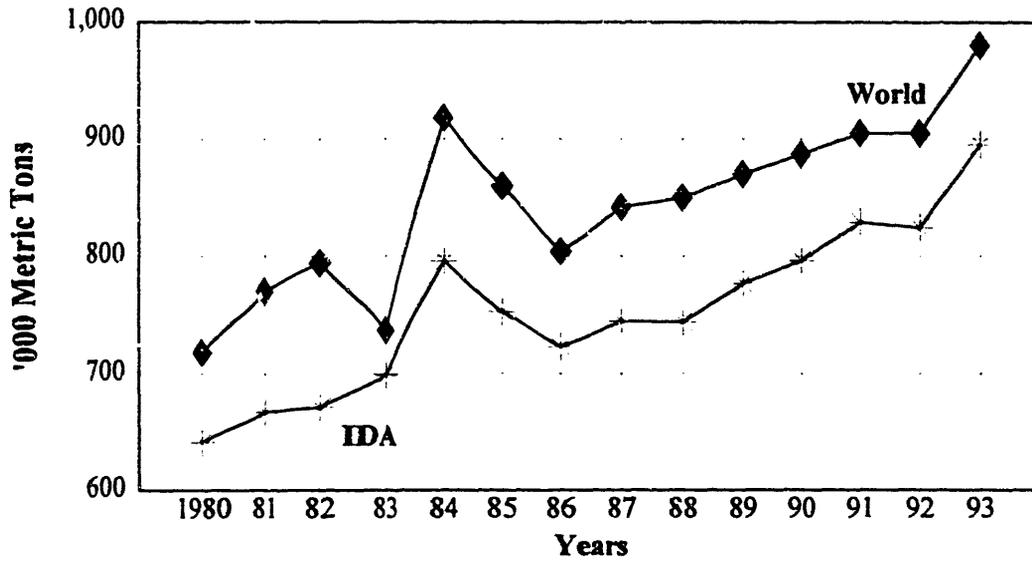
<sup>(1)</sup>Excluding EC intra-trade.

<sup>(2)</sup>Information not available for certain major importers such as Egypt.

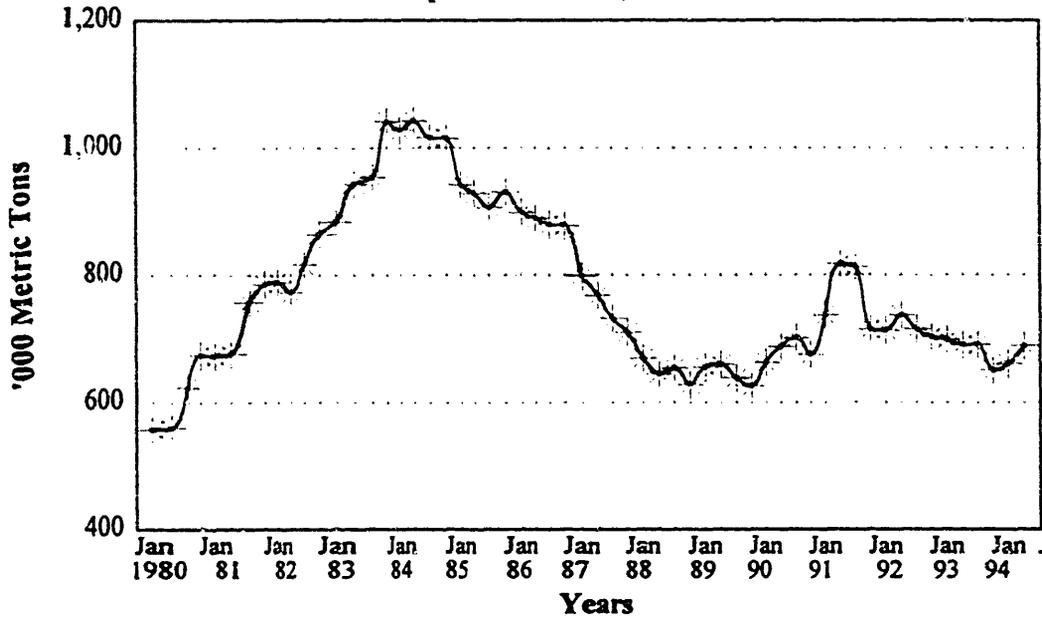
**Graph 14 - CHEESE PRODUCTION 1980 - 1993**



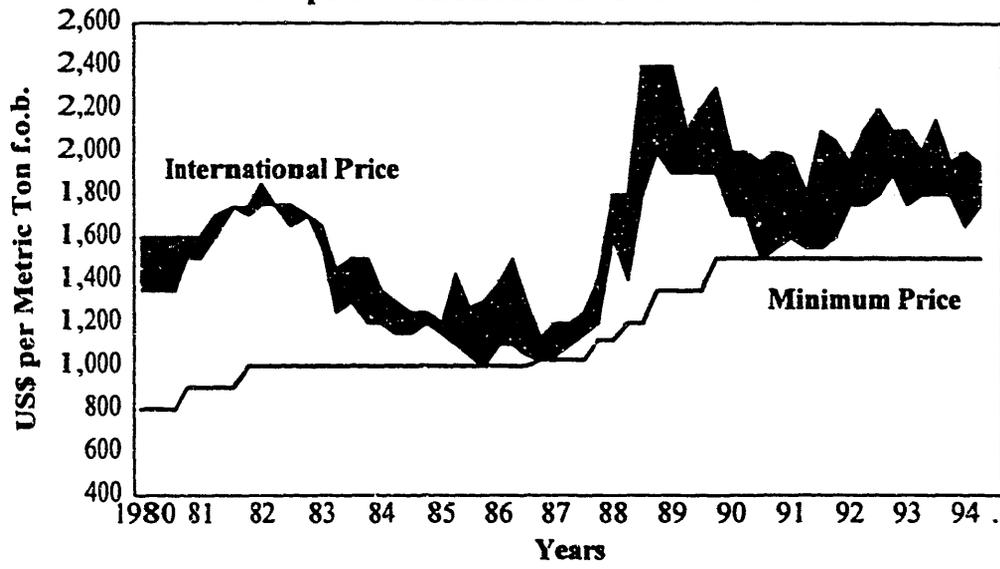
**Graph 15 - CHEESE EXPORTS 1980 - 1993**



**Graph 16 - CHEESE STOCKS 1980 - 1994**  
IDA Participants and Austria, Canada and the US



**Graph 17 - CHEESE PRICES 1980 - 1994**



## OTHER DAIRY PRODUCTS

### Whey in powder or block or concentrate

47. Whey products are mainly by-products of cheese production. World *production* of whey powder increased by a further 2 per cent to 1.71 million tons in 1993, in parallel with developments in production of cheese. The main increases were registered in the European Communities and the United States. 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.

48. *Demand* for liquid whey and concentrated whey as animal feed (particularly for calves) in 1993 was adversely affected by the depressed market for veal calves. There is also, however, 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 1993 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.

49. 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 of 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. In May 1994, prices increased both in the United States and in Europe as compared to May 1993.

### Concentrated milk

50. 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 1992 and remained relatively stable in 1993 at 4.6 million tons. From a peak of nearly 1 million tons in 1985, world *trade* in condensed milk declined to about 350,000 tons in 1991. World trade in condensed milk recovered in 1992 and 1993, with increased exports from the European Communities and Canada.

51. *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 and the first half of 1994.

### Casein

52. World casein *production* declined by 7 per cent to 212,000 tons in 1993. This was primarily the result of a sharp decline in EC production beginning in mid-1993. In the European Communities, increases in the casein subsidy had previously encouraged an upturn in production. However, the aid to manufacturers was reduced in July 1992 and was further cut in March 1993. World *exports* of casein in 1993 declined to 145,000 tons.

53. Casein prices vary widely with quality. Following substantial increases during 1992, casein 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. In May 1994, they further declined by 16 per cent to US\$4,090 per ton compared to May 1993.

### FOOD AID

54. 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. Food-aid shipments of dairy products averaged nearly 400,000 tons (product weight) in the early 1980s, but fell below 100,000 tons in 1990. In 1991 and 1992, food-aid deliveries rose again to 220,000 tons (product weight). In particular, shipments of food aid to Eastern Europe and the former Soviet Union increased in 1991-92. World food-aid deliveries of dairy products in 1993 remained around 200,000 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.

55. *EC food aid.* European Communities' food-aid programmes provided for 5,000 tons of butter oil in 1993, compared to 6,800 tons in 1992. Actual food-aid deliveries of butter oil in 1993 amounted to 1,000 tons compared to 5,000 tons in 1992. Annual allocations of skimmed milk powder for food aid were reduced from 150,000 tons at the beginning of the decade to 50,000 tons in 1993. In 1993, actual deliveries of skimmed milk powder for food aid amounted to 55,000 tons, compared to 51,000 tons in 1992. The EC notified to the Consultative Committee of Surplus Disposal (CSD) of the FAO transactions of 38,000 tons of skimmed milk powder and 38,600 tons of butter/butter oil in 1993.

56. *US food aid.* In September 1992, the United States announced a fiscal year 1993 Russian food-aid package that included 16,800 tons of butter, 3,000 tons of baby food and 3,500 tons of milk powder. For the fiscal year starting October 1992, 25,000 tons of butter/butter oil were made available under the PL 480 Program and 80,000 tons were allocated under Section 416(b). In May 1993, the United States announced food-aid programmes for over 60,000 tons of butter, of which some 50,000 tons have been allocated for Russia and 10,000 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 1,800 tons of skimmed milk powder. At the same time, 11,000 tons of skimmed milk powder and 16,000 tons of butter oil were shipped under the Section 416(b) export donation programme. The United States notified to the CSD transactions of 8,300 tons of skimmed milk powder and 74,000 tons of butter/butter oil in 1993.

## INTERNATIONAL DAIRY PRICES

57. During the fifteen-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 have not regained their levels of the early 1980s.

58. 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.

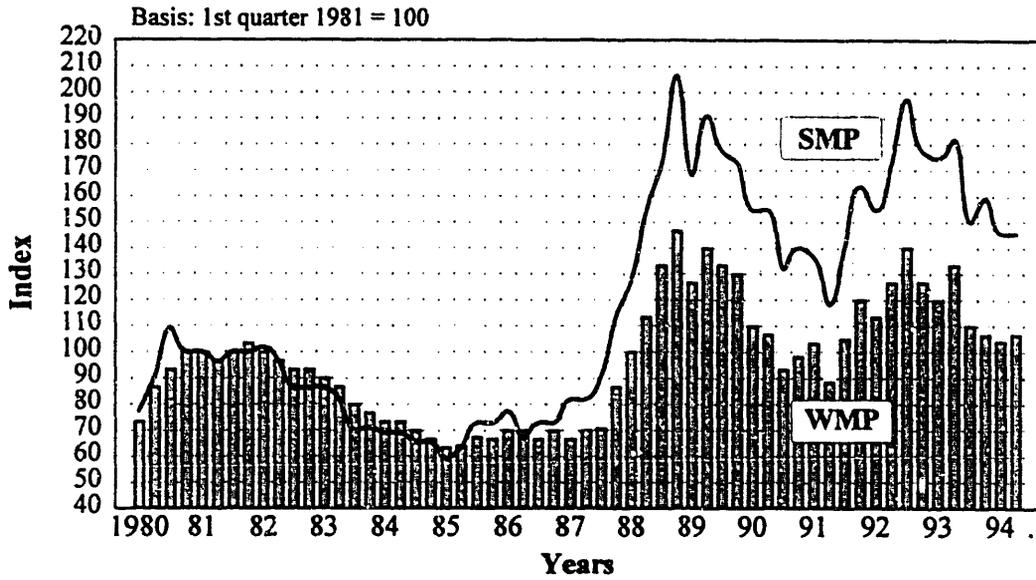
**TABLE 11**  
**International Dairy Prices\* (1991-94)**

(US\$ per metric ton f.o.b.)

Product	1991		1992				1993				1994	
	January-December	January-March	April-June	July-September	October-December	January-March	April-June	July-September	October-December	January-March	April-June	
Skimmed milk powder	1,250-1,800	1,550-1,700	1,600-1,900	1,800-2,170	1,775-1,950	1,725-1,920	1,650-2,000	1,400-1,650	1,500-1,750	1,450-1,600	1,425-1,620	
Whole milk powder	1,250-1,800	1,550-1,700	1,550-1,900	1,750-2,100	1,700-1,900	1,625-1,800	1,575-2,000	1,350-1,650	1,400-1,600	1,380-1,560	1,425-1,600	
Anhydrous milk fat	1,625-2,250	1,700-1,950	1,625-1,950	1,625-2,200	1,625-1,950	1,625-1,720	1,625-1,800	1,625-1,750	1,625-1,750	1,625-1,780	1,400-1,800	
Butter	1,350-1,850	1,400-1,550	1,350-1,600	1,350-1,800	1,350-1,550	1,350-1,430	1,350-1,500	1,350-1,550	1,350-1,500	1,350-1,480	1,100-1,500	
Cheddar cheese	1,550-2,100	1,750-1,950	1,750-2,100	1,800-2,200	1,900-2,100	1,750-2,100	1,800-2,000	1,800-2,150	1,800-1,950	1,650-2,000	1,750-1,950	

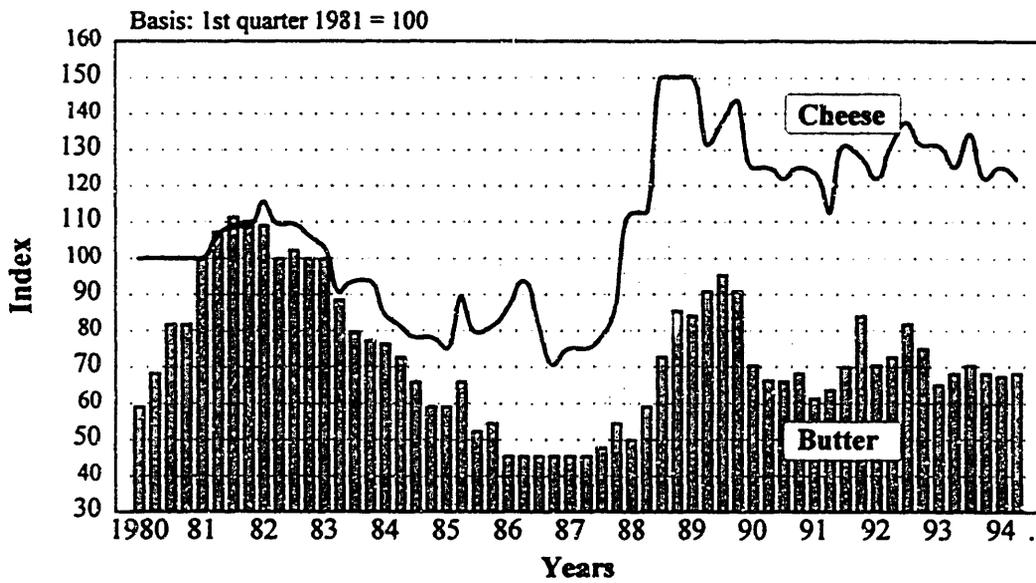
\*Ranges as reported by IDA participants.

**Graph 18 - PRICE INDICES FOR SKIMMED MILK POWDER  
& WHOLE MILK POWDER**



Note: Upper level of international price range

**Graph 19 - PRICE INDICES FOR BUTTER & CHEESE**



Note: Upper level of international price range

## DAIRY PRODUCTION AND POLICIES IN SELECTED COUNTRIES AND REGIONS

### NEW ZEALAND\*

59. New Zealand's milk production set another record in the 1993/94 dairy year (1 June to 31 May). *Manufacturing* milk production is estimated at 8.6 billion litres of whole milk or 735 million kgs. of milk solids, which amounts to an increase of 13 per cent over the 1992/93 season.<sup>1</sup> Early in the season the increase in production was even higher. In September and October 1993, production was 20 per cent and 18 per cent, respectively, above the same months in 1992. Growth rates declined to 11 to 13 per cent in November/December and were down to 10 per cent in January as a result of below average rainfall through the NZ late summer and autumn. In general, cow conditions, pasture cover and feed availability are considered below the levels required for optimal winter and spring production. It is therefore not expected that the high growth rates of the past two dairy years will be sustained. According to the New Zealand Dairy Board, production in 1994/95 is assumed to remain stable. At the same time, cow numbers (in milk) are forecast to rise by another 3½ per cent (see Table 12).

TABLE 12

NZ Dairy Production in 1993/94 and Forecast for 1994/95 (June to May)

	1993/94 Estimate	% Change over 1992/93	1994/95 Forecast	% Change over 1993/94
Total cows in milk ( <sup>'000</sup> head)	2,584	3.0	2,675	3.5
Manufacturing milk (million litres)	8,603	12.8	8,600	0.0
Butter ( <sup>'000</sup> tons)	302	9.4	270-290	- 4-11
Cheese ( <sup>'000</sup> tons)	192	31.5	200-210	4-9
WMP ( <sup>'000</sup> tons)	296	4.6	315-330	6-11
SMP ( <sup>'000</sup> tons)	142	11.8	130-140	- 1-8
BMP ( <sup>'000</sup> tons)	26	13.0	20-25	- 4-23
Casein ( <sup>'000</sup> tons)	78	1.4	65-70	- 10-17

Source: New Zealand Dairy Board.

60. The main factors underlying the increase in NZ production in the past season include the good condition of both cattle and pastures at the beginning of the season; the sustained favourable weather until early February 1994; improved pasture and herd management; and increased use of fertilizer.

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<sup>1</sup>Manufacturing milk (excluding milk and cream for liquid consumption) has comprised 94 per cent of total NZ milk production in recent years, which compares to around 75 per cent in Australia and the European Communities, and 60-65 per cent in the United States and Canada. Total milk production in 1993/94 is thus estimated at 9.4 million tons.

It is estimated that the underlying rate of growth of New Zealand's milk production is about 3 per cent per annum, but due to the seasonal impact actual production may fluctuate by some 10 per cent (plus or minus) around this trend rate.

61. New Zealand's share of world dairy trade (in terms of milk equivalents) was in the magnitude of 18-21 per cent in 1992-93, while the European Communities commanded 48 per cent. Unlike its major competitors on the world market, New Zealand's exports are not subsidized. As world market conditions have generally been weaker in the dairy year 1993/94, NZ farmgate prices were lower than a year before. The final milk value set by the NZ Dairy Board for the 1993/94 season was fixed at \$NZ 2.90 per kg. milk solids (\$NZ 5.05 per kg. milk fat), lower than the expected value for the season and 11 per cent lower than in 1992/93. The average farmgate price paid by dairies is expected to be \$NZ 3.15 to \$NZ 3.25 per kg. milk solids. For the 1994/95 season, the NZ Dairy Board set the initial milk value at \$NZ 2.40 per kg. milk solids, with the expectation that it may achieve a final value in the range of \$NZ 2.70 to \$NZ 2.90. Since the 1993/94 season, "milk solids" has replaced milk fat as the key measure of production on which the Dairy Board's payment for milk is made.

#### *Milk Powders*

62. Unlike whole milk powder, there has been no increasing trend in the production of skimmed milk powder in recent years. The increase in 1993/94 was a recovery from the depressed level in 1992/93 when skimmed milk powder production was restrained at the expense of whole milk powder.

63. New Zealand's skimmed milk powder exports to Mexico, which were substantial in the late 1980s (45,000 tons in 1989 and 22,500 tons in 1990), have been much lower in the 1990s (zero in 1992 and 6,000 tons in 1993). On the other hand, New Zealand achieved major advances in whole milk powder sales to Mexico, in particular since 1992. In 1993, Mexico became the number one export destination for whole milk powder, a position previously held by Malaysia. Exports reached 40,000 tons in 1993, up from 27,000 tons in 1992. In the volatile Algerian market, New Zealand sold 39,000 tons in 1993, following 18,500 tons in 1992 and 34,500 tons in 1991.

64. In calendar year 1994, New Zealand has to date notified skimmed milk powder stockfeed sales totalling 4,454 tons. All sales were under derogation from the minimum price and destined for Japan. Export prices ranged from US\$954 to US\$1,078 f.o.b. per ton.

#### *Butter and Butter Oil*

65. Despite the increase in dairy production, New Zealand has successfully accommodated the volumes in the market, with relatively low end of season stocks. The revived butter trade with Russia was an important factor in achieving this result. In calendar year 1993, NZ exports to Russia reached almost 50,000 tons, after negligible exports in calendar year 1992. Under the derogation from the minimum price for butterfats, New Zealand notified 50,000 tons of sales to Russia, a large part for shipment in 1994, at prices ranging from US\$1,100 to US\$1,200 c.i.f.

66. New Zealand's butter access quota to the European Communities has been reduced from 79,000 tons in 1986 to 53,182 tons for calendar year 1994, subject to a reduced import levy of ECU 338.40 per ton. Since the creation of the EC Single Market in January 1993, the butter may be traded throughout the European Communities after entry through the United Kingdom. As a result of the Uruguay Round negotiations, New Zealand will be granted import access opportunities totalling 76,667 tons at a tariff rate of ECU 868.80 per ton.

*Cheese*

67. In line with the industry's objective to reduce the share of milk used for butter manufacture, NZ dairy production expanded most strikingly for cheese (plus 31 per cent in 1993/94). In fact, NZ production is forecast to double in the current dairy year 1994/95 compared to 1992/93 production. This expansion came in response to growing demand from New Zealand's overseas markets without adverse effects on prices. Exports to its major market, Japan, reached new heights at 42,000 tons in calendar year 1993.

68. In calendar year 1994, New Zealand has so far made cheese sales under derogation from the minimum price totalling 895 tons. All sales were made to the European Communities.

*Casein*

69. Due to lower prices in the international market and increased milk powder production, the manufacture of casein has been restrained. Production in 1993/93 remained at similar levels (75,000 tons) as in the previous two dairy years. Virtually all production is exported. Exports in calendar year 1993 totalled 65,200 tons, with the major destinations being the traditional markets, i.e. the United States (28,300 tons), Germany (12,100 tons) and Japan (10,600 tons). Export prices in 1993 averaged US\$4,000 per ton, lower than in 1992 but significantly higher than in 1991.

**AUSTRALIA\***

70. Australian milk production in the 1993/94 dairy year (July to June) is estimated at 7.9 billion litres, an increase of around 8 per cent over 1992/93. Favourable weather conditions have been one of the main reasons for the rise in production. Australia's dairy production is mainly based on year-round non-irrigated pasture grazing, with limited but rising use of concentrates. Dairy cow herds average about 113 cows. After declining for almost 30 years, dairy cow numbers have begun to increase since 1992. The reversal of the long-term trend reflects the relatively good returns from dairying in recent years. Milk production in 1994/95 is forecast to increase marginally to 7.95 billion litres, although average yields are expected to decline with a return to less favourable weather conditions than in the past two years. The expansion of the dairy herd is expected to continue.

71. About 75 per cent of Australia's milk production is processed into dairy products (manufacturing milk), with the remaining 25 per cent used as fresh milk (market milk). In the first three quarters of the past dairy year, production of skimmed milk powder and whole milk powder increased by 25 per cent, while butter/anhydrous milk powder production was 10 per cent higher and cheese output expanded by only 3 per cent. This was despite the fact that world market prices for skimmed milk powder and notably butter weakened during this time. The movement into lower paying product lines is one of the reasons why farmgate prices for manufacturing milk are estimated to be about 9 per cent lower in 1993/94.

72. Some 40 per cent of total milk production is exported as manufactured dairy products. Australia's major export markets are concentrated in South East and East Asia, led by Japan. A large portion of the increased production of manufactured products in 1993/94 found its way into export and will continue to do so.

73. Progressive deregulation of the domestic liquid milk market encouraged new product development and increased marketing activity. Overall demand for milk in 1993 was relatively static at 100 litres per head. In contrast, there has been a recovery in demand for manufactured products. The trend

towards low fat product lines continued across all categories in the dairy market, from liquid milk to cheese, yogurt and butter blends.

74. Since July 1986 the Australian dairy industry has operated a market support scheme financed by producer levies. By channelling into export dairy products, which would otherwise be sold in the domestic market, the internal market price is raised relative to export prices. The market support payments are based on estimates of export volumes and expected average export prices for the coming marketing year. The Australian Government sets the levy and the maximum levels for the support payment as a percentage of the anticipated export price. For 1994/95, the maximum support rate is 18.6 per cent. The new rates indicated in Table 13 correspond to an average of 15 per cent. Under the current arrangement, support rates will be decreased to 10 per cent by 1999/2000. Market support payments during 1986-90 constitute export subsidies under the terms of the Uruguay Round Agreement on Agriculture and are therefore subject to reduction commitments.

TABLE 13

Australian Market Support Rates  
(In \$A per ton)

	1993/94 Average	As from 1 July 1994
Butter	301	296
Cheddar cheese	360	355
Skimmed milk powder	288	285
Whole milk powder	305	301

Source: Australian Dairy Corporation.

#### *Milk Powders*

75. In the first three quarters of the Australian dairy year (June to March), skimmed milk powder production totalled 166,000 tons and is estimated at 194,000 tons for the full dairy year. Skimmed milk powder stocks throughout 1993/94 have been significantly higher than in recent years (65,000 tons on 1 April 1994).

76. The South East Asian countries are Australia's most important markets for skimmed milk powder/buttermilk powder and butter oil, which are mainly used for recombination to produce fluid products for domestic consumption. Japan is also a significant market for Australian skimmed milk powder and specialty powder formulations. In 1993, skimmed milk powder exports to the Philippines, Australia's major overseas outlet for skimmed milk powder and buttermilk powder, increased by 7,000 tons to a total of 34,874 tons. At the same time, there was a drop of almost 9,000 tons of skimmed milk powder exports to Japan (10,701 tons in total). In the first quarter of 1994, Australia shipped 23,362 tons to Mexico. Mexico had not figured among Australia's major export destinations for skimmed milk powder in recent years.

77. Whole milk powder production is estimated at 98,000 tons in 1993/94. Whole milk powder exports are predominantly destined for South East Asia, Taiwan and Japan. In calendar year 1993, major increases in export volumes occurred in the Philippines (plus around 6,000 tons), Brazil (plus around 3,000 tons) and Singapore.

#### *Butter and Butter Oil*

78. In 1992/93, total butter and anhydrous milk fat production reached 126,458 tons (butter equivalent), of which about 60 per cent was exported. In the first three quarters of the past dairy year, butter and butter oil production were up by another 10 per cent, reaching 119,000 tons. For the full dairy year, production is estimated at 137,000 tons.

79. Despite the weaker economy in 1993, butter consumption recovered due to aggressive price discounting. However, the trend towards low fat dairy products continued. Butter retail sales increased by 2 per cent in 1993, while sales of butter-vegetable oil blends rose by 7 per cent, and sales of mono-unsaturate margarine (mainly based on canola oil) increased by 40 per cent.

80. Australian butter exports in calendar year 1993 totalled 40,889 tons, compared to some 17,000 tons in 1992. Most of the increase was due to renewed exports to Russia (14,641 tons) and Egypt (8,529 tons). Under the derogation from minimum prices for butterfat effective since June 1993, Australia sold 16,500 tons to the former Soviet Union, with the bulk contracted at US\$1,178 f.o.b. per ton. Butter stocks, at 15,000 tons at the end of the first quarter of 1994, were less than half of one year earlier.

### *Cheese*

81. Total Australian cheese production at 179,000 tons was 3 per cent higher in the first three quarters of dairy year 1993/94. As a reflection of consumption trends, there was no increase in Cheddar production, but it still constitutes about 64 per cent of total cheese production. On the other hand, shredded and fresh cheese output expanded by 24 and 16 per cent, respectively.

82. Despite the generally unfavourable economic climate in 1989 to 1993, Australian cheese consumption has recovered to pre-recession levels. Per capita cheese consumption in 1992/93 was back to 9.1 kgs. However, consumer preferences for cheese have been changing. Consumer demand has been strong for non-traditional and locally-produced cheese, such as Camembert, Parmesan and Mozzarella. There has been important growth for low fat cheese and convenience cheese products, such as pre-sliced and shredded or grated cheese.

83. Japan is the major export market for Australian cheese, with about half of total cheese exports in calendar year 1993. Exports to Japan increased by 9,000 tons to nearly 46,000 tons. Traditionally, trade has been dominated by Cheddar cheese, but more recently there has been strong growth in exports of cream cheese, Mozzarella and shredding cheese.

84. Cheese imports of most varieties enter under tariff quotas, except from New Zealand and the Pacific Forum Islands. Under the free-trade agreement with New Zealand, dairy imports - mainly cheese - enter Australia free of duty. Out of 25,000 tons imported in 1993, 14,000 tons were from New Zealand. 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.

### **EUROPEAN COMMUNITIES\***

85. Milk deliveries in 1993 were at 101.4 million tons, just ½ per cent less than in 1992. Deliveries are expected to decline in 1994. 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 continued to increase by a further 2 to 3 per cent in 1993, to approximately 33 million tons.

86. In July 1994, the Council of Ministers reached agreement on farm prices and other adjustments for the 1994/95 marketing year. Butter intervention prices will be cut by 3 per cent. Last year the Council had accepted that a further 2 per cent price reduction would come into force in 1994/95. An additional 1 per cent cut has now been added to the pre-agreed 2 per cent for 1994/95. There is no commitment to any price cut in 1994/95. Intervention for cheese is to be abolished.

87. Milk quotas will remain unchanged for both 1994/95 and 1995/96. However, the Italian quota increase agreed conditionally last year has been made definitive, although slightly revised downwards to 9.6 million tons.

88. A single definition of butter for intervention is to be introduced. The Council has called for further technical work to be carried out before it takes a formal decision by 31 October 1994.

89. As a result of the Uruguay Round, the European Communities' bound tariffs on agricultural products will be reduced in six equal instalments beginning in 1995 and ending in 2000. Thus, the tariff on butter will be reduced by 36 per cent from the base level of ECU 2,962 to ECU 1,896 per ton; and the skimmed milk powder tariff will be cut by 20 per cent from ECU 1,485 to the final bound level of ECU 1,188 per ton. Furthermore, in 1995 the EC will establish tariff quotas for 76,667 tons of butter reserved for New Zealand, and 15,250 tons of cheese reserved for New Zealand, Canada and Australia. In addition, the EC will open new market opportunities (at reduced tariff rates) for 41,000 tons of skimmed milk powder and 18,000 tons of cheese. During the implementation period, access opportunities will rise, in equal annual instalments, to final levels of 69,000 tons for skimmed milk powder, 104,000 tons for cheese, and 10,000 tons for butter.

90. The European Communities is committed to successively reduce quantities and outlays of subsidized dairy products beginning in 1995. Thus, maximum allowable subsidized exports of skimmed milk powder will be 297,200 tons in 1995, to be reduced to 243,300 tons in 2000. Budgetary outlays must be reduced from ECU 347.9 million in 1995 to 236.9 million in 2000. The respective commitments for butter are: 447,200 tons in 1995 to be reduced to 366,100 tons in 2000; outlays to be decreased from ECU 1,245.9 million to ECU 848.2 million. For cheese: 406,700 tons in 1995 to be reduced to 305,100 tons; outlays to be cut from ECU 505.2 million to ECU 281.1 million. For other milk products: 1,161,400 tons to be reduced to 938,400 tons; and outlays to be decreased from ECU 946.6 million to ECU 645.2 million.

#### *Milk Powders*

91. Skimmed milk powder production increased by 5 per cent in 1993 to 1.22 million tons. This is in contrast to the 24 per cent decline in 1992. The turn-around was largely due to the sharp decline in casein manufacture in 1993. Skimmed milk powder production in the first quarter of 1994 was 5 per cent below the comparable 1993 level. This reduction is due to the decline in milk deliveries as well as increased demand of milk for cheese.

92. With effect from 1 February 1993, the minimum incorporation rate for skimmed milk powder in mixed feeds was cut from 50 per cent to 35 per cent. It had been expected that the rate would return to 50 per cent as of the beginning of 1994, however, in light of the firm market for skimmed milk powder and the relatively weak market for veal, no change will be made in 1994. Total domestic consumption of skimmed milk powder decreased by 18 per cent to 945,000 tons in 1993; the use of skimmed milk powder for animal feed also decreased by 18 per cent to 662,000 tons.

93. Following a 24 per cent decline in 1991, EC exports of skimmed milk powder increased by 54 per cent to 390,000 tons in 1992. However, exports decreased by 23 per cent to 299,000 tons in 1993.

94. EC public stocks of skimmed milk powder continued to decline in the first six months of 1993. They amounted to only 29,000 tons at the end of June 1993, compared to 163,000 tons a year earlier. Public stocks rose slightly to 35,000 tons by 31 December 1993 and to 41,000 tons by 31 March 1994. However, by 30 June 1994, stocks had increased to 82,000 tons.

95. In 1993, whole milk powder production increased by ½ per cent to 944,000 tons compared with 1992. Exports increased by 1½ per cent to 589,000 tons in 1993.

#### *Butter and Butter Oil*

96. Lower output of milk, coupled with further increases in domestic demand for cheese and fresh milk products, led to a decrease in EC butter production in 1992. In 1993, however, production at 1.53 million tons was 1½ per cent higher than in 1992. In the first quarter of 1994, production declined by 4 per cent to 353,000 tons.

97. 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. The total volume of butter taken under the pastry and ice-cream regulation in 1993 was 392,000 tons, highlighting the importance this use of butter has in the European Communities. The volume of butter taken up by the pastry and ice-cream industry in January through May 1994 was 200,000 tons, 16 per cent more than in the corresponding period of 1993. In addition, in an attempt to slow down the decline in butter consumption, a two-year programme of making butter available at reduced prices to recipients of social security measures has been continued. Preliminary estimates of EC butter consumption in 1993 indicated an apparent and unexpected increase of about 3 per cent as compared to 1992. It may thus be possible that the trend of declining consumption has levelled off. Consumption of margarine seems to be stable at a level of about 4.7 kgs. per head, whereas consumption of butter and vegetable oil blended spreads appears to be increasing.

98. In 1993, exports of butter to third countries decreased by 29 per cent to 99,000 tons. At the same time, exports of butter oil decreased by 6 per cent to 79,000 tons. Under provisions permitting the importation of New Zealand butter into the European Communities, a quota of 53,182 tons has been set for 1994. In accordance with the provisions of the Uruguay Round Agreement on Agriculture, the European Communities will provide access for New Zealand butter at its 1986-88 base year level of 76,667 tons, at the import levy applied at that time.

99. Intervention purchases of butter up to May 1994 amounted to 16,000 tons, about 40 per cent less than during the same period in 1993. The total quantity of butter bought in 1993 was 32,200 tons. In January 1993, public and private stocks of butter stood at 241,000 tons compared to 302,000 tons a year earlier. In mid-December 1993, stocks totalled 211,000 tons of butter. On 30 June 1994, stocks totalled 239,000 tons of butter.

#### *Cheese*

100. Cheese production in the European Communities grew by 1 per cent to 5.55 million tons in 1993 in response to sustained growth in domestic and export demand.

101. Cheese consumption continued to expand albeit by only ½ per cent in 1993. The great variety of cheese available and further product diversification (i.e. low-fat cheeses) are the main reasons for this trend.

102. In 1993, EC cheese exports recovered to 524,000 tons, compared to 466,000 tons in 1992. Imports, mostly from Switzerland, were 106,000 tons in 1993.

#### *Other Dairy Products*

103. EC 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 3 per cent to 924,000 tons in 1993, following the expansion in cheese production. Exports of whey remained stable in 1992 at 32,000 tons.

104. *Condensed milk* output decreased by 4 per cent to 1.2 million tons compared to 1992. Exports recovered to 343,000 tons in 1992, following a drop to 316,000 tons in 1991. This recovery occurred as traditional buyers increased their purchases at the same time as East European countries emerged as buyers.

105. The 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. EC production subsequently increased in 1992 to 138,000 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 by 13 per cent to 120,000 tons in 1993.

### FINLAND\*

106. In 1993, milk deliveries continued their downward trend, reaching 2.3 million tons. The slight decline was probably due to the slaughtering of cows. In the first quarter of 1994 milk deliveries were 4 per cent higher than in the same period of the previous year. It is expected, however, that 2.3 million tons of milk will again be processed by Finnish dairies by the end of 1994. Penalties for farmers exceeding their production quotas have been set at Fmk 1.65/litre for the year 1993/1994.

107. The drop in milk production, along with changes in consumption patterns towards low-fat dairy products, resulted in a decline of Finnish *butter* production in recent years. The amount of milk processed into butter fell by 30 per cent since the early 1980s. In 1993, per capita consumption of butter was at 5.7 kgs., almost half the level of 1985. Butter production is estimated to increase by 5 per cent to 59,000 tons in 1994. Consumption of butter is expected to remain stable at 39,000 tons by the end of the year. Exports are estimated to reach 20,000 tons by the end of 1994. Finnish butter exports are recovering after a sharp decline in the past years. Under the derogation from the minimum prices effective since June 1993, Finland notified sales of 11,108 tons of butter at prices ranging between US\$1,000 and US\$1,310 per ton to countries of the former Soviet Union. In the first quarter of 1994, Finnish exports totalled 8,800 tons.

108. In the first three months of 1994, 3,700 tons of *skimmed milk powder* were produced. For the full year 1994, skimmed milk powder production is expected to remain at 1993's level of 15,000 tons, while consumption declines further. In 1993, exports halted almost completely due to the lower production level. From January to March of 1994, only 2 tons of skimmed milk powder were exported. Exports for 1994 are forecast to total 5,000 tons.

109. Only negligible quantities of *whole milk powder* were produced in 1993. In 1994, output, which is entirely for export, will barely reach 1,000 tons. Exports, mainly destined to the former Soviet Union, will fall to 200 tons. Stocks in April were 400 tons.

110. In 1993, *cheese* production continued to increase, reaching 90,000 tons. In the first three months of 1994 output rose modestly to 22,700 tons. However, production is expected to decrease to 89,000 tons for the year as a whole and may fall further in the future in line with reduced milk output. Cheese consumption has risen by 80 per cent since the 1980s. For 1994 it is estimated at 70,000 tons. Per capita disappearance in Finland last year was over 13 kgs., similar to many European countries. Finnish exports are forecast to remain steady at 25,000 tons by the end of 1994, in spite of a lower export level registered in the period January-March.

111. Although Finland is trying to diversify its agricultural production into meat, milk still accounts for 35 per cent of the total returns of agriculture production. The Finnish producer price of milk is currently 40 to 50 per cent higher than the average producer price in the EC countries. In February 1992, Finland applied for full membership in the European Communities. According to the Treaty of Accession concluded in June, Finland will have to align its producer prices to the European Communities' price level if its referendum results in a decision to join. However, the country will benefit from a five-year transition period and will receive a compensation grant amounting to ECU 457 million. The Finnish milk quota will be fixed within the Common Agricultural Policy on the basis of historical production, at 2,552 thousand tons, including "SLOM" reserve and direct sales.

#### NORWAY\*

112. The Norwegian dairy sector is supported by various instruments. Farmers receive a basic subsidy for each litre of milk delivered to the dairies, regardless of the final utilization of the milk. For the years 1993 and 1994, the basic subsidy was fixed at NKr 0.283 per litre. Moreover, a special regional subsidy is paid to farmers. For 1993 and 1994 it ranges from NKr 0.11 to NKr 1.60 per litre, with the highest support provided in the northernmost regions of the country. A fixed payment is given to each dairy holding as structural income support. Consumer price subsidies on liquid milk and domestically consumed cheese were abolished on 30 June 1993. However, since 1 July 1993 the VAT on dairy products has been cut to 15 per cent from the 22 per cent general level. This measure is supposed to stimulate consumption and benefit low-income families.

113. In 1993, milk production continued its downward trend to 1,806 million tons. Output is forecast to decrease slightly to 1,796 million tons by the end of 1994. Whole milk consumption has declined steadily since 1980, with the decrease being partly offset by an increase in low-fat milk consumption. In 1993, per capita consumption of skimmed and low-fat milk totalled 113 kgs. while whole milk consumption decreased to 49 kgs. Total consumption of liquid milk is estimated to have dropped to 700 million kgs.

114. *Skimmed milk powder* production declined to 8,000 tons in 1993. In the first quarter of 1994, it decreased by 14 per cent to 2,400 tons. Skimmed milk powder consumption was down by 340 tons compared to the same quarter of the previous year. Exports in the first three months of 1994 were negligible. No significant exports of skimmed milk powder are expected due to compulsory return deliveries to milk producers. Whole milk powder output and consumption rose slightly.

115. *Butter* production continued to decline. In the period January-March 1994, output was down by 11 per cent at 4,600 tons and consumption declined by a further 5 per cent. In the first three months of the year, only 1,200 tons of butter were exported. Butter was delivered mostly to North African countries, at an average export price of US\$1,350 per ton f.o.b. Butter stocks on 1 April 1994 had decreased to 2,300 tons.

116. *Cheese* production has risen by 20 per cent since the early 1980s. However, in the first quarter of 1994, cheese production decreased slightly to 21,400 tons. Cheese consumption has been stable in the last few years. In 1993, total consumption reached 57,600 tons while per capita consumption was at 13.3 kgs. Although cheese is the only dairy product exported on a significant scale, in the first three months of 1994 cheese exports dropped by almost 17 per cent to 5,300 tons. Main destinations were the European Communities, Japan, Australia, Canada, the United States, Sweden and Mexico.

117. In November 1992, Norway presented its accession request to the European Communities. An agreement on the conditions of its entry was reached in March 1994. Norway, like Finland, will have a transitional period of five years to align its producer prices to the lower EC price levels. The country will be compensated with a temporary financial aid in the amount of ECU 260 million. According to the Treaty of Accession, Norway's overall milk quota will be 2,017 thousand tons, including the "SLOM" reserve.

#### SWEDEN\*

118. Milk production is the most important type of production in Swedish agriculture. Current policies for milk and dairy products are aimed at reducing production to a level that can be absorbed in the domestic market or exported without subsidies. Consumer subsidies and export subsidies were removed as part of the 1990 food policy reforms. Special funds have been allocated to dairy farmers ceasing milk production. Following the implementation of the reforms, the Swedish dairy sector has been restructured. Milk production fell significantly through 1992 due also to a sharp reduction in dairy cow numbers. However, the amount of milk processed by Swedish dairies began to increase again in 1993. In the first quarter of 1994, milk deliveries rose by 1½ per cent to 1,136 million kgs. Expanded milk production for the year as a whole may lead to a surplus. This is due to the Swedish application to join the European Communities and the expectation of the re-introduction, within the Common Agricultural Policy, of a milk quota system.

119. *Skimmed milk powder* production is declining in Sweden. In 1993, production of skimmed milk powder was 23 per cent lower than in the early 1980s. In the first four months of 1994, it dropped by 25 per cent to 8,600 tons compared to the first quarter of 1993. In the period January-March 1994, an estimated 2,600 tons of skimmed milk powder were exported at an average price of US\$1,550 per ton f.o.b. Stocks continued their downward trend. On 1 April 1994 they were at 2,800 tons, a decrease of nearly 18 per cent compared to the previous year. *Whole milk powder* production, which is destined for internal consumption, increased slightly to 2,000 tons.

120. In the first quarter of 1994, *butter* production dropped by 30 per cent to 8,200 tons. This was due to a switch from butter to cheese production. In contrast, consumption of butter was 4 per cent higher at 4,900 tons compared to the same period of 1993. Butter exports dropped to negligible quantities. In June, the average export price was US\$1,300 per ton f.o.b. At the end of the first quarter, butter stocks had declined by 35 per cent compared to the first four months of 1993.

121. In 1993, *cheese* production increased to almost 126,000 tons. In the period January-March 1994, cheese output rose by 15 per cent to 33,800 tons. Consumption of cheese during that period reached 143,000 tons, a 10 per cent increase compared to 1993. This resulted in a slight rise in imports of cheese. Since 1991, as compensation for the abolition of the system of collectively financed export subsidies, the Swedish Government has provided temporary, direct export subsidy payments. For 1994, export refunds for cheese will total approximately SKr 50 million. On 1 April, cheese stocks were 13 per cent above last year's level.

122. In December 1990, when Sweden applied for membership in the European Communities, its producer prices, support levels and production costs in the dairy sector were significantly higher than those of the European Communities. The reduction of border protection as from 1 July 1991, and the devaluation of the Swedish krona in 1992, lowered the discrepancy. Price and support levels are still higher for the dairy and the livestock sectors. Nevertheless, Sweden will be the only applicant among the EFTA countries which will not benefit from a transitional period to align producer prices to the level set in the European Communities. In compensation, the country will phase-in its budgetary commitments over four years. According to the accession agreement concluded in March 1994, and if the forthcoming Swedish referendum on membership has a positive outcome, the Swedish production quota for milk will be fixed at 3,303 thousand tons including direct sales.

#### SWITZERLAND\*

123. The dairy industry, accounting for one third of the gross value of agricultural production, is the most important sector of Swiss farming. Milk production is primarily destined for fresh domestic consumption. Cheese processing is given priority over butter production. Therefore, butter imports are encouraged. As from 1 September 1993, the guaranteed producer price for milk was lowered by 10 centimes to 97 centimes per litre. As a compensation for the SwF 293 million cut in price support, the Swiss Government increased direct payments to dairy farmers by SwF 200 million. For 1994, direct payments will total SwF 800 million. In the first quarter of 1994, milk deliveries continued to rise slightly, reaching 1.06 million tons due to higher productivity.

124. The *skimmed milk powder* industry is recovering. In the first three months of 1994, production and consumption increased significantly compared to the first quarter of 1993. This was due to higher deliveries. The 25 per cent rise in consumption resulted in no exports. Stocks at the end of March 1994 had declined to 5,600 tons.

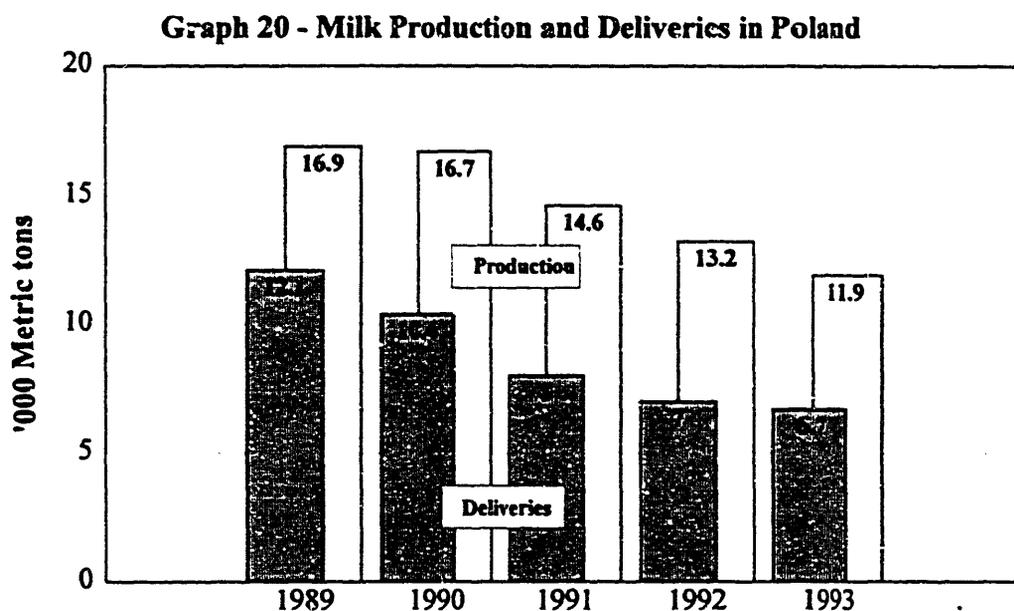
125. After a decline in 1993, *butter* production rose to 11,300 tons in the period January-March 1994. Butter imports dropped modestly although a 24 per cent increase in consumption, presumably due to lower butter prices, was registered in the first three months of 1994. In order to keep a desired balance between butter and margarine, the butter price will be reduced by a further 50 to 60 centimes per kg. as from 1 November 1994, depending on the packaging of the butter. Butter stocks on 1 April 1994 were unchanged.

126. In 1993, *cheese* production increased by 2½ per cent due to higher milk deliveries. However, in the first quarter of 1994, output declined to 30,200 tons, a 7½ per cent reduction compared to the same period of the previous year. In the first three months of 1994, cheese consumption fell modestly while exports recovered to 14,000 tons after the drop in 1993. In spite of lower consumption, Swiss imports of cheese continued to increase, reaching 7,200 tons in the period January-March 1994. Stocks on April 1 1994 rose to 27,000 tons.

#### POLAND\*

127. Poland's share of world milk production was just over 2 per cent in 1993, which far exceeds that of all other Eastern and Central European countries. In comparison with Western Europe, Poland's production is exceeded only by Germany, France and the United Kingdom. However, total livestock production fell by about 12 per cent in 1993, due mainly to reduced profitability as the drought in 1992 pushed up feed prices.

128. At the beginning of this decade, the level of producer support within the agricultural sector fell sharply as the country moved away from central planning. However, in response to the weak performance of the country's agriculture in recent years, there has been a progressive increase in tariffs between 1991 and 1993. For dairy products, the tariffs range from 10 to 40 per cent (40 per cent for butter). A temporary import surcharge of 6 per cent in response to balance-of-payments problems has been effective since mid-December 1992. The Polish Government has notified its intention to extend the application of the import surcharge until 1997 in order to further remedy its balance-of-payments position. The surcharge is scheduled to be reduced to 5 per cent in 1995; to 3 per cent in 1996 and discontinued altogether from 1997. The motivation behind the extension, according to Polish authorities, is evidence that the trade balance deficit is of a more structural nature than previously suspected. Imports have continued to grow faster than exports, and, as a result, despite the 8 per cent devaluation of the zloty in August 1993, the trade balance has deteriorated. Also, a prolonged recession among principal trading partners, as well as a higher than expected average burden of debt servicing in the near future, is expected to have an adverse effect on Poland's balance-of-payments position.



129. The declining trend in Polish *milk* production continued through 1993. Production fell to 11.9 million tons in 1993, about 9 per cent below the previous year and approximately 40 per cent below the 1989 level. A further slight decrease is expected in 1994. Cow numbers have declined steadily since 1990 and the herd level is now about 3.9 million head. At the end of March 1994, cow numbers had decreased by 5.8 per cent compared to the same date in 1993. Delivery levels in proportion to total production have fallen since 1989; currently they have stabilized at approximately 55 per cent of total production volume. This reduction can be attributed to the increase of direct deliveries from farmers to the market. In the first half of 1994, supplies to dairies were forecast to remain stable.

130. The structure of the Polish dairy sector is characterized by a great number of very small herds that contribute the bulk of the milk produced (over 80 per cent). These farms have a low capital input and an average of only 1 to 3 cows. Although progress has been achieved, this small-scale production gives rise to problems related to the handling of the milk and leaves much to be desired with regard to quality and yield levels (currently 3,100 litres per cow). Presently, a great majority of the country's dairies operate at a loss, with consequences also for farmers. According to recommendations of the National Association of Dairy Co-operatives, concentration of dairy production, amelioration of milk quality and a more efficient promotion of dairy products, as well as a modernization of dairy technology, are necessary for an improved dairy structure.

131. In 1993, production of *skimmed milk powder* and *whole milk powder* remained stable at approximately 147,000 tons and 65,000 tons, respectively. However, during the first quarter of 1994, production of skimmed milk powder dropped by 30 per cent compared to the same period the previous year. On 21 June 1994, Poland introduced a new import levy on skimmed milk powder amounting to Zł 16,200 per kg. Whole milk powder production remained unchanged. While almost all production of whole milk powder was consumed domestically, close to 60 per cent of skimmed milk powder production was exported. The export prices for skimmed milk powder ranged between US\$1,230 and US\$1,530 per metric ton.

132. *Butter* production dropped by almost 8 per cent to 139,000 tons in 1993, a less dramatic decline compared to that of recent years (production almost halved between 1989 and 1992). During the first quarter of 1994, the fall was further compounded by a drop of 12 per cent compared to the same period in 1993. Most of the butter produced in the country was also consumed there, only relatively small amounts were imported. Under the derogation for sales of butter and butter oil to the former Soviet Union since June 1993, Poland has notified exports of 7,388 tons. Over the past three years, the average monthly consumption of butter has gradually dropped to about 0.47 kgs. per month in 1993. During the same period, consumption of margarine has increased. The trend appears to be one of declining animal fat consumption and increasing consumption of vegetable fats. This is thought to reflect changes in dietary behaviour and, also, lower prices of margarine in relation to butter.

133. *Cheddar cheese* production showed an increase of 8 per cent in 1993. Production increased by 20 per cent in the first quarter of 1994, compared to the first quarter of 1993. Cheese consumption fell about 6 per cent in 1993, and a further 12½ per cent in the first quarter of 1994 compared to the same period in 1993.

TABLE 14

Poland - Trade in Dairy Products

('000 metric tons; ( ) = % change from comparable period)

	SMP	WMP	Butter	Cheese
Imports 1993	14.7 (104%)	3.5 (n.a.)	6.1 (-42%)	37.4 (70%)
1st qtr 1994	0.5 (-90%)	0.05 (-97%)	0.05 (-98%)	2.4 (-84%)
Exports 1993	86.2 (-5%)	3.7 (-61%)	17.0 <sup>(1)</sup> (n.a.)	11.7 (102%)
1st qtr 1994	16.0 (13%)	1.0 (400%)	8.0 <sup>(2)</sup> (300%)	10.0 (3200%)

<sup>(1)</sup>Of which 2.4 tons for food aid.<sup>(2)</sup>Of which 1.5 tons for food aid.

Source: GATT.

**HUNGARY\***

134. In Hungary, overall agricultural output fell by a little less than 10 per cent in 1993. The fall in output from the livestock sector was more pronounced than in other sectors. Since 1990, milk production in Hungary has decreased by some 30 per cent to a level of around 2.1 million tons in 1993. During 1993, milk production declined by 11 per cent. Cow numbers have been declining for over ten years. In the December 1993 census, the herd was estimated to have been 450,000 head - down 9 per cent from 1992. Higher production costs and a lack of sufficient capital investment are among the main factors behind the decline in the Hungarian livestock sector.

135. Despite the gloomy outlook for the dairy sector, prospects for Hungarian agriculture, as a whole, look brighter in 1994. An increase of 5 to 8 per cent is expected in agricultural production. Probably the single most significant factor in this upturn is the Hungarian land reform. By 1 January 1994, 31 per cent of total arable land was in private hands compared to 8 per cent in 1990. State farms are scheduled to be privatized in the latter half of 1994. Due to this reform process, less land is expected to remain uncultivated this year, thus the forecast rise in output. Also, improvements for loan terms to small farm entrepreneurs in 1994 may ease the financial burden suffered in previous years.

136. In relation to other Central and Eastern European countries, Hungary's milk production is on the lower end. Yields are relatively high and match Western European standards. Deliveries to dairies are commonly just below 90 per cent of production. Except for cheese, production has generally declined for dairy products in Hungary. The trend did not change in the first quarter of 1994.

137. In 1988, consumer subsidies were removed on milk while support to producers was maintained. This led to price increases and a fall in consumption of dairy products. Milk consumption in Hungary is currently among the lowest in Europe. Hungarians consume 150 litres of domestically produced dairy products a year (in milk equivalents). Liquid milk consumption amounts to 67 kgs. per capita, about half the corresponding European level.

138. Export subsidies for butter have been reduced to 10 per cent in 1994 (previously 30 per cent). For cheese, the subsidy is 30 per cent and, for milk powders it varies: 10 per cent between 1 November to 30 April, and 20 per cent between 1 May to 31 October. Dairies received government subsidies between 1 June 1993 and 31 December 1993. This temporary support to milk wholesalers was extended in 1994.

139. In 1993, Hungarian dairy exports decreased some 11 per cent in value terms. The value of imports, on the other hand, increased by 19 per cent. Despite this differential, Hungary still enjoys a trade surplus in dairy products. The positive trade balance for all agri-food trade in Hungary is much larger than in any other Central or Eastern European country.

TABLE 15

Hungary - Dairy Production

('000 metric tons)

	1992	1993	1992/93	1st qtr 1994	Change from 1st qtr 1993
Milk*	2,370	2,100	- 11%	n.a.	n.a.
SMP	9.4	5.3	- 44%	0.9	-18%
WMP	6.5	5.8	- 11%	0.9	0%
Butter	17.4	14.2	- 18%	3.2	-20%
Cheese	43.4	47.3	9%	11.5	4%

Source: GATT; \*FAO.

TABLE 16

Hungary - Trade and Consumption

('000 metric tons; ( ) = % change from comparable period)

	SMP	WMP	Butter	Cheese
Imports 1993	0.2 (from zero)	0.5 (25%)	0.2 (from zero)	6.5 (183%)
1st qtr 1994	0.2 (from zero)	0.0 (0.0%)	0.0 (0.0%)	1.1 (175%)
Exports 1993	0.7 (-50%)	2.8 (-48%)	4.5 (18%)	12.9 (-10%)
1st qtr 1994	0.3 (from zero)	0.0 (0.0%)	0.1 (-91%)	2.1 (-25%)
Consumption 1993	4.6 (-41%)	3.6 (140%)	10.7 (-23%)	38.4 (16%)
1st qtr 1994	1.2 (9%)	0.9 (-10%)	2.7 (4%)	9.1 (17%)

Source: GATT.

## ROMANIA\*

140. In 1993, agricultural output in Romania grew by some 12 per cent, a distinct change compared to previous years' performances. Poor rains and early frosts in November 1993, as well as an early spring in 1994, may hamper further growth in Romanian agriculture during 1994. The Romanian economy, as a whole, depends heavily on the performance of the agricultural sector; agriculture and forestry represent almost one fourth of gross domestic product.

141. One factor that contributed significantly to the recovery of Romanian agriculture has been the increased private entrepreneurship in the sector. Under Romania's Land Law, approximately 90 per cent of the 9.1 million hectares due for allocation to private citizens had been distributed by mid-January 1994. Also, as part of a programme agreed in June 1994, private farmers will be offered government loans to assist in the purchase of machinery.

142. According to some estimates, milk production continued to decline by 12 per cent to 2.9 million tons in 1993. The fall is expected to continue in 1994, but at a slower rate. Romanian milk producers are suffering from poor returns and a shortage of quality inputs, particularly feedstuffs. Production levels in 1993 were lower for all dairy products, except for whole milk powder (see Table 17).

143. In the beginning of 1994, Romanian import tariffs for milk doubled from a level of lei 5,000 to lei 10,000 per hectolitre (US\$0.13 per kg.). This measure was apparently taken in order to encourage domestic production and the sale of stocks.

TABLE 17

Romania - Production and Trade

('000 metric tons; ( ) = % change from comparable period)

	SMP	WMP	Butter	Cheese
Production 1993	4.0 (-26%)	7.1 (48%)	13.7 (-33%)	40.1 (-12%)
1st qtr 1994	0.2 (-60%)	0.8 (31%)	1.8 (-28%)	7.8 (1%)
Imports 1993	2.5 (-33%)	5.8 (12%)	2.4 (-74%)	2.5 (19%)
1st qtr 1994	0.04 (-96%)	0.1 (-74%)	1.0 (25%)	0.3 (-67%)
Exports 1993	0.3 (-62%)	-	0.3 (582%)	1.6 (-16%)
1st qtr 1994	0.5 (257%)	-	-	0.3 (-71%)

Source: GATT.

**BULGARIA\***

144. Drought, still persisting after two years, continues to have a negative influence on Bulgarian agriculture. Total agricultural output is preliminarily estimated to have fallen by 16 to 20 per cent during 1993. Livestock numbers declined sharply; by 1 April 1994, cow numbers had fallen by 18 per cent compared to the same date in 1993. Among the Central and Eastern European countries, Bulgaria is one of the smallest producers.

145. Milk production fell by 18 per cent to 1.3 million kgs. in 1993. The fall, markedly steeper than in previous years, escalated the trend of declining milk production. This trend continued into the first quarter of 1994, with milk production falling another 16 per cent compared to the same period in 1993. Whole milk powder and butter production were down 60 and 50 per cent, respectively, from 1992 levels. In the first quarter of 1994, both butter and whole milk powder production were well below comparable levels in 1993.

146. Bulgaria has traditionally been an important cheese producer and exporter; however, production has decreased substantially over the past years (see Table 18). Under the Interim Agreements between the European Communities and Bulgaria, the quota for cheese imports to the European Communities was set at 1,000 tons for the first half of 1994. These imports are subject to a 40 per cent reduction in levies.

TABLE 18

Bulgaria - Cheese Production and Trade

('000 metric tons; ( ) = % change from comparable period)

	1990	1991	1992	1993	1st qtr 1994
Production	142.2	116.5	83.6	59.7 (-29%)	6.4 (-50%)
Exports	18.0	23.9	20.2	13.2 (-35%)	2.7 (35%)
Imports	1.4	-	0.4	3.7 (825%)	0.2 (-75%)
Consumption	129.7	85.3	n.a.	52.6 -	n.a.

Source: GATT.

147. In spite of the overall situation, dairy production in the private sector has increased substantially. The private sector grew as animals were relocated from the collective sector. Yields per cow also increased, if only by 1 per cent; however, they still remained below the country's average. The current structure of Bulgarian agriculture comprises 171 agri-industrial farms, which rank among the largest farms in the world (average size of 16,000 hectares). The privatization process in Bulgaria began later than in the other Central and Eastern European countries, and is expected to take up to 20 years to complete.

TABLE 19

Bulgaria - Trade in Dairy Products

('000 metric tons; ( ) = % change from comparable period)

	SMP	WMP	Butter
Imports 1993	4.4 (2100%)	2.7 (n.a.)	2.2 (47%)
1st qtr 1994	0.9 (12%)	0.3 (50%)	0.3 (-25%)
Exports 1993	0.5 (n.a.)	0.4 (-92%)	0.5 (400%)
1st qtr 1994	0.1 (from zero)	0.0 (n.a.)	0.1 (from zero)

Source: GATT.

148. Food prices showed a remarkable increase in the beginning of 1994, as the Bulgarian currency (lev) rapidly depreciated. In February 1994 alone, they rose by just under 6 per cent. Cheese was among those products most affected. In March 1994, cheese prices rose 24 to 36 per cent over the previous month. Food prices rose by about 60 per cent on average during 1993. Following the price increase in the first quarter of 1994, price monitoring for food products has been expanded. Monitoring with partial price controls now covers up to 32 per cent of all staples. A wide range of meat and dairy products, including milk, butter and cheeses, is affected by the new legislation.

**CZECH REPUBLIC**

149. In 1993, milk production fell to 3.1 million tons, close to 20 per cent below the 1992 level. Despite this drop there remains a surplus of milk over domestic consumption. However, cow numbers have been decreasing at such a rapid rate that the Czech Government has expressed concern over the likelihood of a future shortage of milk. Over the past four years, the number of dairy cows has fallen by almost 30 per cent. By April 1994, cow numbers reached 816,000, a 10½ per cent decline compared to April 1993. Contrary to the negative trends in the livestock sector, crop production increased, and the total agricultural output of the Czech Republic fell only slightly.

150. The basic objective of the Czech Government's agricultural policy is that of increasing agricultural productivity in order to assure better international competitiveness. However, agricultural unemployment rates have been rising in recent years. At the same time, farm revenues have been falling, making capital investments difficult. In 1993, input costs rose by over 30 per cent while prices of farm products rose by only 10 per cent on the average. Added to this, it has become increasingly difficult to obtain loans for agriculture, in part because of confusion arising from the new land ownership structure. In response to the capital needs of the farmers, a loan-guarantee fund was set up in order to ease the farmers' financial burden.

151. The State Fund for Market Regulation (SFMR) is a public agency whose main purpose is to regulate the market for a number of commodities, including milk and dairy products (see Table 20). The instruments used are intervention purchases as well as export subsidies. During 1993, the SFMR

managed 96 per cent of butter exports, about 22 per cent of total skimmed milk powder exports, and 14 per cent of cheese exports.

TABLE 20

Czech Republic - Trade and Production in Dairy Products

('000 metric tons)

	SMP		Butter		Cheese	
	1992	1993	1992	1993	1992	1993
Production	113.4	92.0	86.3	66.6	76.8	52.5
Total exports	48.0	66.4	29.4	31.7	10.8	10.4
SFMR exp.	12.0	14.5	28.3	30.5	7.4	1.5
Total imports	0.5	0.6	0.02	0.05	2.0	5.0

SFMR (Státní Fond Tržní Regulace) is the Czech Government's State Fund for Market Regulation.

Source: GATT.

**SLOVAK REPUBLIC**

152. In 1994, GDP is expected to decline by 2 per cent and could be followed by further stagnation in 1995. On the other hand, agricultural output, which fell by approximately 6 to 7 per cent in 1993, is expected to show a 2 per cent growth in 1994. In general, livestock productivity was poor in 1993 and dairy cow numbers fell to 422,700 head, down 12 per cent from 1993. Milk production declined by 11 per cent to 1.3 million tons. Food consumption fell in Slovakia, as food prices rose approximately 20 per cent during 1993. Milk consumption fell by about 10 per cent in 1993 compared to 1992.

153. As of 3 March 1994, the Slovak Republic imposed an import surcharge of 10 per cent on all imports.

**COMMONWEALTH OF INDEPENDENT STATES**

154. The Commonwealth of Independent States (CIS) produced approximately 16 per cent of the world's milk output in 1993. Russia alone is one of the major cow milk producers in the world, only surpassed by the European Communities and the United States. The bulk of the milk originating within the CIS comes from Russia, Ukraine and Belarus. Their respective proportions of total milk deliveries in 1993 were approximately 60 per cent from Russia, 25 per cent from Ukraine and 9 per cent from Belarus. Kazakhstan was not far behind, with some 5 per cent of the total. Milk production in 1993 fell only 2 per cent from the previous year's level to an estimated 83.6 million tons. Deliveries, however, decreased by 8 per cent and amounted to only 42½ million tons. On 1 April 1994, cow numbers were down by 6 per cent compared to 1 April 1993. In almost all CIS States, output fell during the first quarter of 1994, compared to the same period in 1993; only in Belarus and Tadjikistan was milk production slightly higher.

155. The former Soviet Union is a major importer of butter. However, compared to the late 1980s, butter imports by the former Soviet Union have fallen substantially and are presently well below their prior volumes. Butter exports from participants of the International Dairy Arrangement to the Republics of the former Soviet Union grew by over 50 per cent in 1993 to 91,100 tons<sup>1</sup>, stimulated by the derogation from the IDA minimum price in June 1993. At the same time, exports from the United States were up 45 per cent and attained 70,900 tons. This is still well below the peak import level of 440,000 tons in 1988. In 1994, it is expected that the countries of the former Soviet Union - especially Russia - will continue to be principal outlets for butter on the international market. In a Decision effective 4 May 1994, the Committee of the Protocol Regarding Milk Fat decided to suspend the minimum prices for butter and anhydrous milk fat for a period of up to twelve months.

### *Russia*

156. In 1993, total agricultural output declined by some 4 per cent and is forecast to decline a further 5 per cent in 1994. This situation has to be seen in light of an overall economy that plunged 18 per cent in terms of real GDP during 1992, and "recovered" to a 12 per cent decline in 1993. Nevertheless, output of the major agricultural products fell by as much as 18 per cent during the first quarter of 1994.

157. After years of decline, milk production in Russia stabilized at approximately 47 million tons in 1993. During the first four months of 1994, production was down by as much as 15 per cent from the comparable period of the previous year. A recent forecast estimates that total milk production in 1994 could decline to around 42 million tons (down about 10 per cent). At 24.6 million tons, State purchases of milk in 1993 were 5 per cent below last year's level. On the other hand, milk deliveries to non-State sources increased substantially in the beginning of 1994. About 6 per cent of total milk production (all categories of farms) was sold through channels other than the official procurement network in the first quarter of 1994. The livestock sector is characterized by problems associated with feeding. In general, fodder quality and composition is poor. Also, the level of profitability has dropped substantially in recent years as the disparity between input and output prices has grown. At the same time, prices for milk and dairy products have risen at a much slower rate than those for most other agricultural products. On 1 April 1994, cow numbers, which had declined slightly during 1993, were down 10 per cent compared to the same date last year.

158. *Butter* production was estimated to have fallen by 6 per cent in 1993 to about 700,000 tons. For the CIS as a whole, the decline was around 10 per cent. However, butter production fell strongly in the first quarter of 1994, by some estimates as much as 33 per cent compared to the same period in 1993. Imports in 1994 are expected to increase and in the first quarter of the year, imports rose by 28 per cent.

159. An import duty of up to 15 per cent on milk and dairy products, effective from 15 March 1994, was suspended after two months. The reintroduction of the duty is currently under consideration.

### *Ukraine*

160. Total agricultural production in Ukraine is estimated to have fallen by a little under 2 per cent in 1993, while real GDP growth decreased by as much as 17 per cent. In the past three years (1991 to 1993), real GDP in Ukraine fell by 43 per cent. Preliminary forecasts for 1994 and 1995 point towards a continued fall of about 10 per cent per annum. The first quarter of 1994 showed a decline of almost 5 per cent in agricultural output compared to the same period in 1993. Also, inflation

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<sup>1</sup>For the EC the figure only includes exports between January and June 1993.

has been a major problem in Ukrainian agriculture; prices for milk and dairy products rose 115-fold during the course of 1993.

161. In 1993, milk production in Ukraine fell by approximately 5 per cent to 18.1 million tons. The number of private farmers continued to increase, albeit at a modest rate. Currently, the area held by private farmers amounts to just over 1 per cent of the total agricultural land area. The dairy production from these farmers represents a minute proportion of the total milk production in the country. Ukraine, which used to be a net exporter of dairy products to other Republics of the former Soviet Union, has since 1992 been relying on imports - notably of butter. Butter production decreased to approximately 325,000 tons in 1993. Cheese production followed suit, and fell by about 12 per cent to 140,000 tons during the same year. Dairy products for children were among the few food-industry products that recorded an increase during 1993.

### *Belarus*

162. The agricultural crisis in Belarus has deepened. In the first quarter of 1994, agri-food production dropped by almost 16 per cent as compared to the same period in 1993. Livestock production accounts for about 60 per cent of total agricultural production in Belarus. Milk production fell by a quarter to approximately 5.6 million tons in 1993. Deliveries declined by about 9 per cent in 1993 to approximately 3.7 million tons. By 1 January 1994, cow numbers were down about 2 per cent to 1.5 million head. However, on 1 April 1994, cow numbers had recuperated somewhat and were up some 2 per cent on the corresponding level in 1993. Contrary to the great majority of the CIS Republics, milk production actually increased marginally in the first quarter of 1994. The effect on deliveries is uncertain, as State purchasing authorities, including the dairy processing industry, are having difficulties in paying the farmers. The Republic has the highest per capita milk consumption level in the CIS, although in 1993, per capita consumption fell by 6 per cent to 537 kgs. Given the relatively high level of milk production, Belarus is a net exporter of dairy products.

## BALTIC REPUBLICS

163. Milk production in the Baltic States has been declining in recent years. In 1992, their combined production was 5 million tons. This volume was estimated to have fallen to 4 million tons in 1993. In *Lithuania*, the largest dairy producer of the Baltic States, total agricultural production fell by approximately 8 per cent. The decline was attributed mainly to debts owed by the food industries to their suppliers. Because of transportation problems, farmers found it difficult to bypass the State processing plants in order to sell directly on the market. In 1993, milk production is estimated to have fallen by about 12 per cent in Lithuania.

164. The agricultural sector is of considerable importance to the *Estonian* economy. Currently the sector employs 50 per cent of the country's workforce and accounts for 21 per cent of exports. The sector is, however, lagging behind the overall economy and farm privatization has been proceeding slowly. Total agricultural production is estimated to have fallen by about 17 per cent in 1993. Since 1991, the livestock herd has been halved. Milk production fell from 1.3 million tons to 600,000 tons in 1993, reportedly the average level of the 1930s. In January 1994, milk deliveries were down 17 per cent compared to the same month in 1993.

## JAPAN\*

165. In 1993, Japanese production of raw milk increased by 4 per cent to 8.58 million tons; however the overall demand for dairy products stagnated, due mainly to the economic slowdown. Import demand by Japan has been reduced due to surplus production and substantial stock accumulation. In order to cope with this situation, the milk producers organization reduced the milk production target quantity for FY 1993 (April 1993 to March 1994) to 98 per cent of the original plan. As the market is still over-supplied, the milk production target was set for FY 1994 at 95.3 per cent of the revised amount for FY 1993. However, milk production in Japan is expected to decrease 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.

166. 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, but 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.

167. In 1993, *skimmed milk powder* production continued to increase in Japan by 7 per cent to 222,000 tons. Total consumption decreased. Imports also decreased by 24 per cent to 74,000 tons in 1993. In the first quarter of 1994, production decreased by 10 per cent to 53,000 tons. Imports also decreased, by 5 per cent to 19,000 tons.

168. Given the rise in manufacturing milk supplies, *butter* output continued to increase in 1993. Japan's butter consumption increased only slightly, not offsetting the increase in output. 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. Intervention purchases of butter began in August 1993.

169. Japanese *cheese* production increased by 9 per cent in 1993. Domestic consumption of cheese has nearly doubled in ten years and is likely to continue to increase. Since the demand for cheese is still growing, the production of natural cheese is expected to increase in the mid or long term. In 1993, Japanese cheese imports increased by 6 per cent to 134,000 tons. The European Communities, New Zealand and Australia remained the main suppliers. Japanese imports of cheese are forecast to increase by 5 per cent in 1994 to reach 140,000 tons.

170. 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 is increased by 2,000 tons each fiscal year from 1992 through 1994. The fiscal year 1991 quota levels were 19,000 tons for prepared whey for infant formula and 8,000 tons for mineral concentrated whey. The quota for whey powder for animal feed is increased by 3,000 tons each fiscal year, starting from the 1991 level of 8,000 tons. The quota for other dairy products was set at 91,000 tons for fiscal year 1992, with increases of 10,000 tons annually through 1994.

171. *Condensed milk* production decreased by 8 per cent in 1993, reaching 57,800 tons. There was a further decrease in production of the same order in the first quarter of 1994.

172. As a result of the Uruguay Round, Japan's base rate of duty on skimmed milk powder, equalling 25 per cent plus Y 466 per kg., will be reduced in six equal instalments to 21.3 per cent plus Y 396 per kg. In the case of skimmed milk powder and butterfat, for example, the duty is composed of an ad valorem duty and a specific amount collected by the Government of Japan from its agents. For skimmed milk powder used as animal feed only the specific duty is bound. The tariff on butter will be reduced from the base level of 35 per cent plus Y 1,159 per kg. to 29.8 per cent plus Y 985 per kg. The tariffs on all types of cheeses (except processed and grated cheeses) will be reduced from 35 per cent to 29.8 per cent over the implementation period.

173. Japan will open tariff quotas for dairy products totalling 442,455 tons in the initial year and rising to 451,755 tons in the final year. These quantities include two tariff quotas for skimmed milk powder for a total of 93,143 tons; three tariff quotas for whey for a total of 84,000 tons; 1,873 tons of butter/anhydrous milk fat. Furthermore, Japan consolidated an aggregate tariff quota for "other dairy products for general use" amounting to 124,640 tons in 1995 and rising to 133,940 tons in 2000. This quota is expressed in whole milk equivalents (rather than product weight) and covers dairy products other than butter, anhydrous milk fat and cheese. In addition, Japan will establish an aggregate tariff quota of 137,202 tons milk equivalent for "designated dairy products for general use" which covers products other than fresh milk/cream (HS 0401) and cheese. Japan will also bind and successively reduce the mark-up applicable to imports under the tariff quota for "designated dairy products for general use". Japan did not consolidate any tariff quotas for cheese.

174. Japan undertakes not to introduce any agricultural export subsidies.

#### ARGENTINA\*

175. In Argentina, all restrictions on production and marketing, other than sanitary regulation 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.

176. Production and consumption of *whole milk powder* decreased in 1993. Argentinean exports recovered in 1993. Whole milk powder imports dropped. *Skimmed milk powder* production fell by as much as 46 per cent in 1993. Consumption also dropped by 42 per cent to 21,000 tons. Skimmed milk powder exports recovered from the steep decline of 1992, to 6,400 tons. Imports dropped by as much as 70 per cent during 1993. 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. In the first quarter of 1994, production of whole milk powder increased while domestic consumption and exports declined steeply. For skimmed milk powder, production and imports increased while domestic consumption and exports declined.

177. Production of *butter* continued to expand in 1993 and reached 49,800 tons, 40 per cent more than in 1992. Consumption also increased, by 20 per cent, during 1993. Exports of butter from Argentina, which were negligible in 1992, increased to 920 tons in 1993. Imports of butter dropped by 70 per cent to 2,000 tons. In the first quarter of 1994, production of butter remained stable. Consumption and imports decreased. Exports, which were negligible in the first quarter of 1993, increased to 230 tons in the first quarter of 1994.

178. Cheese production grew by 10 per cent in 1993 to 321,000 tons. Consumption also grew, by almost 9 per cent, to 320,000 tons in 1993. Exports in 1993 increased to 3,500 tons compared

to 1992. Imports decreased from 6,300 tons in 1992 to 2,800 tons in 1993, also in response to the countervailing duties. In the first quarter of 1994, production, imports and exports of cheese increased while consumption decreased.

### URUGUAY\*

179. In Uruguay, *milk* production in 1992 reached 669,000 tons, a decrease by 6½ 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

180. *Milk* production recovered in 1992 from the previous year's drought, and increased a further 1½ per cent to 15.2 million tons in 1993. The slight 1993 increase reflected slow growth in consumer demand. In 1994, small productivity gains are expected to maintain the low rate of expansion. Milk yields in Brazil average 790 kgs. per cow, although in some regions yields are as high as 2,600 kgs. Currently, the Brazilian dairy herd numbers an estimated 20 million head. Consumption of dairy products has declined since 1988, largely as a result of worsening economic conditions.

181. 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 21 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. In April 1994, the Committee adopted the report of the panel which ruled that Brazil had acted inconsistently with its obligations under the Agreement on subsidies when imposing countervailing duties on imports of milk powders from the European Communities.

182. Brazilian *milk powder* production is estimated to have increased by as much as 45 per cent to 80,000 tons in 1992, and to have remained unchanged at that level in 1993. Imports decreased to 10,000 tons in 1992, due to the continuing general decline in demand for dairy products. Despite reduced funding for government-operated feeding programmes, imports are estimated to have increased to 23,000 tons in 1993.

### UNITED STATES

183. *Milk production.* 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.

184. In 1994, milk production is expected to show a small increase to 69.3 million tons. 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. The 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 1993, average yields per cow in the United States were 7,036 kgs.

185. In the United States, surplus production had become a pressing problem since the early 1980s. The 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 US 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 expected to drop further as there is expected to be a sizeable surplus of both milk fat and skim solids.

186. In the period 1987 to 1992, commercial use of skim solids grew by more than 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 454,000 tons for the first time since the mid-1960s. Commercial butterfat use grew 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 454,000 tons in 1992 to 90,000-140,000 tons in 1993. In fact, from August to year end 1993, the CCC was selling butter back to the industry. Net removals of skim solids, on the other hand, were substantial throughout the year. They increased from 90,000 tons in 1992 to 140,000 tons in 1993. In 1994, the USDA expects a milk fat surplus in the magnitude of 270,000 to 320,000 tons, and a skim solids surplus as large. Such projected equivalence last happened in 1987.

187. *Trade policy.* The US 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 111,000 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 1993, 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 40,000 tons of milk powder, increasing by 3 per cent annually over a fifteen-year transition period. This quota equals US subsidized sales of non-fat dry milk under the DEIP in 1992. The United States will establish an aggregate initial duty-free quantity of 5,500 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.)

188. As a result of the Uruguay Round negotiations, the United States will replace its dairy import quotas with tariff equivalents, which will be reduced by 15 per cent in equal annual instalments over six years beginning in 1995. The tariff for skimmed milk powder will be reduced from 101.8 cents/kg. to 85.6 cents/kg.; that for butter from 181.3 cents/kg. to 154.1 cents/kg.; and for Cheddar cheese

from 144.3 cents/kg. to 122.7 cents/kg. The current import quota for cheese of 110,999 tons will be converted to a tariff rate quota and increased to 141,991 tons by the year 2000. The new access will be allocated by country. Total market access opportunities for dairy products (covered under Chapter 4 of the HS) will rise from approximately 150,000 tons in 1995 to 200,000 tons in 2000.

189. The United States will establish a ceiling for the quantity of subsidized exports and budgetary outlays for dairy products. For butter and butter oil, the annual allowable quantity will be decreased from 42,989 tons in 1995 to 21,097 tons in 2000. The allowable budgetary outlay will be reduced from US\$44.8 million to US\$30.5 million during the same period. For skimmed milk powder, the comparable quantity decrease will be from 108,227 to 68,201, whereas the decline in the budgetary outlay ceiling will be from US\$121.1 million to US\$82.5 million. The maximum quantity of subsidized cheese exports will be reduced from 3,829 tons in 1995 to 3,030 tons in 2000, while the budgetary outlay ceiling is dropped from US\$5.3 million to US\$3.6 million during the same period.

190. *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 156,800 tons compared to 155,500 tons in 1992. Sales of skimmed milk powder and whole milk powder remained almost unchanged at 117,000 tons and 16,000 tons, respectively. Butterfat sales decreased slightly to 20,000 tons. Total awards were thus considerably smaller than initial allocations for the 1993 DEIP, which provided for 204,000 tons of milk powders alone. The main export destinations were again Algeria (77,000 tons), followed by Mexico (37,000 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. In March 1994, the United States announced details of the 1994 DEIP. Some 136,900 tons of milk powder is available for distribution to 95 countries, 27,450 tons of butterfat to 69 countries and 5,500 tons of cheese to 22 countries. The total 1994 allocation - 169,850 tons of dairy products - compares with 258,235 tons in 1993. The total quantity is also well below the initial allocations for 1992 (197,300 tons), but it is more in line with what has actually been exported under the DEIP in the past two years.

#### *Milk Powders*

191. Non-fat dry milk production in 1993 recovered to 420,000 tons. This follows the decline to 396,000 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 340,000 tons in 1992, but declined again to 263,000 tons in 1993. In the first quarter of 1994, non-fat dry milk production increased by 15 per cent to 120,000 tons.

192. In 1993, exports of skimmed milk powder increased by 2 per cent to 76,000 tons. Exports in the first quarter of 1994 increased to 27,500 tons compared to 19,500 tons in the first quarter of 1993. Total stocks of skimmed milk powder increased slightly throughout 1993 and by the end of the year were at 40,600 tons compared to 36,800 tons a year earlier. Stocks at the end of June 1994 were estimated at 52,000 tons.

193. Whole milk powder production declined in 1993 by 10 per cent to 68,400 tons. Exports continued to rise during 1993, by as much as 34 per cent to 37,600 tons. However, in the first quarter of 1994 exports declined sharply to 6,000 tons, compared to 20,200 tons in the first quarter of 1993.

#### *Butter and Butter Oil*

194. In 1993, butter production declined by 3½ per cent to 598,000 tons, 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 first quarter of 1994, butter production decreased by 6 per cent to 180,000 tons.

195. In the period from early 1993 to August 1993, US sales and donations to the former Soviet Union under various programmes approximated 98,000 tons of dairy products, 72,000 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 2,500 tons of butter and 5,500 tons of butter oil to Russia has recently been reported. In the first four months of 1994, US sales or donations to other Republics of the former Soviet Union amounted to 4,500 tons of butter, 7,250 tons of butter oil and 2,575 tons of whole milk powder.

196. Butter stocks have declined continuously. From 275,000 tons in June 1993, stocks dropped to 224,000 tons on 1 September, as compared to 326,000 tons one year earlier. By the end of 1993, stocks had decreased to 128,000 tons. Butter stocks totalled 89,000 tons at the end of June 1994.

### *Cheese*

197. US cheese production decreased slightly in 1993 to 2.93 million tons. The US market continued to show strong growth in cheese consumption with annual gains around 5 per cent in 1992 and cheese consumption continued to grow, albeit at a slower rate, in 1993. Cheese exports increased by 7 per cent to 16,300 tons in 1993. In the first quarter of 1994, cheese production increased by 4 per cent to 730,000 tons. Exports increased by 10 per cent to 4,300 tons.

198. US cheese imports reached 145,000 tons in 1993 (up 12 per cent). The bulk of the imports was from the European Communities and New Zealand. In the first quarter of 1994, cheese imports increased by 28 per cent to 31,800 tons.

### *Other Dairy Products*

199. *Whey* powder production increased by 1 per cent in 1993, to 557,000 tons. However, output decreased by 10 per cent in the first quarter of 1994.

200. In 1993, *concentrated milk* production decreased to 254,000 tons, 5 per cent less than in 1992. Production continued to decrease in the first quarter of 1994.

201. The United States is the world's largest importer of *casein*. Imports increased by 6½ per cent in 1992 to 91,300 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 1993, however, casein imports declined by 15 per cent to 77,400 tons, and their value declined by 13 per cent compared to 1992. The main suppliers remained the European Communities and New Zealand. In the first quarter of 1994, imports increased sharply to 21,400 tons compared to only 14,100 tons in the first quarter of 1993.

## CANADA

202. 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 20,400 tons of cheese under quota (unchanged since 1978) and small volumes of other dairy products.

203. The Canadian Government supports the price for industrial milk received by dairy farmers in two ways. The Canadian Dairy Commission, a government agency, purchases butter and skimmed 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.

204. Milk deliveries decreased to 6.8 million tons in 1993, 3 per cent less than in 1992. This development is in line with the past trend of decreasing production as a result of successive MSQ cuts. However, since August 1993, the MSQ for 1993-94 was 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 estimates for the 1993-94 dairy year (August-July) indicate that farm sales remained stable at around 7.7 million tons. Production and consumption of fluid milk are forecast at 3 million litres. In 1993-94, total milk production is estimated to have increased by 2 per cent to 7.6 million tons.

205. 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.

206. *Skimmed milk powder* production at 51,600 tons was 3½ per cent lower in 1993, compared to 1992. Exports were low in the 1993-94 dairy year, down to 14,000 tons. This compares with 61,000 tons in 1991-92 and 17,000 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 10,000 tons by 1994-95.

207. 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 at 5,400 tons compared to 10,200 tons at the beginning of 1993. Stocks on 1 April 1994 increased to 12,500 tons as production increased. 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.

208. In the 1993-94 dairy year, domestic use of butter is expected to have increased from 81,000 to 83,000 tons. Butter stocks declined to 16,000 tons by July 1994 (end of 1993-94 dairy year). Butter production and consumption are expected to drop by 2½ per cent and 3½ per cent, respectively, in 1994/95. In the medium term, 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.

209. Canadian *cheese* production for the 1993-94 dairy year is estimated at 114,000 tons for Cheddar and 162,000 tons for specialty cheeses. Cheddar cheese production and consumption are forecast to stay close to the same level for 1994/95. Specialty cheese production and consumption are still expected to increase by 2 per cent and 3 per cent, respectively. The trend for specialty cheeses should continue in future years. 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 9,000 tons in 1993.

210. In Canada's Uruguay Round schedule of tariff concessions, most tariffs for dairy products are fixed in ad valorem terms, subject to a minimum specific duty. For example, Canada's base rates of duty for cheese will be 289 per cent, subject to a minimum ranging from Can\$4,149 (Cheddar, Mozzarella) to Can\$6,805 per ton (Camembert). All base tariffs for cheese will be reduced by 15 per cent in six equal annual instalments, with the first tariff cut due in 1995. The base tariff for skimmed milk powder, which amounts to 237.2 per cent but not less than Can\$2,360 per ton, will be reduced to a final bound tariff of 201.6 per cent but not less than Can\$2,006 per ton. The base rate of duty for butter, 351.4 per cent but not less than Can\$4,780 per ton, will be decreased to 298.7 per cent but not less than Can\$4,001 per ton.

211. Canada will establish tariff quotas for dairy products totalling 96,065 tons in 1995 and rising to 97,375 tons in 2000. Of this aggregate quantity, 64,500 tons represent the estimated annual cross-border purchases imported by Canadian consumers. Furthermore, 20,412 tons of cheese have been consolidated. Access opportunities for butter will increase from 1,964 tons in 1995 to 3,274 tons in 2000, most of which will be reserved for New Zealand. Imports under tariff quotas will be subject to reduced rates of duty.

212. Canada is committed to reduce subsidized exports of cheese, butterfat and skimmed milk powder, and "other milk products", a category which includes whole milk powder. Maximum allowable subsidized exports of skimmed milk powder will be 54,910 tons in 1995 and 44,953 tons in 2000; and for butter 9,464 tons in 1995 declining to 3,500 tons in 2000.

## MEXICO

213. 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 1993, milk production is estimated at 7,226 million litres (up 4 per cent from the previous year), with a cow herd of 6½ million head.

214. 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, yogurt 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.

215. 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 reconstituted imported milk powder.

216. 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 programme of LICONSA provides reconstituted milk to poor families at subsidized prices (about 5 million litres per day). Although private traders are now allowed to import milk powders, LICONSA's share remains high, 86 per cent in 1992.

217. 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 300,000 tons, and are estimated at 185,000 tons in 1992 and at 160,000 tons in 1993. The forecast for 1994 is for 170,000 tons of imports. This 6 per cent increase over 1993 reflects increasing fluid milk consumption as a result of rising incomes and the Mexican Government's policy of subsidizing milk to the lower income segment of the population. Mexico has been a major beneficiary of the United States Dairy Export Incentive Program (DEIP). In 1993, DEIP sales to Mexico totalled 37,000 tons of skimmed milk powder. Australia reportedly contracted for the sale of 20,000 tons of milk powders to Mexico in early 1994. New Zealand's exports of whole milk powder to Mexico totalled 40,300 tons in 1993, compared with 27,000 tons in 1992.

218. Imports of cheese are forecast to climb to 35,000 tons in 1994, compared to 30,000 tons in 1993 and to only 2,000 tons in 1989.

TABLE 21

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

	Period	SMP	WMP	Butter	Butter oil
US Dairy Export Incentive Program	Sales in CY 1993	37,200	-	-	-
European Communities	Jan.-Nov. 1993 exports	88,955	3,789	-	9,623
New Zealand	Sales in CY 1993	5,700	40,300	-	13,800
Australia	Sales in CY 1993	3,043	-	-	3,577

219. 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 40,000 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\*

220. 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. The instruments of stabilization are now determined independently by milk buyers. There are no support prices and no producer subsidies, average actual returns to producers are independently determined by the milk buyers. As a result of the Uruguay Round, South Africa will be replacing its dairy import quotas by tariffs.

221. In 1993, total milk production increased by less than 1 per cent to 1.94 million tons. Domestic consumption of milk during the year was 958,000 tons, a decrease of 4½ per cent from the previous year, reflecting lower consumption of fresh milk and milk used for industrial processes.

222. Skimmed milk powder production in 1993 decreased by almost 15 per cent to 16,300 tons. Consumption in 1993 decreased by 23 per cent in line with the long-term trend. Whole milk powder production increased by 19 per cent to a level of 15,600 tons. Consumption also increased, by 25 per cent, to 14,000 tons. Butter production decreased by 14 per cent to 14,000 tons in 1993. Consumption of butter remained unchanged vis-à-vis 1992 and 1991. This resulted in a fall of butter stocks by as much as 76 per cent compared to the level at the beginning of the year. No butter was imported but 3,700 tons of butter were exported in 1993. Production and consumption of cheese in 1993 were 35,600 and 33,600 tons, respectively. This represented an increase of 4 per cent in production and a decrease of about 4 per cent in consumption during 1993 as compared to 1992. In the first quarter of 1994, production of skimmed milk powder decreased by 8 per cent to 5,000 tons. However, domestic consumption increased by as much as 40 per cent to 3,500 tons. Whole milk powder production decreased by 33 per cent to 3,000 tons. Domestic consumption increased by 3 per cent to 3,800 tons. Butter production remained stable at 4,300 tons. Domestic consumption decreased by 7 per cent to 3,600 tons. Exports decreased from 1,100 tons in the first quarter of 1993 to 400 tons in the first quarter of 1994. Production and consumption of cheese were both 7,900 tons. This represented a decrease of 6 per cent in production and of 8 per cent in consumption during the first quarter of 1994 compared to the first quarter of 1993.

#### EGYPT\*

223. 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 recovered to 2.28 million tons in 1993, 2 per cent up from the previous year. In 1993, the growth in demand was greater and imports increased. A mere 4,000 tons of butter was manufactured in Egypt in 1991 and 1992 due to poor climatic conditions. Consequently, Egypt imported 44,100 tons of butter and butter oil in 1992, up 16,300 tons on 1991. Imports in 1993 are estimated at 45,000 tons of butter and butter oil. Imports of skimmed milk powder totalled 25,300 tons in 1992, up 4,800 tons on 1991. They declined in 1993 but are forecast to regain their 1992 level of 25,000 tons in 1994. However, imports of cheese in 1992, at 22,000 tons, were 5,600 tons lower than in 1991. Domestic production of cheese totalled 317,000 tons in 1992 and 325,000 tons in 1993. 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 9,000 tons, 5,500 tons of which were skimmed milk powder.

### ISRAEL

224. *Milk* production in Israel increased by ½ per cent to 1.02 million tons in 1993. Average milk yields in Israel, at 9,300 kgs. per cow in 1993, are the highest in the world.

### ALGERIA

225. 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 220,000 tons of milk powders, and 43,000 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 77,000 tons (see Table 22). Imports of butter in 1993 are estimated at 43,000 tons. 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. The Government of Algeria is attempting to adopt a strategy to substitute some of the 100,000 tons of imported whole milk powder, with reconstituted milk made from imports of skimmed milk powder and butter oil. In 1993, it is estimated that 24,000 tons of butter oil and 150,000 tons of skimmed milk powder were imported and 1.44 million tons of reconstituted milk were produced, supplying around 65 per cent of Algeria's needs. The balance was provided by whole milk powder. Imports of skimmed milk powder may increase in the future. Furthermore, the Government of Algeria has lifted the import ban on cheese that was imposed in October 1992 in an effort to conserve foreign exchange. However, the current political situation in the country may result in restricted trade opportunities in 1994.

TABLE 22

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

	Period	SMP	WMP	Butter	Butter oil
US Dairy Export Incentive Program	Sales in CY 1993	60,000	-	3,000	12,000
European Communities	Jan.-Nov. 1993 exports	34,500	71,200	1,200	8,500
New Zealand	Sales in CY 1993	2,000	39,300	-	4,000

**INDIA**

226. 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 and buffalo milk production expanded by a further 4 per cent in 1993 to 60.9 million tons, of which 30.5 million tons were cow milk. This is the result of increasing yields, stemming from genetic improvements and improved pasture and fodder supplies. 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 63 million tons in 1994 and 66 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.

227. *Skimmed milk powder* output in India decreased by 10 per cent in 1991 to 65,000 tons and remained unchanged in 1992. However, in 1993 output recovered to 75,000 tons and is forecast to remain stable in 1994.

**CHINA**

228. *Dairy* production in China continued to expand by an estimated 7 per cent in 1992, to approximately 7.5 million tons. Government policies encourage further expansion but milk production stagnated in 1993, after a number of years of strong growth, reflecting profitability being squeezed by rising input costs, especially for feed, while farmgate prices were static. However, as the size of China's dairy herd has not declined, a resumption of growth, albeit at a slower rate than formerly, is anticipated.

## KOREA

229. 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. The production is expected to increase by 7 per cent to reach 2 million tons in 1994.

230. The Republic of Korea announced that imports of 11,000 tons of milk powder will be authorized in 1994. In early 1993, this same quantity was approved, however actual imports through November 1993 had reached 16,300 tons.