

**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

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 1993.

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 to it from various national and international sources, notably documentation 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 Community, Agriculture Canada and the United States Department of Agriculture.

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. It covers developments in dairy policies through 1992, and, where possible, the outlook for 1993. The report should be read in conjunction with the statistical information circulated in the following documents:

- | | | |
|--------------|---|---|
| DPC/W/124 | - | Milk Deliveries and Production - Statistical Note by the Secretariat |
| DPC/PTL/W/95 | - | Committee of the Protocol Regarding Milk Fat - Summary Tables |
| DPC/PTL/W/96 | - | Committee of the Protocol Regarding Certain Cheeses - Summary Tables |
| DPC/PTL/W/97 | - | Committee of the Protocol Regarding Certain Milk Powders - 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 13 August 1993.

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WORLD DAIRY MARKET HIGHLIGHTS

- World production of all types of milk continued to decline in 1992, dropping 2½ per cent below its 1991 level. The largest declines in production occurred in the countries of Central and Eastern Europe as well as in the former Soviet Union, due to difficulties arising from the transitions of their political and economic systems.
- Production also continued to decrease in the European Community, the Nordic countries and in Canada as a result of government policies. Milk output rose in New Zealand and Australia in 1992 as a result of favourable weather conditions, and reached record levels in New Zealand.
- World milk production is expected to decline further in 1993, with decreases continuing throughout most of Europe and Canada. Production levels in New Zealand and Australia are likely to exceed those of 1992, and further increases are also forecast for the United States and a number of Asian and Latin American countries.
- World butter production also continued to decline in 1992, but supplies remain in excess of effective demand. With the disappearance of the former Soviet Union as the major market for butter, world butter exports declined and stocks remained high.
- In June 1993, the Committee of the Protocol Regarding Milk Fat granted a derogation from the minimum price provisions of the Protocol for butter and butter oil exports to countries of the former Soviet Union, up to a maximum of 50,000 tons per participant under contracts concluded before 31 December 1993 and for deliveries before 31 March 1994.
- World production of skimmed milk powder declined in 1992, in line with generally decreased consumption. Whole milk powder production rose, however, particularly in New Zealand, the European Community, Poland and Australia. Increased import demand for milk powders from a number of traditional buyers, most importantly Mexico, stimulated an expansion in world trade and maintained prices for both skimmed milk powder and whole milk powder at relatively high levels.
- World cheese production continued to grow in response to rapidly increasing consumption. World trade in cheeses remained brisk, with prices sustained at high levels.
- Exports of dairy products from the United States increased sharply in 1992, as a result of the operation of the Dairy Export Incentive Program (DEIP). Bonuses totalling US\$140.3 million were provided for exports of 128.8 thousand tons of milk powders, 23.4 thousand tons of butter and butter oil, and 3.2 thousand tons of cheese in 1992. For 1993, bonuses for the sale of 48.4 thousand tons of butter and butter oil, 205 thousand tons of milk powders and 5.8 thousand tons of cheese have been announced. Seventy-six countries are identified as eligible to receive these products; Mexico and Algeria were the major beneficiaries of the programme in 1992.

THE WORLD ECONOMY IN BRIEF

World merchandise trade expanded by 4½ per cent in *volume* terms in 1992, up from the pace of 3 per cent recorded in 1991 and close to the average for the previous decade. World output growth was also up, but at 1 per cent remained well below the average of the past ten years. The reversal of the global economic slowdown that began in 1989 was due primarily to the recovery of the United States' economy, whose strength more than offset slower growth in Western Europe and Japan.

On a *value* basis, world merchandise trade increased by 5½ per cent to \$3.7 trillion (\$3,700 billion) in 1992. Preliminary estimates indicate that world trade in commercial services - which include transportation, tourism, telecommunications, insurance, banking and other professional services - was up 8 per cent to \$960 billion, making 1992 the fourth consecutive year in which trade in services has expanded more rapidly than merchandise trade.

Countries whose import demand was a contributing factor to the growth of world trade in 1992 included the United States (up almost 10 per cent) and a number of non-OECD countries, with strong import growth in Asia (especially East Asia), in Latin America (mostly Argentina, Chile, Mexico and Venezuela) and the Middle East (most countries). A sharp decline in the trade of the former Soviet Union led to a drop in the trade of the region composed of Central and Eastern Europe and the former Soviet Union, even though the countries in Central and Eastern Europe as a group reported increased export and import volumes for the first time since the start of their transition to market economies. 1992 was the second consecutive year in which Western Europe's exports to Central and Eastern Europe expanded faster than imports from that region.¹ Generally, exports from the slower-growing region of Western Europe benefited from the higher demand of faster-growing regions.

Export earnings of most fuel exporters in the Middle East, Africa and other regions declined in the face of moderate price declines and weak or negative growth in export volumes. Prices of metals and minerals were also down on expectations of a sluggish world economic recovery. Tropical beverage prices were down for most of 1992 due to uncertainty in the commodity arrangements for cocoa and coffee, and the declines in purchases of the former Soviet Union. Among the major commodity groups, only timber and fats and oils (as a group) recorded price gains in 1992.

The outlook for a continued recovery in world trade in 1993 is clouded by the uncertain strength of the recovery in the United States, and expectations of declining economic activity in Western Europe and weak growth in Japan. Because the rate of trade expansion in the second half of 1992 was below the average for the year as a whole, trade growth would have to accelerate in 1993 to match last year's 4½ per cent gain. Although the trade and economic activity of non-OECD countries continues to be a source of dynamism in the world economy, the resulting stimulus to world trade may not be sufficient to outweigh a slowdown in OECD countries, as expected by current forecasts.

¹Bulgaria, the former Czech and Slovak Federal Republic, Hungary, Poland and Romania.

AN OVERVIEW OF DAIRY POLICIES

1. The political, social and economic changes in Central and Eastern Europe have had a strong impact on the dairy market. Policy changes resulted in higher retail prices which adversely affected domestic purchasing power. There was a consequent increase in exportable supplies of certain dairy products in many countries, particularly of butter. The collapse of intra-regional trade and balance-of-payments problems led to exports at reduced prices and to new markets in search of convertible currencies. At the same time, commercial import demand was reduced due to a lack of ability to pay for normal imports, particularly in Russia, which previously had been the major export market for butter.
2. Most major dairy producing countries have continued to implement national policies aimed at reducing structural surplus production and public expenditures. Support prices, target prices and advance payments were maintained at previous levels or lowered. Production quotas have also been maintained or reduced and production limitation systems made more effective. Nonetheless, government support policies for dairy production in many countries still remain at relatively high levels and exceed those for other commodities.
3. The potential exists for increases in global productivity through genetic improvements and augmented feed supplies. In particular, many developing countries are pursuing programmes to expand their dairy industry's productivity and efficiency. The authorization to use yield-increasing hormones is still pending in major dairying countries. However, the EC Commission recently proposed to ban Bovine Somatotropin (BST) for the next seven years. There is some concern that strong consumer opposition to its use could result in an adverse effect on demand.
4. 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. In 1992, however, fewer new such products were apparently introduced on the market than in previous years. 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.

THE INTERNATIONAL DAIRY ARRANGEMENT

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

6. 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.

7. 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.

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

9. 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 (see paragraph 21).

TABLE 1

Levels of Minimum Export Prices, 1980-92

(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

WORLD MILK PRODUCTION AND CONSUMPTION

10. World milk *production* (including sheep, goat and buffalo milk) is estimated at 513 million tons in 1992, 2½ per cent below the 1991 level. Cow's milk production declined by 3 per cent to 450 million tons. Production continued to decline sharply in Central and Eastern Europe as well as in the Baltic republics and other former Soviet republics. Production also declined somewhat in the European Community, the Nordic countries and in Canada, as a result of government policies to reduce production. In contrast, milk production in New Zealand reached record levels, primarily as a result of favourable climatic factors. Production also rose in Australia and the United States. Output rose in general in the developing countries, particularly in India and China and in some Latin American countries.

11. In 1993, world milk production is expected to fall further by 1 to 2 per cent, continuing the trend of recent years. The upheavals in the socio-economic situation in Eastern Europe and the former Soviet republics will continue to depress dairy output. Government policies to reduce production should result in

further declines in output in other areas of Europe and in Canada. Good herd condition and increased supplemental feeding should contribute to production exceeding 1992 levels in Australia and New Zealand. Further increases are also expected in the United States, as well as in the developing countries of Asia. Growing demand and changing government policies in a number of Latin American countries should also encourage a slight expansion in production in that region. Production in Africa is not expected to rise because of reduced herd levels following the drought of 1992.

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

13. World *consumption* of liquid milk has been increasing at an average annual rate of 1 per cent since the 1980s. Total world consumption in 1992 is estimated at 153 million tons, and a further 1 per cent growth in consumption is expected for 1993. World per capita consumption of fluid milk reached an estimated 47.6 kgs. in 1991, equivalent to the 1984 record level. This world-wide average level conceals large variations in per capita consumption among different countries and regions of the world. Per capita consumption is generally much higher in developed countries, and in particular in some Northern European countries. Average per capita consumption of milk and dairy products in developed countries was estimated at 200 kgs. in 1992. In developing countries, in contrast, per capita consumption of milk and dairy products averages 36 kgs., and in some cases is estimated to be as low

TABLE 2

MAJOR MILK PRODUCERS⁽¹⁾
1992 estimates

(Million M.T.)

EC ⁽²⁾	114.4
United States	68.8
India	56.0
Russia	47.0
Ukraine	18.0
Brazil	14.8
Poland	13.2
Mexico	10.7
Japan	8.6
New Zealand	8.5
China	7.5
Australia	7.3

(1) Cow and buffalo milk.

(2) Production estimate. Deliveries reported as 102.2.

as 2.5 kgs. Yet consumption levels in developing countries are gradually increasing with growing urbanization and income increases.

14. The principal area of growth in consumption has been Asia. Rising incomes and changing food consumption habits provide a strong boost to demand for milk and dairy products. Many countries subsidize school milk and other campaigns to promote milk consumption. As a result, per capita milk consumption has steadily increased in countries such as the Republic of Korea, Thailand, Indonesia, China and India. Consumption also increased in Latin America, particularly in Mexico, Argentina and Chile.

15. Per capita milk consumption in many developed countries has ceased to grow in recent years, for two distinct reasons. In many Central and Eastern European countries, as well as in the former Soviet Union, per capita consumption has traditionally been very high. Since 1990, however, 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 1992, and the contraction is expected to continue in 1993. In a number of other developed countries, per capita demand for milk has ceased to grow as consumers face concerns about the adverse health effects of too much fat in their diets, and as substitute products become increasingly available. Consumers in the European Community and other Western European countries, as well as in North America, show a growing preference for semi-skimmed types of milk and other reduced-calorie products. In the European Community, this has resulted in no overall change in consumption, whereas milk consumption declined in some other Western European countries and Canada.

16. The consumption of other fresh milk products such as yoghurt 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 Community, fresh product output increased by 1 per cent in 1992. It is estimated that more than 30 per cent of the milk collected is now marketed in this form. This recent development clearly reflects the underlying trend in consumption. There is a potential demand for yoghurt and flavoured milk in many developing countries, but consumption continues to be hampered by relatively high prices.

17. 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. The appearance and developments of dairy substitutes and imitations entails some concern as to the effect this could have on the dairy market in the future and a possible need for measures to protect the marketing of traditional milk products. In September 1988, the International Dairy Federation adopted some guidelines for the designation and presentation of substitute products. These guidelines are intended to identify and provide for the proper labelling of substitutes to prevent misuse of designations reserved for milk and milk products.

BUTTER AND ANHYDROUS MILK FAT

Butter and Butter Oil

18. World butter and butter oil *production* declined by a further 2½ per cent in 1992, to 7.03 million tons. Large carry-over stocks in major producing countries continue to overhang the market at the same time as consumption has been declining. 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 the Nordic countries, in line with decreased government support to the dairy sector. Production also dropped in the European Community and Canada as the industry adjusts to the trend of declining demand. However, production increased in the United States, New Zealand and Australia in 1992. World butter production is expected to decline by a further 2 per cent in 1993, to 6.89 million tons.

19. 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. In 1991, however, world consumption declined by 2 per cent and the decline continued in 1992. The drop in consumption reflects a growing consumer preference for blended spreads and low fat spreads in many developed countries, as well as declines in Eastern European countries. Traditionally large consumers of butter, demand in these countries has dropped steeply in the face of the economic difficulties, reduced supplies and higher prices. A further decline in world butter consumption is likely in 1993.

20. The continuing decline in demand for butter has led to reduced import demand while exportable surpluses of butter have increased. World *exports* of butter continued their diminishing trend in 1992, falling by about 12 per cent to 600 thousand tons. However, exports from the United States rose sharply in 1992. The increase in United States exports is largely the result of special credit-guarantee sales to Russia. 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 reduced to almost negligible levels because of the economic difficulties facing the region. Butter being supplied to the former Soviet Union has been offered under special credit terms or as donations.

21. At its meeting of 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 weakened in the second quarter of 1993, mainly due to continuing difficulties in the former Soviet Union market and to food-aid deliveries and concessional sales, notably by the United States. The Committee recognized the seriousness of the situation and the importance of finding both short-term and long-term solutions to these difficulties. In light of this extraordinary

TABLE 3

MAJOR BUTTER PRODUCERS
1992 estimates

(Thousand M.T.)

EC	1,500
India ⁽¹⁾	1,079
Russia	735
United States	616
Pakistan ⁽¹⁾	300
New Zealand	185
Poland	150

(1) Including ghee.

situation and as a short-term solution, the Committee acting in conformity with Article 7:1 of the Protocol, granted a derogation from the provisions of the Protocol with respect to the minimum prices for butter and butter oil for exports to countries of the former Soviet Union up to a maximum quantity of 50,000 tons (butter equivalent) per participant for butter and butter oil exclusively for consumption in those countries. Sales contracts should be unconditionally concluded before 31 December 1993 and deliveries should be 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. It was agreed that longer-term solutions would need to be further considered by the Committee.

TABLE 4

MAJOR BUTTER EXPORTERS

1992 estimates
(Thousand M.T.)

EC ⁽¹⁾	152.0
New Zealand	132.5
United States	80.0
Australia	16.8
Sweden	16.7
Finland	16.0

(1) Excluding EC intra-trade.

TABLE 5

MAJOR BUTTER IMPORTERS

1992 estimates
(Thousand M.T.)

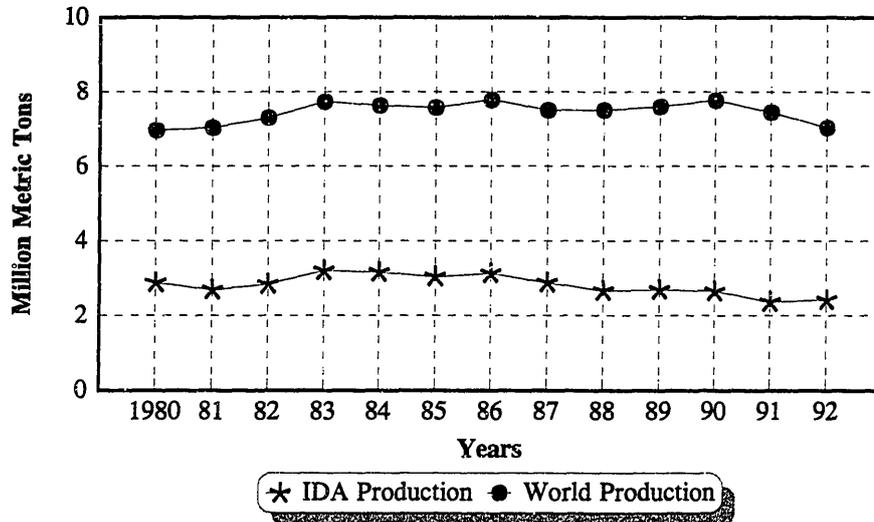
Russia	150.0
Egypt	62.0
EC ⁽¹⁾	48.0
Algeria	43.0
Argentina	11.8
Poland	10.6

(1) Excluding EC intra-trade.

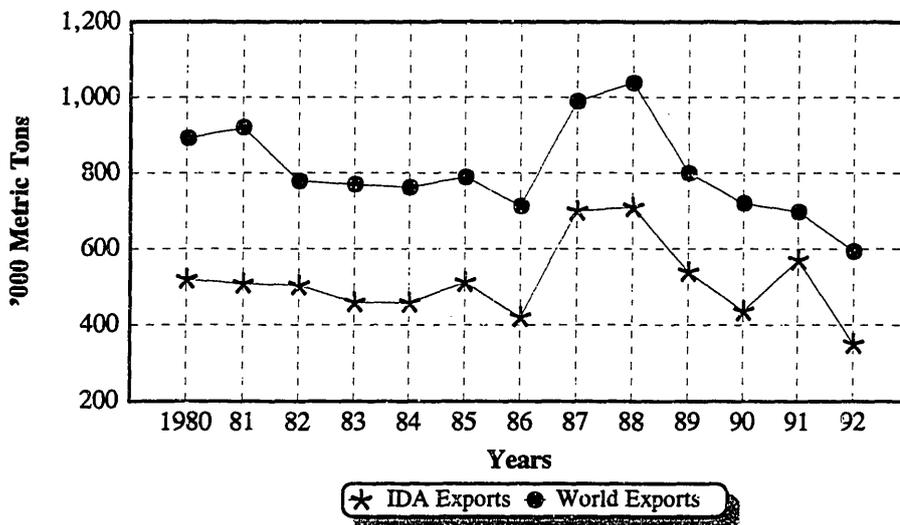
22. On 1 January 1993, total *stocks* of butter in the European Community, North America and Oceania amounted to 561 thousand tons, 2 per cent less than their level one year earlier. In mid-1993, stocks of butter in the main producing countries remain high, even if substantially below 1992s level, and concerns about their level have been raised.

23. World butter *prices* continued to decline in the first half of 1992, to a range of US\$1,350-US\$1,600 per ton f.o.b. Prices for butter remained at those low levels in the second half of 1992. Demand for butter remained weak and large stocks continued to overhang the market. There were few commercial sales of butter, and some offers for sales below the minimum price were reported. Prices declined to the range of US\$1,350-US\$1,500 per ton f.o.b. in the first half of 1993. Butter prices will continue to be under pressure at least during the remainder of 1993. The IDA minimum price for butter has remained unchanged at US\$1,350 per ton f.o.b. since September 1989.

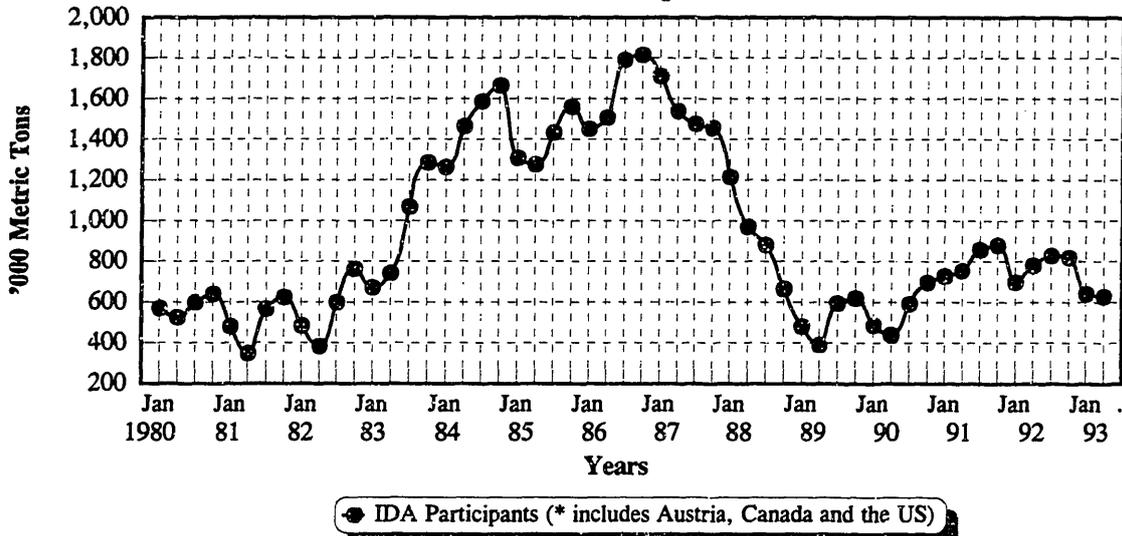
Graph 1 - BUTTER PRODUCTION 1980 - 1992



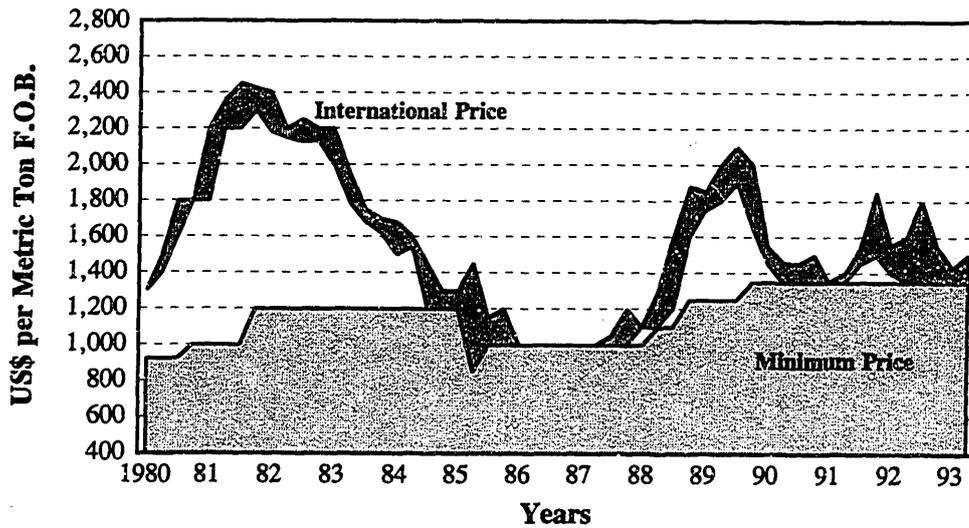
Graph 2 - BUTTER EXPORTS 1980 - 1992



Graph 3 - BUTTER STOCKS 1980 - 1993
IDA Participants *



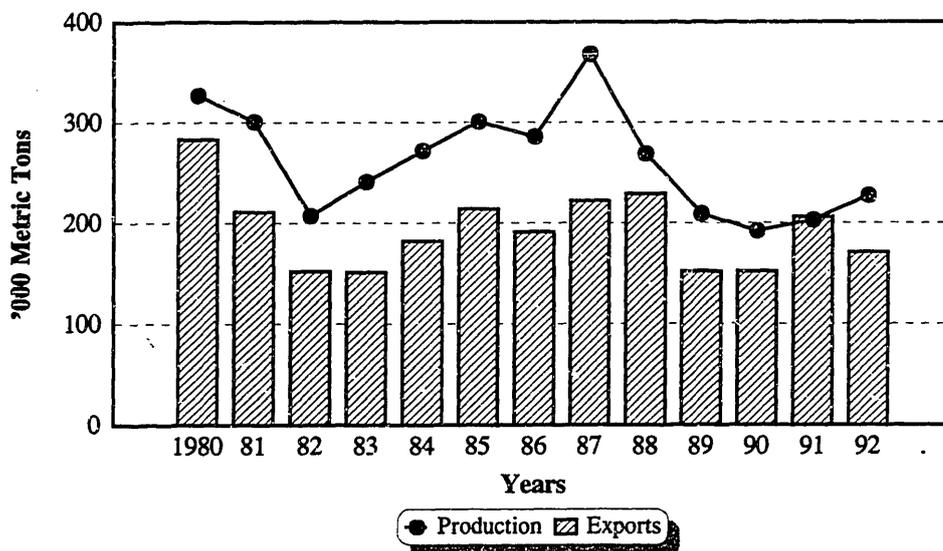
Graph 4 - BUTTER PRICES 1980 - 1993



Anhydrous Milk Fat

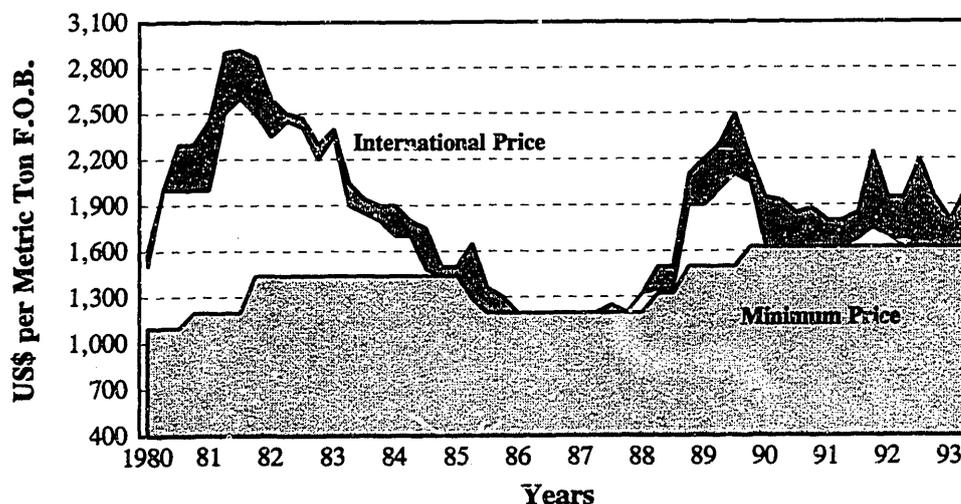
24. In the first half of 1992, international *prices* of anhydrous milk fat continued to weaken, ranging between US\$1,625 and US\$1,950 per ton f.o.b. Prices remained depressed in the second half of 1992, ranging between US\$1,625 and US\$2,200 per ton f.o.b. Certain sales had reportedly been made at prices below the minimum export price. In the first half of 1993, prices weakened further to the range of US\$1,625-US\$1,800 per ton f.o.b. Future prices and sales of anhydrous milk fat remain sensitive to competition from vegetable oils. However, the minimum export price has been kept at US\$1,625 per ton f.o.b. since September 1989.

**Graph 5 - ANHYDROUS MILK FAT
PRODUCTION & EXPORTS 1980-1992***



* IDA participants only

Graph 6 - ANHYDROUS MILK FAT PRICES 1980 - 1993



MILK POWDERS

Skimmed Milk Powder

25. World *production* of skimmed milk powder decreased by 8 per cent to 3.55 million tons in 1992. Large drops in output occurred in the European Community and New Zealand, and there were declines also in Eastern European countries as well as in North America. In 1993, world production is forecast to decline by a further 5 per cent from the previous year, due mainly to reduced milk supplies in major producing countries. Substantial declines in output are expected in the United States and the European Community and some decline is also expected in other Western European countries and Oceania.

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

27. After declining in recent years, world *exports* of skimmed milk powder increased by 12.5 per cent to 900 thousand tons in 1992. Exports increased from the European Community, Poland, and the United States whereas Australian, New Zealand and Canadian exports declined substantially. However, exports of buttermilk and whole milk powder from New Zealand, as well as from Australia, grew rapidly in 1992. Increased import demand from a number of traditional customers, and particularly from Mexico and other Latin American countries, fuelled the expansion of trade.

TABLE 6

MAJOR SKIMMED MILK POWDER
EXPORTERS
1992 estimates
(Thousand M.T.)

EC ⁽¹⁾	408.0
New Zealand	114.3
Australia	110.5
Poland	90.8
United States	76.4
Canada	29.6
Austria	25.0

TABLE 7

MAJOR SKIMMED MILK POWDER
IMPORTERS
1992 estimates
(Thousand M.T.)

Mexico	160.0
Japan	97.0
Algeria	60.0
Argentina	18.0
Brazil	10.0

(1) Excluding EC intra-trade.

28. There has been a substantial decline in deliveries of skimmed milk powder to third world countries under *food-aid* programmes in recent years. Total deliveries in 1992 are estimated at 56 thousand tons, more than half of which are from previous programmes. From a maximum level in 1984 of 167 thousand tons, these deliveries have subsequently declined to 109 thousand tons in 1987, 87 thousand tons in 1989, 74 thousand tons in 1990 and 61 thousand tons in 1991.

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

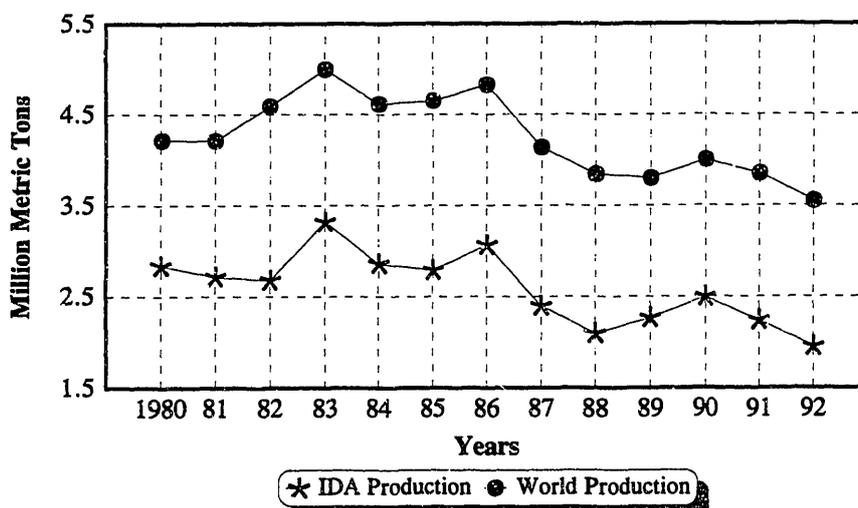
30. Prices for skimmed milk powder continued their upward trend throughout the first three-quarters of 1992, and eased only slightly in the fourth quarter. This was primarily due to large purchases by major importers, notably Mexico, Venezuela and Algeria. Increased import demand in the face of reduced production levels stimulated the high prices. In the first half of 1993, the market for skimmed milk powder was characterized by slightly lower prices and reduced demand, in part due to exchange rate movements. Reported prices ranged as follows (per ton f.o.b.):

First quarter 1992	-	US\$1,550 to US\$1,700
Second quarter 1992	-	US\$1,600 to US\$1,900
Third quarter 1992	-	US\$1,800 to US\$2,170
Fourth quarter 1992	-	US\$1,775 to US\$1,950
First quarter 1993	-	US\$1,725 to US\$1,920
Second quarter 1993	-	US\$1,650 to US\$2,000

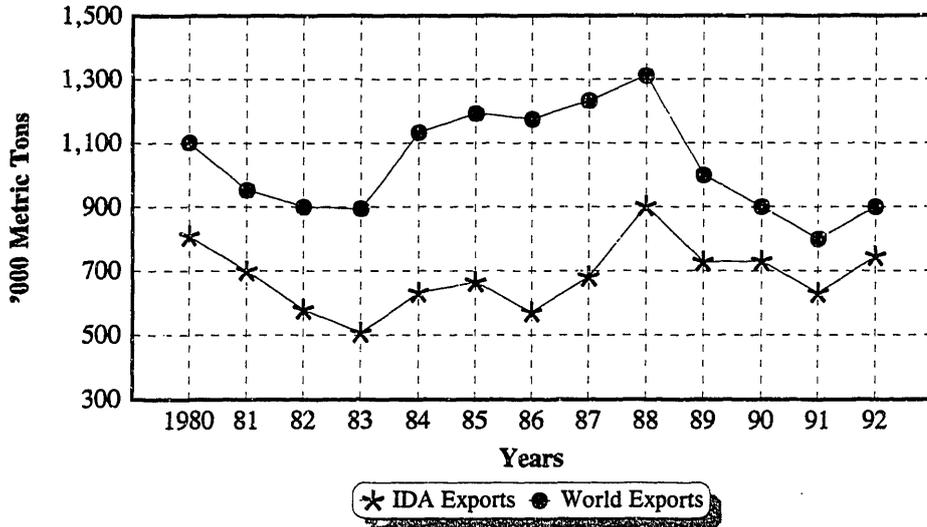
Indications are that skimmed milk powder prices may trend up slightly during the remainder of 1993. The minimum export price has been maintained at US\$1,200 per ton f.o.b. since September 1989.

31. At their September 1992 meetings, the GATT Dairy Committees reviewed the minimum export prices for products covered by the Protocols. New Zealand submitted a proposal in advance of the meeting to increase the minimum prices specified under the Protocol Regarding Certain Milk Powders by US\$200 per ton f.o.b., indicating that such an increase was fully justified in light of the criteria of Article 3:3(b) of the Protocol. Some participants supported this proposal and noted that current minimum prices for powders were too low to guarantee a viable return to the most economic producers. They further noted the long-term and sustained upward trend in the prices of milk powders and expressed their concern over the substantial difference between market prices and the agreed minima. However, others felt that the upward trend in the prices was largely due to the decline in the United States dollar and that in light of the monetary uncertainties and the changes in the production and consumption patterns in certain countries, it would not be appropriate to modify minimum export prices at this time. Consequently, the present minimum export prices for the pilot products covered by the three Protocols were maintained unchanged.

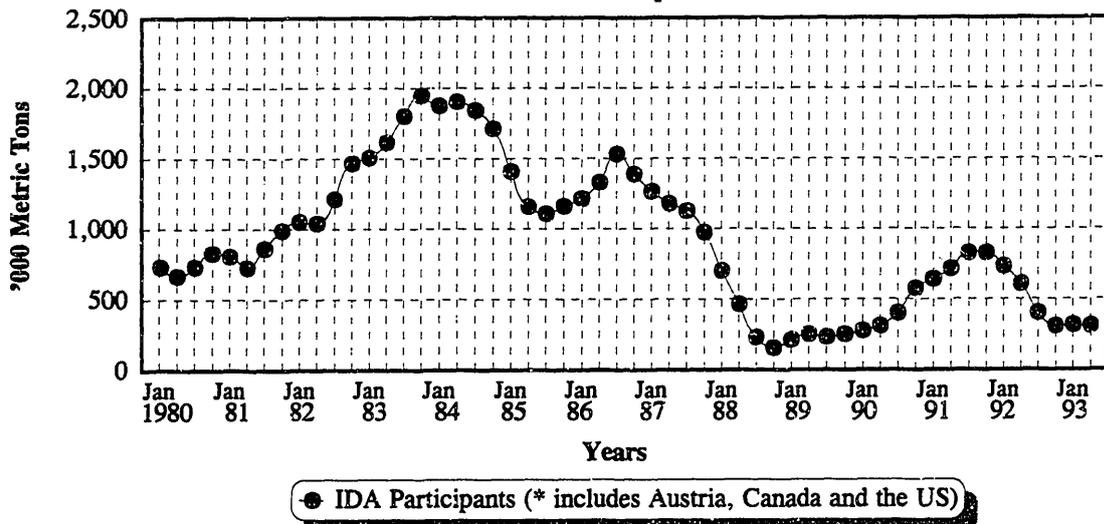
**Graph 7 - SKIMMED MILK POWDER PRODUCTION
1980 - 1992**



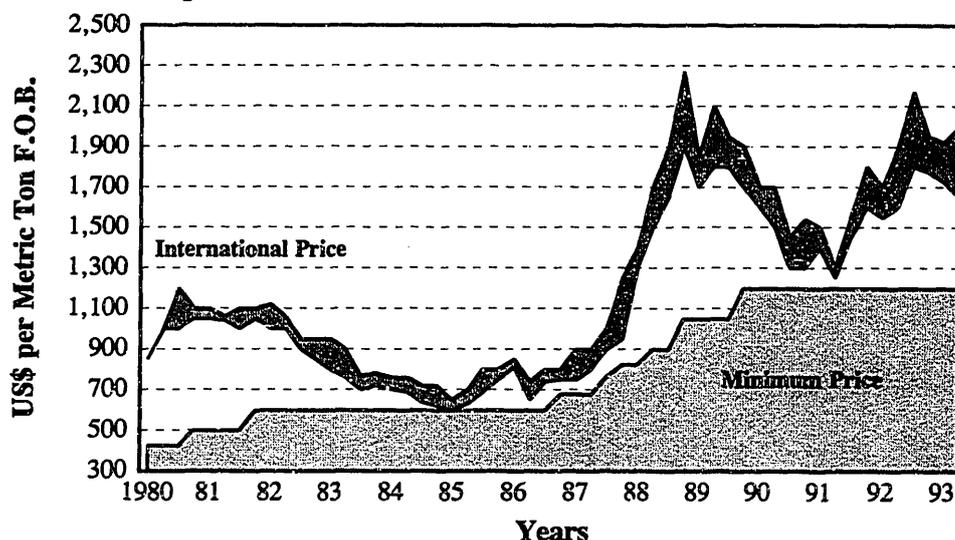
**Graph 8 - SKIMMED MILK POWDER EXPORTS
1980 - 1992**



**Graph 9 - SKIMMED MILK POWDER STOCKS 1980 - 1993
IDA Participants ***



Graph 10 - SKIMMED MILK POWDER PRICES 1980 - 1993



Whole Milk Powder

32. World whole milk powder *production* in 1992 is estimated to have remained at the 2.27 million ton level achieved in 1991. This is a 6½ per cent increase over the 1990 level, due to further increases in New Zealand production and strong recoveries in the European Community, Poland and Australia.

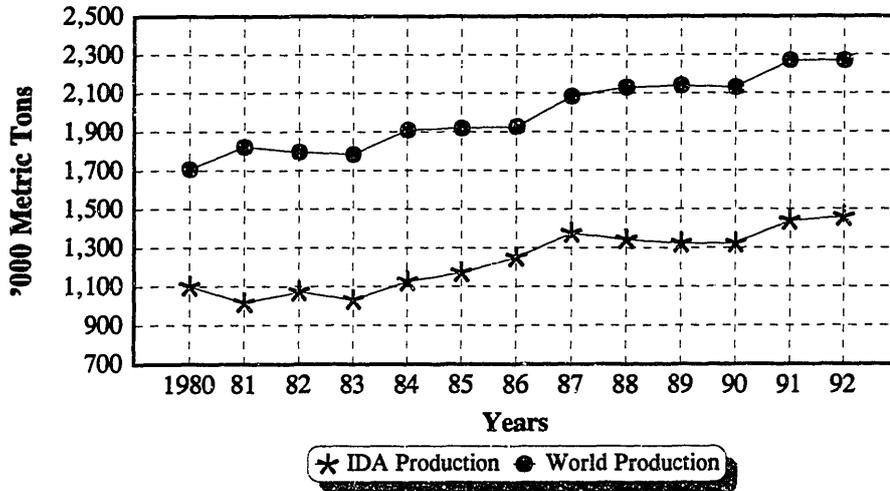
33. Whole milk powder exports are estimated to have further risen in 1992 to 990 thousand tons. Whole milk powder imports by developing countries began to increase towards the end of 1990 and this development continued in 1991 and 1992. There was a further shift in import demand from condensed and evaporated 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, it is likely that there will be continued demand in Asian and Latin American countries.

34. International *prices* of whole milk powder continued to increase in 1992. In the first half of 1993, prices declined slightly in part due to exchange rate movements. Reported prices (per ton f.o.b.) ranged as follows:

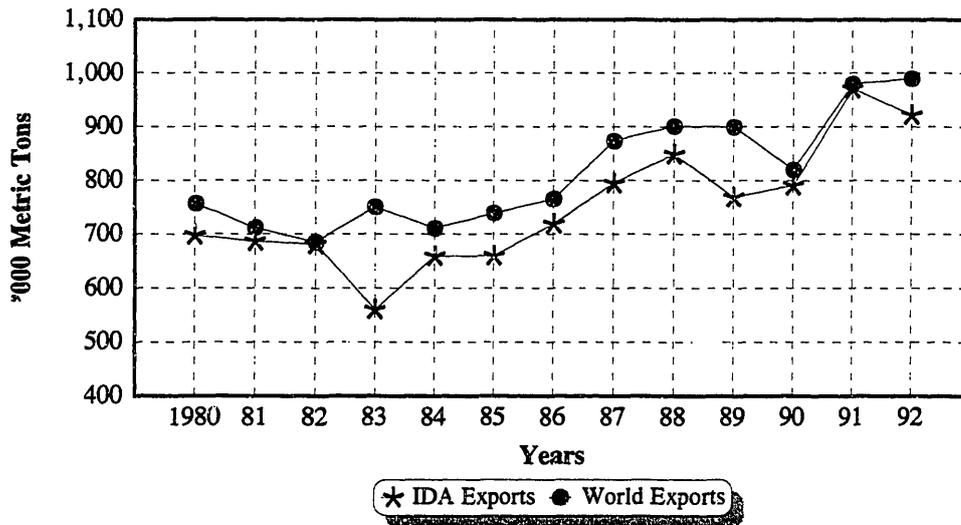
First half 1992	-	US\$1,550 to US\$1,700
Second half 1992	-	US\$1,700 to US\$2,100
First quarter 1993	-	US\$1,625 to US\$1,800
Second quarter 1993	-	US\$1,575 to US\$2,000

The minimum export price has been maintained at US\$1,250 per ton f.o.b. since September 1989.

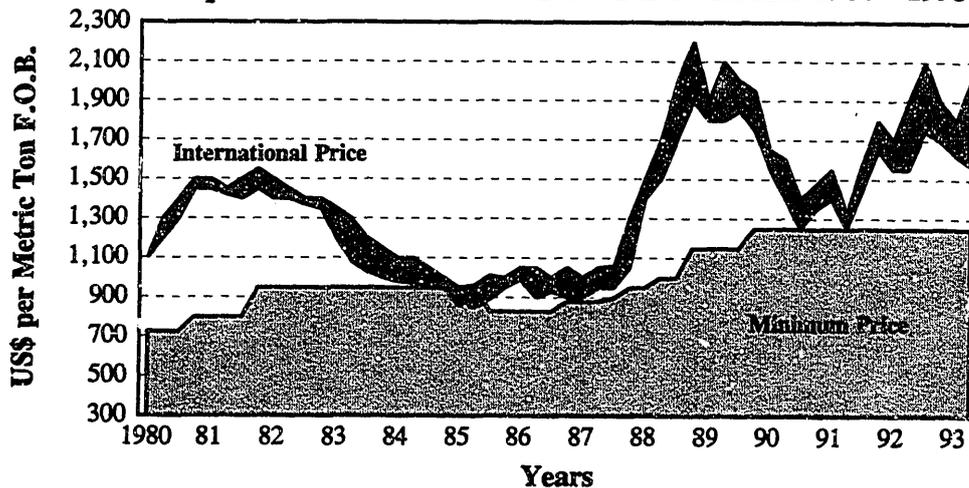
**Graph 11 - WHOLE MILK POWDER PRODUCTION
1980 - 1992**



Graph 12 - WHOLE MILK POWDER EXPORTS 1980 - 1992



Graph 13 - WHOLE MILK POWDER PRICES 1980 - 1993



CHEESE

35. In 1992, world *production* of cheese (all kinds including curd) increased by 5½ per cent to nearly 15 million tons. Cheese production grew importantly in the European Community, Australia, New Zealand and the United States, in response to growing demand and shifts away from butter production. In most Eastern European countries, however, production continued to decline because of the difficulties facing the dairy sectors as a whole. Cheese production in the developing countries increased by 1 per cent compared to 1991. A further 1 per cent growth in world cheese production is expected in 1993.

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

TABLE 8

MAJOR CHEESE PRODUCERS
1992 estimates

(Thousand M.T.)

EC	5,103
United States	2,927
Egypt	324
Russia ⁽¹⁾	290
Argentina	257
Canada	262
Australia	203
Switzerland	136
New Zealand	130

⁽¹⁾Russia's figure includes only certain cheese varieties.

37. World cheese *exports* reached 905 thousand tons in 1992, remaining at the same level as a year earlier. The decline in exports by the European Community was offset by growth in exports by Australia, New Zealand and Switzerland. These countries account for over 80 per cent of world cheese exports. World cheese trade is expected to grow in 1993.

38. On 1 January 1993, world cheese *stocks* were 4 per cent lower than a year earlier, and a further decline was projected for the end of 1993. With the exception of Canada, most large dairy producers are likely to experience declines in cheese carry-over stocks as domestic consumption and exports are expected to grow faster than production.

39. Cheddar cheese *prices* remained relatively high throughout 1992, with reported prices during the year ranging from US\$1,750 to US\$2,200 per ton f.o.b. In the first half of 1993, prices remained steady and ranged between US\$1,750 and US\$2,100 per ton f.o.b. With demand for cheese growing more rapidly than production, cheese prices are expected to remain high for the remainder of 1993. The IDA minimum export price has been maintained unchanged at US\$1,500 per ton f.o.b. since September 1989.

TABLE 9

MAJOR CHEESE EXPORTERS

1992 estimates
(Thousand M.T.)

EC ⁽¹⁾	466.0
New Zealand	114.7
Australia	76.8
Switzerland	64.7
Austria	30.0

⁽¹⁾Excluding EC intra-trade.

TABLE 10

MAJOR CHEESE IMPORTERS⁽¹⁾

1992 estimates
(Thousand M.T.)

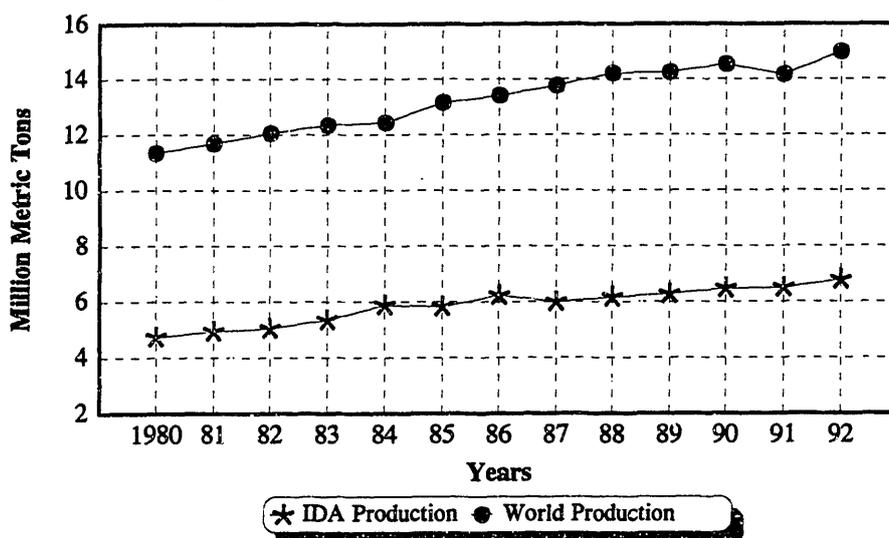
United States	129.5
Japan	126.0
EC ⁽²⁾	110.0
Iran	82.0
Switzerland	27.1

⁽¹⁾Information not available for certain major importers.

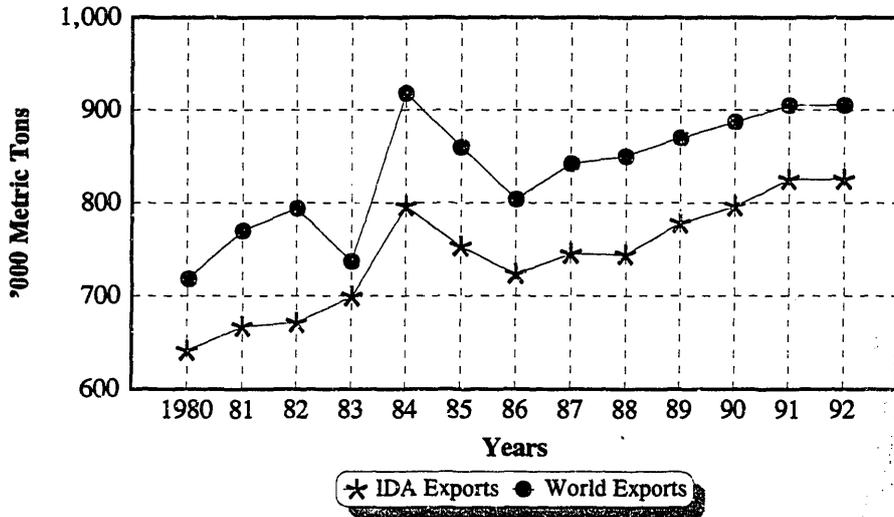
⁽²⁾Excluding EC intra-trade.

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

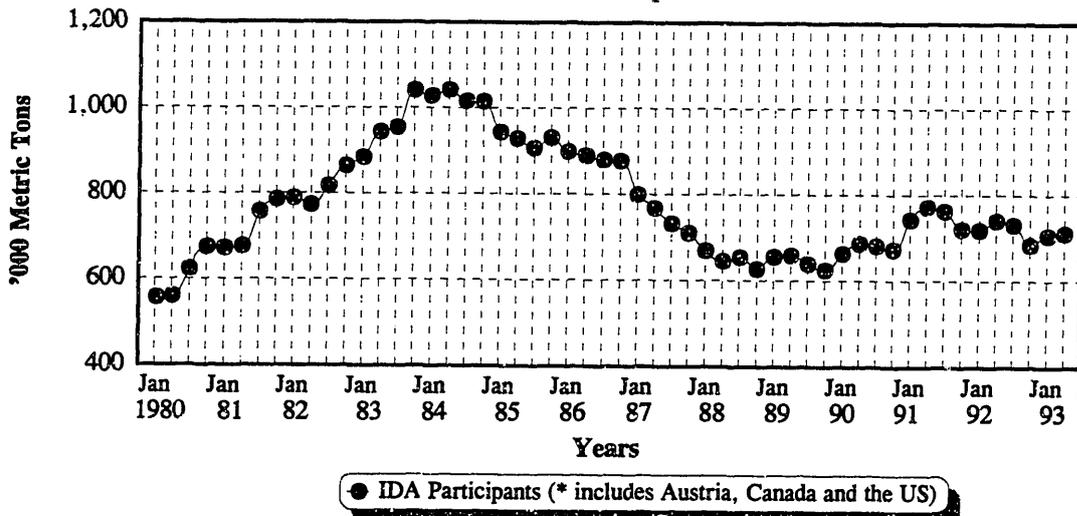
Graph 14 - CHEESE PRODUCTION 1980 - 1992



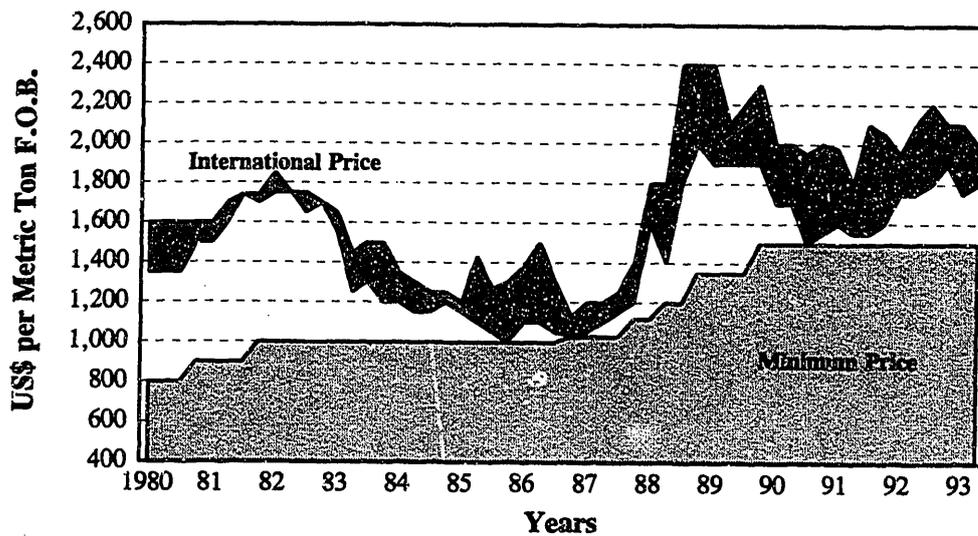
Graph 15 - CHEESE EXPORTS 1980 - 1992



Graph 16 - CHEESE STOCKS 1980 - 1993
IDA Participants *



Graph 17 - CHEESE PRICES 1980 - 1993



OTHER DAIRY PRODUCTS

Whey in powder or block or concentrate

41. World *production* of whey powder increased by about 2 per cent to 1.68 million tons in 1992 following developments in production of cheese. The production of other related milk concentrates, including lactose, also continued to expand, but little data is available on the production levels of such products. These products are mainly by-products of cheese production. Nonetheless, output of whey powder and lactose has grown more rapidly than cheese production in recent years. 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. This has further stimulated whey production notably in Australia, Canada, the European Community and the United States. Liquid whey and concentrated whey are still extensively fed to animals, notably calves.

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

43. In May 1992, *whey powder prices* in the United States reached a peak at around US\$535 per ton, 60 per cent higher than a year earlier. However, prices fell throughout the summer and autumn and were as low as US\$350 in December 1992, a decline by 38 per cent on December 1991. In Europe, whey powder prices fell throughout 1992. Prices had fallen to US\$625 per ton in May, and continued to fall to previous year levels by December. At the end of 1992, whey prices were low both in the United States and in Europe. Whey powder price continued to slide in the first six months of 1993. In June 1993, prices in Europe were at around US\$350 per ton, their lowest level since September 1990; in the United States they fell to US\$340 per ton compared to US\$375 in June 1992, a drop by 9½ per cent. This weakness stemmed from the widespread rise in cheese production.

Concentrated milk

44. World *production* of condensed and evaporated milk declined throughout the 1980s, with condensed milk being increasingly replaced by whole milk powder in the market. However, world production of condensed milk recovered in 1991 and increased further in 1992 by 0.6 per cent to 4.58 million tons. From a peak of nearly 1 million tons in 1985, world *trade* in condensed milk declined to about 350 thousand tons in 1991. World trade in condensed milk recovered in 1992 with increased exports from the European Community and Canada.

45. *Prices* for condensed milk, based on Dutch quotations, increased throughout 1991 to reach Hfl. 3,550 per ton, which in dollar terms corresponded to US\$1,940. In the first half of 1992, Dutch quotations remained at that level. The quotation was increased to 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.

Casein

46. World casein *production* increased by 13 per cent to 227 thousand tons in 1992. This was primarily the result of increases in the European Community and New Zealand. In the European Community, increases in the production subsidy encouraged the recent upturn in production. However, the aid to manufacturers was reduced in July 1992 and was further cut in March 1993. Production in the European Community is expected to decline in 1993, which may also lead to a slight reduction in the world production level. World *exports* of casein in 1992 are estimated to have remained near their 1991 level of 150 thousand tons.

47. Casein *prices* vary widely with quality. Following substantial declines during most of 1991, casein prices began to strengthen at the end of that year due to strong import demand, a less than expected increase in European Community production, small New Zealand supplies and hardly any supplies coming from Central and Eastern Europe. Prices continued to strengthen in 1992, reflecting the tight market conditions for skimmed milk powder in both Europe and North America. United States quotations reached US\$5,450 per ton in November, 47 per cent higher than a year earlier. However, prices declined during the first six months of 1993 and in June they were at US\$4,840 per ton, 2 per cent lower than a year earlier.

FOOD AID

48. Food-aid deliveries of dairy products consist mainly of skimmed milk powder and anhydrous milk fat. The decline in global surpluses affected the availability of milk products that can be provided under 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 Community. Food-aid shipments of dairy products, which had averaged nearly 400 thousand tons (product weight) in the early 1980s, were estimated to have fallen below 100 thousand tons in 1990. However, the quantity of dairy products shipped as food aid during 1992 was, at 222 thousand tons (product weight), similar to that of the previous year but substantially higher than in 1990. Shipments of food aid in dairy products during 1991 and 1992 were characterized by an increase in shipments to the countries of Eastern Europe and the former Soviet Union. In the short term, these countries are expected to continue to receive dairy products in the form of food aid. Consequently, world food-aid deliveries of dairy products in 1993 will probably remain around 200 thousand tons.

49. Since 1991 there has been a substantial need for dairy products and other food items to be supplied to countries in Central and Eastern Europe and the former Soviet Union as food aid and on other than normal commercial terms. The European Community and the United States have been the main suppliers. Food-aid transactions reported to FAO's Consultative Sub-Committee on Surplus Disposal (CSD) totalled 178 thousand tons in 1991, compared with 81 thousand tons in 1990 and 86 thousand tons in 1989. According to CSD, more than half of total shipments in 1991 went to Eastern Europe and the former Soviet Union area, whose commercial imports decreased. Food-aid transactions reported to CSD totalled 158 thousand tons in 1992, of which 46 thousand tons went to Eastern Europe.

50. A total of 97 thousand tons of non-fat dry milk and 105 thousand tons of butter/butter oil were made available by the United States under the PL 480 and Section 416(b) programmes for fiscal year 1992. Under these programmes, dairy products were provided as food aid to a number of countries, including Poland and Russia, early in 1992. The United States has announced a fiscal year 1993 food-aid package for Russia which includes 3 thousand tons of baby food and 3.5 thousand tons of milk powder. In May 1993, the United States announced food-aid programmes for over 60 thousand tons

of butter of which 50 thousand tons are destined for Russia and some 10 thousand tons to various Eastern European States.

51. Since March 1991, the European Community has dispatched as food aid 55 thousand tons of skimmed milk powder, 82 thousand tons of whole milk powder and 16 thousand tons of baby food. In addition to Russia, which received the bulk of this aid (especially the cities of Moscow and St. Petersburg), Bulgaria, Romania and Albania also were major beneficiaries. The bulk of these deliveries were carried out during the second half of 1991 and the first half of 1992.

INTERNATIONAL DAIRY PRICES

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

53. 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. Developments in market prices, and changes in the agreed minimum export prices, clearly illustrate the difference in market trends for various milk components.

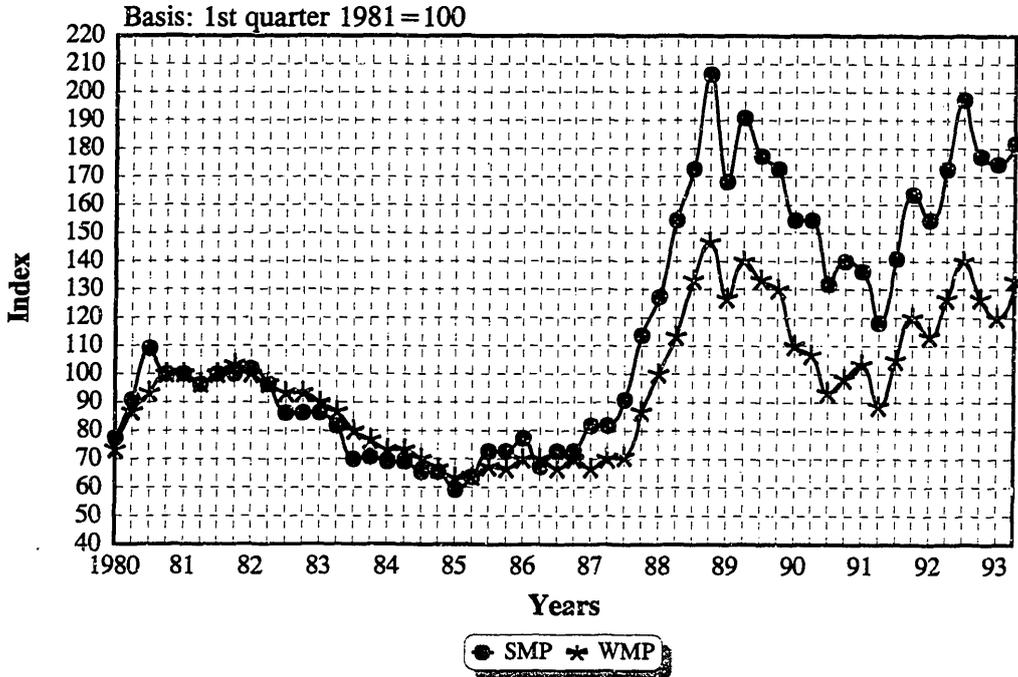
TABLE 11

International Dairy Prices (1990-93)

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

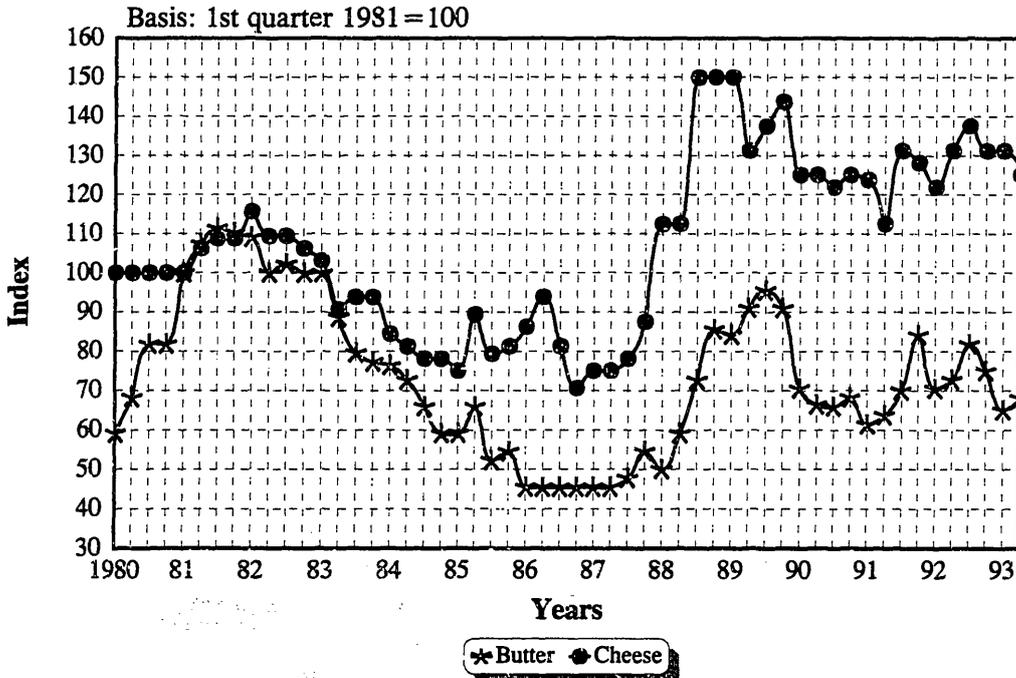
Product	1990	1991	1992				1993	
	January-December	January-December	January-March	April-June	July-September	October-December	January-March	April-June
Skimmed milk powder	1,300-1,700	1,250-1,800	1,550-1,700	1,600-1,900	1,800-2,170	1,775-1,950	1,725-1,920	1,650-2,000
Whole milk powder	1,250-1,650	1,250-1,800	1,550-1,700	1,550-1,900	1,750-2,100	1,700-1,900	1,625-1,800	1,575-2,000
Anhydrous milk fat	1,625-1,950	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
Butter	1,350-1,500	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
Cheddar cheese	1,550-2,000	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

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



* Upper level of price range

Graph 19 - PRICE INDICES FOR BUTTER & CHEESE *



* Upper level of price range

DAIRY PRODUCTION AND POLICIES IN SELECTED COUNTRIES AND REGIONS**NEW ZEALAND***

54. Production during New Zealand's 1992 dairy year (June 1991-May 1992) reached a record 8.5 million tons, about 5 per cent above the previous year's level. This resulted from excellent weather and pasture conditions. The average producer price for milk fat paid by the New Zealand Dairy Board was NZ\$5.20/kg. Production for the 1992/93 season is estimated to have increased by 2 per cent compared to the previous season due to continuing favourable weather conditions. The average producer price for milk fat paid by the Board in 1992/93 was increased to NZ\$5.65/kg., reflecting some improvement in market earnings and the lower value of the New Zealand dollar. In 1992/93, the number of dairy cows is estimated to have increased by about 70 thousand compared to the previous season. This increase continues the build-up of the dairy herd over the past decade, with cow numbers rising by an average of 1½ per cent annually. The amount of milk produced in the 1993/94 season will depend on weather conditions. Given, however, that some new resources have been drawn into the industry, production in 1993/94 could be higher if normal weather patterns are experienced.

Butter and Butter Oil

55. In New Zealand, the dairy industry has continued to pursue the objective of reducing the proportion of milk used in butter manufacture in the face of reduced access to traditional markets. In order to provide incentives at farmgate to this effect, instruments such as a two-tier price system have been considered, i.e. a split price regime for milk fat and protein. In line with industry goals, butter/butter oil production in 1991/92 was down by 3½ per cent to around 260 thousand tons despite the increase in milk output. The production of butter/butter oil is estimated to have further declined in 1992/93. Nonetheless, butter output accounts for over 60 per cent of all milk fat.

56. The manufacture and sale of saturated fat margarines and of blended spreads (i.e. margarines with milk fat added) have been legal in New Zealand since 1990. These developments are putting pressure on the market share for butter which has accounted for 65 per cent of the New Zealand consumer yellow fats market. Butter consumption declined in 1991/92 and a further decline is estimated for 1992/93. Greater expenditure on general and branded promotions may reduce the decline in butter consumption to some extent.

57. In 1992, New Zealand exports of butter decreased by 36 per cent to 132.5 thousand tons. The European Community remained a major outlet under special arrangements which have permitted the import of New Zealand butter into the United Kingdom. The volume of butter which New Zealand could export to the European Community has been progressively reduced to 55 thousand tons for 1992. The arrangement provided for a reduction in the special import levy from 25 per cent ad valorem to 15 per cent. The arrangement expired at the end of 1992, but in December a new quota of 51.8 thousand tons was granted for 1993. The special import levy was reduced by 20 per cent from ECU 42.85 per 100 kgs. to ECU 34.28 per 100 kgs. Before 1 October 1993, the EC Council is to make a decision on the maintenance of this arrangement beyond the end of 1993. With the implementation of the Single Market in 1993, deliveries of New Zealand butter can now be made to all EC countries and not just the United Kingdom.

58. Other important outlets for New Zealand butter in 1992 were Argentina and Morocco. New Zealand registered an increase of 14 per cent in exports of butter oil in 1992 to 41.5 thousand tons. However, total butter/butter oil exports (in butter equivalent) decreased in 1992. In the first

quarter of 1993, exports of butter recovered to 58 thousand tons; the main destinations were the United Kingdom, Russia and Iran. These sales have alleviated to some extent the problem of excess availability of butter. However, market opportunities for butter remain limited and highly uncertain and the possibility of making sales under the Decision of 22 June 1993 is considered as a short-term solution to the difficulties in the international butter market.

59. On 1 January 1993, stocks of butter in New Zealand at 71 thousand tons were 47 per cent higher than a year earlier. On 1 April 1993, stocks were at 48.7 thousand tons. On 1 June 1993, carry-over stocks to the 1993/94 season, estimated at around 50 thousand tons, were considered high and causing concern due to limited market availabilities exacerbated by the collapse of the former Soviet Union market.

Milk Powders

60. Production of skimmed milk powder in New Zealand dropped by 10 per cent to 132 thousand tons in 1991/92. Production decreased further in 1992 by 2 per cent to 131.5 thousand tons. Drying capacity constraints and the expansion of whole milk powder production limited the volume of skimmed milk powder production. In 1992, exports were down to only 114 thousand tons, 25 per cent less than in 1991. The main destinations were countries in Southeast and Eastern Asia and Mexico. Buttermilk powder exports decreased in 1992.

61. In contrast, New Zealand production of whole milk powder continued to increase strongly with an output of 270 thousand tons in 1992, an increase by 11 per cent compared to 1991. New Zealand's whole milk powder production has more than doubled that of ten years ago. Exports from New Zealand, the world's second largest exporter, continued to recover in 1992. Exports amounted to 254 thousand tons, an increase of 2 per cent compared to 1991 and two and a half times their 1980 level. The main outlets remained in South and East Asia and in South America. The estimate for 1992/93 is for exports increasing to some 270 thousand tons, with possible annual increases in subsequent years of 50 thousand tons.

Cheese

62. In line with the trends of recent seasons and industry goals to reduce the proportion of milk used for butter manufacture, cheese production is estimated to have increased in 1991/92 to 136 thousand tons. In 1992, cheese production increased 4 per cent to 130 thousand tons. Much of the increased output ended up in stocks as export markets were weak. A reduction in cheese production is expected in 1993.

63. New Zealand exports increased a further 5 per cent in 1992, with the main outlet remaining Japan. New Zealand made an advance notification of sales of cheese under derogation in 1992 and had sold 605 tons of low-quality cheese to destinations in Western Europe at prices ranging from US\$445 to US\$1,025 per ton f.o.b. In the first five months of 1993, New Zealand sold under derogation 134 tons of cheese to Germany at the price of US\$1,255 per ton f.o.b.

Other Dairy Products

64. New Zealand's annual production of *casein* decreased by 6½ per cent to 66 thousand tons in 1992. Exports decreased by 15 per cent to 66 thousand tons; the main destination was the United States with 38 thousand tons of imports.

AUSTRALIA*

65. Australian milk production in the 1992 dairy season (July 1991 - June 1992) also benefited from excellent weather conditions and increased by 5 per cent to 6.9 million tons. This occurred as a 6 per cent average increase in yields more than offset the decline in the national herd size and the 3½ per cent drop in the number of dairy farms. Total 1992/93 production may increase by 8½ per cent to 7.5 million tons, the highest level since 1972. This high level of production is mainly due to the above average seasonal conditions, greater use of supplementary feed, higher farmgate returns and the availability of cheap feed as a result of the rain-affected wheat harvest. There has also been a rise in dairy cow numbers following a period of gradual decline. Despite the increase in milk production, domestic sales to the liquid market have been relatively static. Sales of plain whole milk have continued to fall, but this has been offset by increases in sales of reduced fat and flavoured milk. This has meant a significant increase in the volume available for manufacturing and a resulting increase in output of all major products.

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

Butter and Butter Oil

67. Production of butter and butter oil for 1991/92 reached almost 116 thousand tons, up 4 per cent from 1990/91. With increased manufacturing milk available, butter and butter oil production is estimated to have increased further by about 8 per cent to 125 thousand tons in 1992/93. Manufacturers' decisions to increase butter production, notwithstanding the pessimistic export market outlook, are due to the better relative returns for skimmed milk powder.

68. Sales of butter, butter blends and butter oil fell by 7 per cent to 53.6 thousand tons in 1990/91. However, due to rapid growth of the butter blend market, butter increased its share in the domestic table spread market at the expense of margarine at a time when total retail demand for spreads was gradually declining. Domestic sales of butter rose slightly during 1992/93.

69. The export outlook for Australian butter is pessimistic with high stock levels likely to remain throughout 1993. Butter exports are estimated at 18.6 thousand tons in 1992/93, compared with 21 thousand tons in 1991/92. However, exports of butter oil increased in 1992, by 24 per cent to 39 thousand tons.

70. On 1 January 1993, stocks of butter in Australia at 29.2 thousand tons were 60 per cent higher than a year earlier. Weak international demand resulted in a significant increase in stocks, up from 23 thousand tons at the end of 1991/92 (30 June 1992) to 37 thousand tons at the end of 1992/93, an increase by 60 per cent.

Milk Powders

71. The 1991/92 production of skimmed milk powder/buttermilk powder amounted to 149 thousand tons, up by about 3 per cent from 1990/91. The estimate for 1992/93 is for a further increase by 15 per cent to 172 thousand tons. Skimmed milk powder and buttermilk powder exports are estimated to be 140 thousand tons in 1992/93, compared with 121 thousand tons in 1991/92. This reflects stronger demand coupled with a sustained recovery in prices.

72. Stocks of skimmed milk powder remained at normal levels throughout 1992. However stocks were relatively high at the end of March 1993 and amounted to 56 thousand tons compared to 42 thousand tons a year earlier.

73. Production of whole milk powder rose by 16 per cent to 69 thousand tons in 1991/92, reflecting a shift away from butter/skimmed milk powder production to whole milk powder for which prices were more attractive. Production for the 1992/93 season is estimated to remain unchanged compared to 1991/92. Australian exports rose by 4 per cent to 54.8 thousand tons in 1991/92. The export outlook remains firm, with sales estimated at 65 thousand tons for 1992/93, an increase by a further 19 per cent over 1991/92. Demand from buyers in major Asian markets was particularly strong.

Cheese

74. Cheese production in 1991/92 was favoured by relatively attractive export prices and the increased availability of manufacturing milk. It rose by 10 per cent to 197 thousand tons. Cheese production is estimated to have further increased by 6½ per cent in 1992/93 to a total of 210 thousand tons.

75. There was an appreciable recovery in Australian cheese exports in 1991/92, when they amounted to 66.4 thousand tons. Exports to Japan, Australia's major overseas market, have increased rapidly, reflecting increases in sales of bulk Cheddar-shred cheese and progress in the development of cream cheese and other specialty cheese lines. Cheese exports in 1992/93 are estimated at 80 thousand tons, an increase of 20 per cent over the previous year's figure. Sales again increased to Japan as well as to the Middle-East and non-traditional destinations.

Other Dairy Products

76. Australian *concentrated milk* production recovered to 96 thousand tons in 1992, an increase by 8 per cent over 1991's depressed level.

EUROPEAN COMMUNITY*

77. In the European Community, milk deliveries in 1992 totalled 102.2 million tons, almost unchanged compared to 1991. Milk production in 1992 is estimated to have fallen by 1 per cent to 114.4 million tons.¹ The EC dairy herd continued to contract by a further 4 per cent, to approximately 21.9 million head. Further herd reductions of about 2 per cent are expected in 1993, as policies to encourage some dairy farmers to give up production are continued. The greatest reductions in the last two years have occurred in the former East Germany. 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

¹EC dairy data since 1992 includes the former German Democratic Republic and Portugal. Changes in Italian dairy statistics introduced in 1992 make direct comparisons with previous years inaccurate.

yields. In 1993, after a weak start, milk deliveries have picked up and are estimated for the first four months to be about 1 per cent higher than for the corresponding period of 1992. Consumption of fluid milk in the European Community continued to increase to an estimated 32.6 million tons in 1992. A further 2 to 3 per cent growth in consumption is expected in 1993.

78. In December 1992, the EC Council agreed to modify quota transfers and leasing in the dairy sector. Member States may allow the transfers and may create a national reserve quota. It was also decided that the collection of the co-responsibility levy would be suspended, effective 1 April 1993. Furthermore, there was agreement to continue for another year the provisions permitting the importation of New Zealand butter into the European Community, albeit at a reduced level.

79. In February 1993, the EC Council agreed to extend the 1992/93 marketing year to the end of June. In May 1993, the Council decided to temporarily increase the 1993/94 quotas in the case of Greece, Italy and Spain by 100, 900 and 600 thousands tons, respectively. Statistical problems were encountered in these member States and actual deliveries were in excess of those reported. The maintenance of these increased quotas will depend on continued progress in implementing the quota system. The Council also agreed to increase the quota in the other nine member States by 0.6 per cent to provide quota for so-called SLOM producers. This followed a recent European Court ruling that the Council was unjustified in withholding milk quotas from these farmers, who had bought or inherited holdings which had been covered by the five-year non-marketing agreement in the late 1970s. The aggregate quota for the twelve member States was thus increased by 2 per cent.

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

81. The EC Council also indicated its intention to make provision for member States to apply a national levy on producers to constitute a fund for promotion and publicity of milk products following the elimination of the co-responsibility levy. The Council decided to make ECU 40 million available to member States to buy quotas for restructuring purposes. Finally, the Council decided to lift the suspension on inward processing relief arrangements in the milk sector as from 1 July 1993.

Butter and Butter Oil

82. Lower output of milk, coupled with further increases in domestic demand for cheese and fresh milk products, led to cuts in European Community butter production in 1992. For the year as a whole, preliminary figures show a decline in butter output of 8½ per cent, with production amounting to about 1.50 million tons compared to 1.64 million tons in 1991. In the first four months of 1993, production is estimated to be 1½ per cent lower than for the corresponding period of 1992. The outlook for the whole year 1993 is for a further decline in butter output. Output of butter oil was lower than in the previous year, i.e. 120 thousand tons compared to 125 thousand tons in 1991.

83. Butter from intervention storage continues to be available at a discount price for non-profit organizations and for the armed forces. Member States also subsidize butter for social purposes and

the European Community contributes financially to national schemes for school milk. Measures under the milk co-responsibility regime have continued in 1991, 1992 and 1993, providing funds for subsidized butter to be used in pastry products, ice-cream and sugar confectionery. Such disposals of butter amounted to about 440 thousand tons in 1991 and 435 thousand tons in 1992. In the first six months of 1993, these disposals increased by 14 per cent to 196 thousand tons. Total European Community consumption of butter declined by about 3 per cent. The decline is due to higher prices, increased supply of imitation products in some member States and dietary concerns. Butter consumption is expected to decrease to a level of around 4.4 kgs. per head by 1997. Consumption of margarine seems to be stable at a level of about 4.7 kgs. per head, whereas consumption of spreads appears to be increasing. In an attempt to slow down the decline in butter consumption, a two-year programme of making butter available at reduced prices to recipients of social security measures has been reintroduced.

84. European Community exports of butter to third countries decreased by 27 per cent amounting to 152 thousand tons in 1992. Exports of butter oil also decreased from 92 thousand tons in 1991 to 90 thousand tons in 1992. European Community imports of butter decreased, by 30 per cent to 48 thousand tons in 1992, largely supplied by New Zealand.

85. In 1992, about 120 thousand tons of butter were released from intervention stocks for industrial use, food aid and other exports. In January 1993, butter stocks stood at 241 thousand tons compared to 302 thousand tons a year earlier. In mid-June 1993, public and private stocks totalled 260 thousand tons.

86. European Community food-aid programmes provided for a maximum of 6.8 thousand tons of butter oil in 1992 compared to 12 thousand tons in 1991. Actual food-aid deliveries in 1992 amounted to 5 thousand tons, down from 10 thousand tons in 1991. Since early 1991, the European Community has been substantially involved in food-aid operations in favour of Central and East European countries and of the former Soviet Union. Since March 1991, about 48 thousand tons of butter have been donated. The main destinations were Moscow and St. Petersburg (38 thousand tons), Romania (5 thousand tons), and Bulgaria (4 thousand tons). The bulk of these deliveries were carried out during the second half of 1991 and the first half of 1992.

Milk Powders

87. Output of skimmed milk powder in the European Community fell to 1.15 million tons in 1992, a decrease of 23 per cent since 1991. The decline in production was due not only to the reduction in milk production but also to the considerable increase in the proportion of milk processed to liquid milk, fresh products and especially cheese. However, skimmed milk powder production increased by about 7 per cent in the first four months of 1993 compared with the corresponding period in 1992.

88. Total domestic consumption of skimmed milk powder in the European Community increased by 13½ per cent to 1.99 million tons in 1991; the use of skimmed milk powder for animal feed increased by 30 per cent to 866 thousand tons due to lower internal prices throughout the year. Taking into account the evolution of the market, the aid granted to skimmed milk powder used in animal feed was reduced in May 1991 from ECU 70 to ECU 65 per 100 kgs. and further reduced to ECU 60 per 100 kgs. as of 17 August 1992. This contributed to an 8 per cent fall in demand from the compound feed industry in 1992. With effect from 1 February 1993, the minimum inclusion rate for skimmed milk powder in mixed feeds has been cut from 50 per cent to 35 per cent. This will apply until 31 December 1993. The use of skimmed milk powder for animal feed was about 20 per cent lower in the first four months of 1993 compared with the corresponding period in 1992.

89. Following a 24 per cent decline in 1991, European Community exports of skimmed milk powder increased by 62 per cent to 407 thousand tons in 1992. Annual allocations of skimmed milk powder available for food aid were reduced from 150 thousand tons at the beginning of the decade to 53 thousand tons in 1991. However, as part of its food-aid operations, the European Community committed 55 thousand tons of skimmed milk powder, 82 thousand tons of whole milk powder and 16 thousand tons of baby food primarily to Russia (especially the cities of Moscow and St. Petersburg), Bulgaria, Romania and Albania. Most of these deliveries were carried out during the second half of 1991 and the first half of 1992. In 1992, actual European Community food-aid deliveries amounted to 33 thousand tons of skimmed milk powder compared to 61 thousand tons in 1990.

90. As a result of the fall in demand and despite the decrease in production, European Community stocks of skimmed milk powder (public and private) continued to grow to 421 thousand tons at the end of 1991, compared to 333 thousand tons a year earlier. As a result of declining production and strong internal and external demand, intervention purchases were stopped in February 1992. Uncommitted public stocks subsequently declined to 95 thousand tons on 31 July 1992, compared to 517 thousand tons a year earlier. These stocks declined further to 47 thousand tons in January 1993, compared to 421 thousand tons in January 1992. Public stocks continued to decline in the first six months of 1993. They amounted to only 29 thousand tons at the end of June 1993, compared to 163 thousand tons a year earlier.

91. Whole milk powder production decreased by 9 per cent to 893 thousand tons in 1992. In the first three months of 1993, whole milk powder production remained relatively stable compared with the corresponding period in 1992. European Community exports recovered to 618 thousand tons in 1991, an increase by 23 per cent compared to 1990. Following a decision taken in March 1991, the European Community provided 50 thousand tons of whole milk powder to the former Soviet Union as part of an urgent action to provide food aid to that area. For 1992, exports are estimated at 583 thousand tons, a decrease by 5½ per cent over 1991.

Cheese

92. Cheese production in the European Community grew by 5½ per cent to 5.1 million tons in 1992. The outlook for 1993 is for a further growth in cheese output based on continued increase in domestic and export utilization.

93. Cheese consumption expanded by 7 per cent in 1992. The outlook for 1993 is for continued growth in total cheese consumption of the same order. The great variety of cheese available and further product diversification (i.e. low-fat cheeses) are the main reasons for these developments.

94. In 1992, European Community cheese exports reached 466 thousand tons, 3½ per cent less than in 1991. However, exports recovered in the first quarter of 1993 to 120 thousand tons compared to 115 thousand tons in the corresponding quarter of 1992. For the year 1993 as a whole, exports are expected to recover and regain at least their level of 1991. Imports, which were mostly from Switzerland remained relatively stable at 110 thousand tons in 1992 and are expected to remain unchanged also in 1993.

Other Dairy Products

95. European Community production of *whey powder* has expanded at a rate of 5 per cent in recent years and reached 839 thousand tons in 1991, accounting for 55 per cent of world production. Production increased again in 1992, by 7 per cent to 899 thousand tons. Production continued to increase by about 2 per cent to 306 thousand tons in the first four months of 1993 and is expected to continue

growing throughout the year following the expansion in cheese production. Exports of whey fell in 1992 by 2½ per cent to 37.8 thousand tons.

96. *Condensed milk* output increased in 1992 by 2½ per cent to around 1.25 million tons. Exports recovered to 343 thousand tons in 1992, following a drop to 317 thousand tons in 1991. This occurred as traditional buyers increased their purchases at the same time as East European countries emerged as buyers.

97. European Community *casein* production is highly dependent on aid programmes. As from 10 October 1990, the casein aid scheme was altered to reduce end-use control difficulties and the production subsidy on casein was increased. European Community production subsequently increased in 1992 when production reached 138 thousand tons. However, aid to manufacture casein was cut back 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 from 1 March 1993.

FINLAND*

98. Milk deliveries in Finland dropped to an estimated 2.34 million tons in 1992, 3½ per cent lower than in 1991. A 4½ per cent decrease in deliveries occurred during the first three-quarters of the year, in response to a new milk buy-out scheme which operated from March to June 1992. The buy-out scheme covered a total of 110 thousand tons of milk. In 1993 and 1994, deliveries are expected to remain at levels similar to 1992.

99. *Butter* production fell by 5 per cent in Finland in 1992. Output is expected to fall further by 2½ per cent in 1993. Consumption also continued to decline sharply in 1992 but it is expected to remain stable in 1993. Finnish butter exports continued to decrease in 1991 and 1992. The outlook for 1993 is for a modest recovery in exports.

100. *Whole milk powder* production in Finland, which was entirely for exports, has declined sharply since 1991 due to the loss of traditional export outlets. A further sharp decline in 1992 brought output to 3 thousand tons, whereas in the early 1980s production had been over 27 thousand tons. The outlook for 1993 was for production declining to almost negligible levels. Exports from Finland to the former Soviet Union declined to 11 thousand tons in 1991, 3 thousand tons in 1992, and the forecast is for only 400 tons in 1993.

101. Little change or further declines in *cheese* production are estimated in Finland. Cheese consumption continues to increase in Finland as in most of the Western European countries. Exports of Finland fell to 25 thousand tons in 1992, down by 11 per cent compared to 1991. The outlook for 1993 is for a further decrease in exports to 23 thousand tons.

NORWAY*

102. In Norway, milk deliveries dropped by ½ per cent to 1.86 million tons in 1992. This resulted from a further tightening of the milk quota system, and government policies to buy back some of the milk production quotas held by dairy farmers. The forecast is for deliveries of 1.80 million tons in 1993, as the reduction policies continue.

103. Norwegian milk producers receive a basic price subsidy equally applicable to all output within the domestic production ceiling. Dairy farmers are paid a subsidy for each litre of milk delivered to the dairy, the amount varies depending upon the area in which the farmer is located. As of June 1992, the price subsidies range from NOK 0.11 to NOK 1.60 per litre. Consumer subsidies are paid on liquid milk consumed domestically. The subsidy has been reduced from NOK 0.363 per litre before 1 June 1992, to NOK 0.343 per litre until the end of May 1993. Consumption of whole, low fat and skimmed milk in 1992 is estimated at 706.7 million kgs.

104. As in the other Nordic countries, the decrease in Norwegian *butter* production accelerated in 1992, when production fell by 7½ per cent to 17.3 thousand tons. Output is expected to continue to decrease in 1993 due to weak demand. Consumption in Norway showed a sharp decline in 1992. Butter exports continued to decrease in 1992, but the outlook for 1993 is for a recovery in exports.

105. Little change or further declines in *cheese* production are estimated in Norway. In contrast, cheese consumption continues to increase. Norwegian cheese exports recovered strongly in 1992, increasing by almost 17 per cent to 26 thousand tons. Exports are expected to increase to 27 thousand tons in 1993.

SWEDEN*

106. In 1992, milk deliveries in Sweden remained unchanged at the previous year's level of 3.20 million tons. However, the 1992 summer drought led farmers to replace home grown hay by forage products of a higher quality, and the increase in yields together with an increase in numbers of dairy cows resulted in increased milk deliveries during the first five months of 1993 by 5½ per cent. For 1993, milk deliveries are expected to increase by 3 per cent to 3.29 million tons. Total numbers of dairy cows are forecast to increase by approximately 1 per cent to 533 thousand head.

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

108. *Butter* production in Sweden declined by 3 per cent to 37 thousand tons in 1992 while consumption stabilized around the 1991 level. Swedish butter exports continued to decrease in 1992. Production of both butter and *cheese* increased slightly in the early months of 1993, as a result of the rise in milk deliveries.

SWITZERLAND*

109. In Switzerland, milk deliveries declined by 2 per cent in 1992, to 2.99 million tons. However, milk deliveries increased by 4½ per cent in the first four months of 1993. In April 1993, the Swiss Government cut the guaranteed producer price of milk by 10 Swiss centimes per kg. to 97 Swiss centimes

per kg. as of 1 September 1993, in an attempt to reduce the costs of dairy support. This cut will not be reflected in cheese prices; however, butter prices will decline.

110. *Butter* production declined by 3 per cent to 33 thousand tons in 1992. Consumption continued to increase marginally to 37.6 thousand tons. This consumption trend began three years ago and is contrary to that of most Western European countries. It may be the result of market deregulation and aggressive marketing.

111. *Cheese* production in 1992 was 2 thousand tons below the 1991 level of 134 thousand tons. For 1993, an increase is forecast as a result of higher milk deliveries. Cheese consumption continues to increase as in most European countries. Exports by Switzerland were up by 5½ per cent reaching 64.7 thousand tons. Forecasts for 1993 indicate a possible small decline. Swiss imports of cheese stagnated at 27 thousand tons in 1992 but substantially increased by some 33 per cent to 6.9 thousand tons during the first quarter of 1993. For the year 1993 as a whole, imports are expected to be larger than in previous years.

POLAND*

112. Poland remains one of the largest milk producers in the world, despite a drop by one-fifth in its production between 1989 and 1992. Poland's milk production, totalling some 13.2 million tons in 1992, is only surpassed by the United States, India, Russia, the Ukraine, Brazil and three of the EC member States (Germany, France and the United Kingdom). In 1993, milk production is forecast to continue to decrease to 12.6 million tons, as the dairy cow herd is further reduced by 111 thousand to reach 4 million head. This is about 1 million head less than in 1989. However, the herd reduction is likely to be much less dramatic than the drought-induced run-down of 1992. In 1989, Poland's domestic per-capita supply of milk amounted to 427 kgs., some 100 kgs. more than in the EC at that time; by 1992, indigenous per capita supply had dropped to some 333 kgs. This was due to, amongst other factors, shrinking demand (for butter, in particular) in the wake of price liberalization in 1990.

113. In June 1990, the Polish Government established the *Agricultural Market Agency* (AMA) to stabilize markets including the dairy market. The AMA is a public agency vested with the mandate to engage in purchases, sales, stock management, and foreign trade. Since May 1992, the AMA operates an intervention scheme which is triggered when milk prices decline below the floor price. Prices are supported by purchasing butter and SMP from those dairies that observe the minimum milk price. Some 95 per cent of the dairies now pay farmers at least the minimum price. On 1 June 1993, the new minimum price for milk was set at 2,300 zlotys per litre (approximately US\$0.135). In 1992, the average producer price per litre of milk (3.5 per cent fat) was approximately US\$0.16, compared to the New Zealand producer price of US\$0.15 per litre. Hence, Poland's dairy producers are now operating at levels near world market prices. So far, the AMA's activities in foreign trade have been focused on the grain and sugar sectors, with transactions commissioned to private trading firms. In the dairy sector, only small quantities of butter and SMP were affected, totalling some 10 thousand tons in 1991 and 1992. State disbursements to the AMA amounted to US\$180 million in 1991 and US\$135 million in 1992.

114. The main border instruments in the dairy sector include customs duties, an import surcharge, and import/export licensing.¹ *Customs duties* currently amount to 10 to 40 per cent ad valorem (with the simple average being 35 per cent). Since mid-December 1992, Poland has applied a temporary *import surcharge* at the rate of 6 per cent in order to forestall a deterioration in the balance of payments

¹A variable levy system is still under discussion but, so far, neither its final shape nor its possible product coverage have been established.

caused by the unusually severe drought in the summer of 1992. The surcharge will be reduced to 3 per cent in 1994 and terminated at the end of 1994. *Import and export licensing* on dairy products were introduced in 1992, to implement the minimum price requirement of the IDA.

115. Under the EC-Poland Association Agreement, agricultural trade is scheduled to be liberalized on a selective basis, i.e. by granting preferential commodity-specific import quotas. For 1993, the EC's quotas for dairy imports from Poland have been fixed at 1.1 thousand tons of butter, 3.25 thousand tons of milk powders and 2.2 thousand tons of cheese, subject to a levy reduction of 40 per cent.¹ Likewise, selective agricultural liberalization will be applied in Poland's Free Trade Agreement with EFTA and in the Central European Free Trade Agreement (CEFTA).

116. While milk production decreased by 10 per cent in 1992, deliveries to dairies contracted even more strongly (down 12 per cent). Whereas in 1987-89 milk deliveries accounted for 72 per cent, this share dropped to 53 per cent in 1992. The reduced supply of raw milk available to the dairies, a trend observable in most Central and Eastern European countries, has affected the output of all processed products but most notably butter.

117. *Butter* production almost halved between 1989 and 1992. In 1992 alone, production dropped by 20 per cent to 150 thousand tons. Poland's per capita supply of butter has now reached the level of the EC (some 4 kgs. as compared to 7.6 kgs. in 1989). Concurrently, butter consumption declined by about 100 thousand tons in the period 1989-92. At 12 thousand tons, butter stocks were relatively high at the end of 1992, though reportedly most of it was old butter. Poland was a net importer of butter in 1992, with imports totalling 11 thousand tons. Exports in 1992 were negligible. For 1993, the butter market is expected to be in balance with a forecast production of 150 to 160 thousand tons.

118. *Skimmed milk powder* production remained almost stable at 150 thousand tons in 1992. Exports, however, doubled to 91 thousand tons, an increase stimulated by relatively high world market prices. Exports continued to climb in the first quarter of this year. Domestic production of *whole milk powder* increased to 65 thousand tons in 1992, while exports totalled 10 thousand tons.

119. *Cheese* consumption increased in 1992, with demand exceeding domestic production of protocol-type cheeses. Imports thus rose to 22 thousand tons. In addition to 100 thousand tons of the types of cheeses covered by the IDA Protocol Regarding Certain Cheeses, 160 thousand tons of fresh cheeses were produced in 1992.

120. There has been a trend of declining imports for those products which can be most profitably produced domestically, such as UHT milk, desserts, ice-cream and fermented products. Thus, production of *fermented milk*, *yoghurt* and *kefir* taken together rose from 40 thousand tons in 1991 to 55 thousand tons in 1992. Poland's *casein* exports in 1992 totalled 10 thousand tons.

HUNGARY*

121. In 1992, Hungary's agriculture experienced the strongest contraction among the Central and Eastern European countries covered in this report. Gross agricultural output is estimated to have dropped by 16 per cent, as compared to 10 per cent in the former Soviet Union. Milk production declined by 14 per cent to 2.25 million tons. Contrary to most Central and Eastern European countries, the

¹The import quotas will be enlarged by 10 per cent each year, while the levy reduction will be increased to 60 per cent beginning in 1994.

productivity of its dairy herds matches Western European standards. Yields averaged about 5 thousand kgs. in 1989-90, 50 per cent more than in Poland; by 1992, milk yields had declined to 4.8 thousand kgs. per cow.

122. Hungary's agricultural policy is set forth in the *Agricultural Policy Act VI* which came into force on 1 March 1993. The policy measures are modelled on the European Community's Common Agricultural Policy, including threshold prices as domestic target prices, sluicagate prices for imports, variable import levies, and export subsidies. Since January 1991, the Government has set (domestic) minimum prices but in times of surplus this scheme was ineffective as it was not supported by intervention purchases or export promotion via subsidies. Currently, the minimum milk price amounts to Ft 20 to Ft 22 per litre depending on quality (approximately US\$0.21 to US\$0.23). With effect as of 1 January 1994, a new support price scheme will be established in which guaranteed milk prices will possibly be tied to production quotas. The guaranteed prices will be determined by the Ministry of Agriculture in co-operation with the newly created Dairy Product Council of industry representatives. Even before the transition process began, Hungary resorted to agricultural export subsidies both in the rouble trade within the Council for Mutual Economic Assistance and in hard-currency trade. In particular, exports to the former Soviet Union had to be subsidized to achieve a much lower price level. Export subsidies are presently set as fixed percentages of the f.o.b. price, with all domestic traders including joint ventures being eligible. In 1992, the highest rate, 30 per cent, applied to dairy, beef and chicken products.

123. Dairy production has been an exception to Hungary's otherwise export-oriented agricultural sector. In the dairy sector, exports resulted only when temporary surpluses in domestic production (including a safety reserve) exceeded internal demand. Exports typically represented some 5 per cent of production. In 1990, domestic consumption declined drastically and large surpluses had to be exported at low world market prices. This development gave rise to a slaughter premium scheme in 1991, aimed at reducing production by 15 per cent. During 1992, slaughterings reduced the national dairy herd by 55 thousand to reach 456 thousand head (down 11 per cent), and milk production dropped by 370 thousand tons (down 14 per cent). Market supplies in 1992 were tight and dairy exports were insignificant, except for 14 thousand tons of protocol-type cheeses.

124. In Hungary, some 40 per cent of milk deliveries were processed into liquid milk, 10 per cent into liquid milk products, 5 per cent into butter, 8 per cent into milk powders, and 38 per cent into cheese. Total *cheese* production in 1992 is estimated at 102 thousand tons, a large share of which is "quark". Protocol-type cheese production totalled 43 thousand tons. In the first quarter of 1993, production of butter and milk powders declined strongly, while cheese production recovered (up 4 per cent). Butter and cheese imports in 1993 under Hungary's global import quota for consumer goods are limited to US\$3 million in 1993.

ROMANIA*

125. Romania's agricultural output declined by 9 per cent in 1992, attributable mainly to problems in the privatization process, lost export outlets in former Yugoslavia due to the embargo, and last summer's drought. The livestock sector is reportedly in a catastrophic state without precedent since 1938. Cattle numbers almost halved since the revolution in 1989, declining from 6.9 million to 3.7 million in 1992. Large uncontrolled cattle exports have aggravated the situation. The dairy cow and buffalo herd was reduced by 200 thousand head to 1.8 million last year (down 11 per cent), and a further drop to 1.5 million head is forecast for 1993. Official figures indicate, however, that milk production decreased by only 2½ per cent in 1992 to reach 4.63 million tons. This figure includes buffalo and sheep's milk, with

the sheep's milk production estimated at 400 thousand tons. Other sources estimate the decline in cow milk production in 1992 at 9 per cent, with a total production of 3.4 million tons.

126. The main agricultural support instruments are price subsidies and loans, mainly for industrial inputs (spare parts, fuels, fertilizers, etc.). Subsidies on consumer goods, which had already been reduced in 1992, were eliminated in May 1993. Romania maintains a temporary export ban on commodities in short supply, including live animals and butter, milk powder and fresh milk. Furthermore, last year imports of dairy products were granted certain reductions of the statutory import tariffs (20 or 25 per cent). Foreign trade has remained largely under Government control.

127. *Butter* production declined to 20 thousand tons (down 11 per cent). Exports were zero, whereas in 1988-89 some 18 to 19 thousand tons were exported. Imports in 1992 totalled 2 thousand tons. *Milk powder* production dropped from 16 thousand tons in 1991 to 10 thousand tons in 1992. *Cheese* production halved between 1988-90 and 1992. The drop in production was particularly drastic last year, when protocol-type cheeses decreased from 71 thousand tons in 1991 to 46 thousand tons. Foreign trade in cheese was negligible.

BULGARIA*

128. Bulgaria was the smallest dairy producer among the Council for Mutual Economic Assistance countries with a milk production of 2.3 million tons in 1990. By the end of 1992, milk production had dropped to 2.1 million tons, but this was considerably larger than the Slovak republic and many States in the former Soviet Union. Bulgaria has been, nonetheless, a relatively large *cheese* producer and exporter. In 1990, protocol-type cheese production totalled 142 thousand tons, i.e. more than New Zealand's production. Cheese exports amounted to 18 thousand tons at that time. Bulgaria has maintained this level of exports, while cheese production has dropped from 142 thousand tons in 1990 to 84 thousand tons in 1992 (down 41 per cent). Cheese imports in 1992 were negligible. Under the Association Agreement with the European Community, which came into force in May 1993, both parties will issue import licences for 2 thousand tons of cheese.

129. The outlook for 1993 is not favourable. Cow numbers have reportedly decreased by 78 thousand head in the first quarter of 1993 from last year's 570 thousand head. Cheese production and exports as well as butter production in the first quarter of 1993 were significantly below last year's levels. Bulgaria may have to import some 2 to 2.5 thousand tons of butter, while cheese exports are expected to decline to 5 to 6 thousand tons.

130. Price liberalization has proceeded gradually and now covers some 84 per cent of total retail turnover. Milk, yoghurt and white cheese, considered as essential products, remain under Government price monitoring. In addition to the statutory import duties, butter and yoghurt imports are subject to an import tax in the period from 1 July to 31 October 1993 ranging from 5 to 25 per cent.

CZECH REPUBLIC AND SLOVAK REPUBLIC

131. The division of the country into two separate republics became effective on 1 January 1993. On the same day, a Customs Union between the Czech Republic and the Slovak Republic came into force, which includes an agreement on agriculture. The States agreed to co-ordinate activities of their respective market intervention schemes (i.e. Market Regulation Funds), domestic support policies and

export subsidies, and to allocate the trade quotas under the Association Agreement with the European Community. In February 1993, the two republics adopted separate currencies.

132. In 1988-90, former Czechoslovakia produced some 7 million tons of milk. With a population of 15.6 million people, the per capita milk supply totalled 450 kgs., surpassing that of Poland. In spite of subsidized consumption and subsidized re-cycling of milk powder to the livestock sector, considerable quantities of milk powders and butter were exported to other Council for Mutual Economic Assistance countries. Then, in 1990, price liberalization unveiled the disguised structural surpluses. Milk powder exports increased from 45 thousand tons in 1989 to 79 thousand tons in 1990 and 121 thousand tons in 1991, while butter exports reached 53 thousand tons that year. In 1991, the Federal Fund for Market Regulation was established to stabilize the market and a slaughter premium scheme was introduced.

133. Agricultural output in the *Czech Republic* decreased by 12 per cent in 1992, the major causes being the contraction in food demand, the drought, and limited funds to purchase inputs. The former State monopoly dealing with agricultural supplies and purchases was transformed into sixteen joint stock companies and forty-eight national enterprises, which are to be privatized. In 1992, the Government allocated funds totalling 6 per cent of gross agricultural output for special projects, such as the establishment of private farms. In January 1993, the *State Fund on Market Regulation* of the Czech Republic began its operations to regulate the market of selected crops and livestock products including dairy products. Measures include fixing of guaranteed prices, intervention purchases and sales, and subsidization of exports.

134. Milk production dropped from 4.9 million tons in 1990 to 3.8 million tons in 1992 (down 22 per cent). Production in 1993 is forecast to decline further to 3.6 million tons. Exports from Government intervention stocks are expected to reach 70 thousand tons of milk powder, 34 thousand tons of butter, 15 thousand tons of skimmed milk powder and 5 thousand tons of cheese. Czech dairy exports forecast for 1993 are thus higher than exports of any of the other Central and Eastern European countries, with the exceptions of Poland's skimmed milk powder exports and Belarus' butter exports.

135. In 1992, the *Slovak Republic* produced some 1.4 million tons of milk. The Slovak Government is currently considering an import surcharge of 20 per cent aimed primarily at imports of food and consumer goods from the Czech Republic. If the surcharge is activated, the Czech dairy sector will be faced with even larger structural surpluses.

THE FORMER SOVIET UNION

136. Next to the European Community, the United States and India, Russia is the largest milk producer in the world. Before the drastic decline in production in 1991, Russia's production roughly equalled that of France and Germany together. The Ukraine, the second major producer in the former Soviet Union, matched Germany's production. This may indicate the future direction of the Ukraine's trade flows in dairy products, given the fact that the Ukraine's population is about 10 million people below that of Germany and that Germany is a net-exporter. Belarus, the region's number three producer, was on par with New Zealand's 7.5 million tons of production in 1990. By 1992, its production had decreased by almost 2 million tons to the level of Ireland. Russia, the Ukraine and Belarus comprise some four-fifths of the total production of the former Soviet Union, with the individual shares being 54 per cent, 21 per cent and 6 per cent, respectively. Total production in the former Soviet Union declined from around 101.3 million tons in 1991, roughly the level of the EC at that time, to 87.3 million tons in 1992 (down 14 per cent). For 1993, FAO forecasts a further drop in the magnitude of 10 per cent to some 79 million tons.

TABLE 12

Butter Imports of the Former Soviet Union, 1981-92

Year	FSU butter imports ('000 m.t.)	World butter exports ('000 m.t.)	FSU's imports in % of world butter exports
1981-83	189	823	23
1984	198	742	27
1985	276	789	35
1986	194	713	27
1987	403	989	41
1988	440	1,038	42
1989	247	800	31
1990	299	720	42
1991	255	698	37
1992	150	593	25

Note: Import figures include food aid and concessional sales. Imports in 1992 are the Secretariat's preliminary estimate for Russia only, subject to revision.

137. The former Soviet Union figured as the single most important buyer in the world *butter* market, until its imports on commercial terms ceased almost entirely in 1992. In the 1980s, the former Soviet Union absorbed about one-third of total world market supplies, albeit with great variation (Table 12). From a level near 200 thousand tons in the early 1980s, imports including food aid, peaked at 440 thousand tons in 1987. Typically, the bulk of imports consisted of old butter disposed of from EC intervention stocks at discount prices. Between the first derogation from the GATT minimum price in December 1984, and the end of 1988, the former Soviet Union imported 872 thousand tons of butter under derogation, of which 826 thousand tons were old butter from the EC. New Zealand was the second major supplier to the Soviet Union during the 1980s, with exports ranging from 11 thousand tons in 1987 to 49 thousand tons in 1989. The United States first appeared in the butter market of the former Soviet Union in 1989 with sales totalling 6 thousand tons in 1989 and 44 thousand tons in 1990 (nil exports in 1991). In 1991, total imports of the former Soviet Union declined to some 250-260 thousand tons. Under the December 1990 derogation, which permitted butter sales of 200 thousand tons per IDA participant, only some 171 thousand tons were actually delivered, with the EC and New Zealand accounting for 95 thousand tons and 65 thousand tons, respectively. In 1992, only the United States concluded modest sales *on commercial terms* to Russia, equalling some 35 thousand tons. New Zealand's exports were negligible at 1 thousand tons. Moreover, the Russian Prime Minister has recently announced plans to stop importing milk and meat altogether next year.

Russia

138. By early 1993, land reform, a politically most sensitive issue, had not yet reached the stage of breaking up the *sovhozes* and *kolkozos*. In 1992, a privatization law was passed, in which land title was merely passed from the State to the collectivized farms. Free trade in land is not permitted except for small plots for personal subsistence farming. In early 1993, only 184 thousand farms (peasant holdings) covering some 7.8 million hectares had been created, each of which controlled 43 hectares on average. There remain major disincentives to private farming in Russia, including rapid increases in input prices and the structure of storage, transport, processing and distribution systems.

139. Total agricultural subsidies in 1992 are estimated as high as 10 per cent of gross domestic product, or 30 per cent of total budgetary outlays. Subsidies apply to livestock and milk as well as other products and are linked to obligatory deliveries to the State procurement sector, a scheme which poses a considerable disincentive to private marketing. In an attempt to prevent the agricultural terms of trade

(i.e. the price scissors) from deteriorating, the Government is currently preparing a pilot project establishing guaranteed and inflation-indexed minimum prices for livestock and dairy products.

140. The decline of both livestock numbers and output continued in 1992. Milk production declined by 10 per cent (Table 13). *Butter* production appears to have been given priority in Russia, as in most Central and Eastern European countries. In 1992, about 60 per cent of total milk output was used for butter production. For 1993, another drop in production is forecast in the dairy and livestock sector, as less fodder is available following the 1992/93 winter. Butter production in the first quarter of 1993 was 8 per cent lower than in 1992. In the years before the former Soviet Union ceased to exist, Russia's self-sufficiency ratio in milk was about 90 per cent, with the Baltic republics and Belarus covering part of the shortfall. In 1990, about half of Russia's dairy imports came from outside the former Soviet Union. In May 1993, the United States announced a food-aid allocation for butter deliveries to Russia worth US\$66.5 million.

TABLE 13

Dairy Production in Russia, 1990-93

('000 m.t.)

	1990	1991	1992	First quarter 1992	First quarter 1993
Milk production	55,715	51,971	46,976
Milk deliveries	39,800	34,174	26,103
Butter production	...	723	735	125	115
Skimmed milk powder	...	158	151
Cheese	...	385	290	56	51

... Not available.

Source: Russian Federation/ECE; Russian Committee for Statistics/World Perspectives, Inc.

Ukraine

141. In the Ukraine, the economic reform process is lagging behind other republics of the former Soviet Union including Russia. Last year, the Ukraine appeared to have been even more seriously affected by animal feed shortage than other States. Average yields per cow declined from an estimated 2.7 tons to 1.46 tons (down 46 per cent). As a consequence, milk production dropped from 22.7 million tons in 1991 to around 18 million tons in 1992. On a per capita basis, the milk supply declined to some 350 kgs., which roughly equals the level of Poland. Butter exports, which totalled 24 thousand tons in 1991, dropped to nil in 1992. Imports are estimated at 7 thousand tons.

Belarus

142. Belarus is a net exporter of dairy products, and given the high per capita supply of milk, will likely increase its net exports in the years to come. In 1992, when production is expected to have reached its lowest level, annual output per capita still amounted to 546 kgs., greatly exceeding that of the European

Community. Milk production declined from 7.46 million tons in 1990 to 6.8 million tons in 1991 (down 9 per cent), and dropped by 18 per cent in 1992 to reach 5.6 million tons. However, the contributions to the inter-State stocks were more severely affected. For 1993, milk production is forecast to increase by 5 per cent to 5.88 million tons. Eutter production in 1992 is estimated at 160 thousand tons, half of which was exported to other States of the former Soviet Union.

Baltic republics

143. The Baltic republics are dairy producers with a long-standing tradition in pedigree breeding. Lithuania is the largest dairy producer of the three Baltic States, followed by Latvia and Estonia. Together, milk production is estimated at 4.6 million tons in 1992. Traditionally, the Baltic States have been important suppliers of butter to Russia, receiving oil and feed grains in exchange. In order to be able to compete on the world market, the Baltic States will have to overcome quality problems, as will most Central and Eastern European countries. At present, their reliance on imported feedstuffs poses a major constraint on production. In Estonia, feed grain imports from other States of the former Soviet Union, once amounting to over 1 million tons per year, have been entirely discontinued. It has been estimated that Lithuania will need to import some 600 thousand tons of feed concentrates this year to keep the present dairy herd alive. Moreover, major problems in the privatization process in Lithuania, have left much of the dairy and livestock production capacity idle.

144. In the Baltic republics *butter* production has been the prime use of milk. In Lithuania, for instance, about 60 per cent of milk deliveries are destined for butter production; 7 per cent go to cheese production and 27 per cent to liquid milk production. Butter production in the three republics in 1992 is estimated at 107 thousand tons, some 45 thousand tons of which were exported to other States of the former Soviet Union. *Cheese* production is estimated at 42 thousand tons.

JAPAN*

145. In Japan, 1992 production of raw milk at 8.6 million tons was 4 per cent higher than in 1991. Production during the first quarter of 1993 increased by 2 per cent over the same period of 1992. The demand for drinking milk did not increase as rapidly as production, but the demand for milk beverages and fermented milk increased due to the popularity of new products and to consumers' concern for health. 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 provides for higher payments for milk sold to manufacturers. The 1993/94 guaranteed price for raw milk used for processing remained unchanged. However, the standard transaction price (price paid by dairies) was lowered. As a result, the 1993/94 government subsidy (discrepancy between guaranteed price and standard transaction price) was increased. Milk production in Japan is not expected to rise much in the near future and increased imports are expected to meet the growth in demand. Japan is one of the world's largest net importers of dairy products in both quantitative and value terms.

146. Given the rise in milk supplies and stagnant demand for drinking milk, the volume of raw milk available for the manufacture of butter and skimmed milk powder increased in 1992. Consequently, *butter* output increased by as much as 25 per cent to 94 thousand tons. Total consumption declined in 1992 and this downward trend is expected to continue in 1993. Japanese imports of butter reached only 4 thousand tons in 1992, less than one-fourth of imports in 1991. This development was the corollary of rising domestic production and falling wholesale prices for butter.

147. *Skimmed milk powder* production increased by 14 per cent to 207 thousand tons in 1992 as a result of the growth in milk production. Total consumption increased in 1992, with about one-fifth of the supply used for animal feed. Imports decreased by 17 per cent to 97 thousand tons in 1992.

148. Japanese *cheese* production increased in 1992, and a further increase of 5 per cent is estimated for 1993. Domestic demand for cheese has nearly doubled in ten years and is likely to continue to increase. Japanese cheese imports in 1992, at 126 thousand tons, were 3 per cent higher than in 1991. The European Community, New Zealand and Australia remained the main suppliers.

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

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

ARGENTINA*

151. Milk production in Argentina is estimated to have increased by 5 per cent to 5.85 million tons in 1992, but the dairy situation of the country remains uncertain. All restrictions on production and marketing, other than sanitary regulations, have been abolished. There is no guaranteed or support price for either producers or manufacturers. After a steep decline in real prices, the price of milk began to recover in the first part of 1992. Nonetheless, production costs have continued to increase, putting pressure on dairy profit margins. In addition, following the trade liberalization measures implemented in April 1991, imports of dairy products have increased, putting further competitive pressure on domestic producers. In October 1992, Argentina imposed countervailing duties on imports of milk powders, soft cheese, semi-hard cheese and blue cheese originating in the European Community.

152. Economic stabilization in Argentina has resulted in a growth and diversification in demand for dairy products. Consumption for human use rose by 7 per cent in 1991 to 1.2 million tons, and continued to increase in 1992. The shift in consumption towards higher value-added products underlies the observed increase in imports of dairy products.

153. Exports of *butter* by Argentina declined sharply from 7.4 thousand tons to 3 thousand tons, while imports increased substantially from 200 tons in 1990 to 7.7 thousand tons in 1991. Thus, Argentina became a net importer of butter in 1991. In 1992, exports of butter were nil while imports increased by about 50 per cent to 12 thousand tons.

154. Exports of *whole milk powder* declined by as much as 88 per cent to 1.1 thousand tons in 1992 while imports increased by 30 per cent to 15.7 thousand tons. With regard to *skimmed milk powder*, exports fell to negligible levels in 1992 from 8.5 thousand tons in 1991. Imports increased substantially (by 70 per cent) to 18 thousand tons in 1992.

155. Following the sharp drop in *cheese* exports from Argentina in 1991, exports declined further in 1992, partly in response to changed economic policies. Cheese imports increased from 2.5 thousand tons in 1991 to 6.3 thousand tons in 1992.

URUGUAY*

156. In Uruguay, milk production in 1992 reached 669 thousand 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. Uruguayan exports of dairy products continued to expand in 1992, primarily to other Latin American destinations.

BRAZIL

157. Milk production recovered in 1992 from the previous year's drought, increasing by about 4 per cent to 14.8 million tons. A further 2 per cent increase is expected in 1993. Milk yields in Brazil average an estimated 750 kgs. per cow, although in some regions of the country yields are as high as 2,600 kgs. Currently, the Brazilian herd numbers an estimated 18 million head. Consumption of dairy products has declined since 1988, largely as a result of poor economic conditions. Brazil reformed its tariff programme in March 1990, and subsequently reduced import tariffs on dairy products. However, in August 1992 Brazil imposed countervailing duties of 20.7 per cent on imports of milk powders from the European Community. This dispute is subject to examination by a panel established by the GATT Committee on Subsidies and Countervailing Duties.

158. Brazilian milk powder production is expected to increase by as much as 45 per cent to 80 thousand tons in 1992, following a drop in 1991. Output is expected to remain unchanged at that level in 1993. Brazilian imports decreased to 10 thousand tons in 1992, due to the continuing general decline in demand for dairy products. Imports are expected to remain at that low level also in 1993.

CHILE

159. In Chile, 1992 milk production increased by 7 per cent to 1.6 million tons. Output is forecast to increase further in 1993. As demand for dairy products continues to grow, the Chilean dairy herd is expected to increase in the coming years. In addition, milk yields per cow are expected to grow as a result of improved genetic stock, feeding and pasture improvements and more modern technology.

UNITED STATES

160. Milk production in the United States increased by 2 per cent to 68.8 million tons in 1992. Favourable weather conditions and increased yields more than offset a decline in cow numbers. Milk output in 1993 is expected to increase by about 1 per cent to about 69 million tons. This increase would occur from slowly increasing yields, as cow numbers are expected to continue to decline. Fluid milk consumption declined slightly in 1992 to 26.6 million tons. In 1993, fluid milk consumption is expected to increase by about ½ per cent to 26.8 million tons. With effect from 7 July 1993, the support price

for skimmed milk powder was increased by US\$134 per ton to US\$2,280 per ton and the support price for butter was reduced by US\$248 per ton to US\$1,681 per ton. The adjustments were made to encourage the production of milk with a higher proportion of non-fat solids.

161. Substantial quantities of United States dairy products benefited from the Dairy Export Incentive Program (DEIP) in 1992. Activity under the 1992 DEIP increased sharply, with awards being granted to cover the sale of around 155 thousand tons of dairy products (a four-fold increase over 1991), with bonuses totalling some US\$140 million. This included 113 thousand tons of skimmed milk powder, 15.8 thousand tons of whole milk powder, 20.7 thousand tons of butter oil, 2.7 thousand tons of butter and more than 3 thousand tons of Cheddar and Mozzarella cheeses. The major beneficiaries of the DEIP in 1992 were Algeria and Mexico. The United States has announced that bonuses will be available in 1993 for 205 thousand tons of milk powder to 97 countries, 48.4 thousand tons of butterfat to 76 countries, and 5.8 thousand tons of Cheddar, Feta, Gouda, cream Mozzarella and processed American cheeses to thirteen countries. These bonuses have the potential of bringing United States export prices substantially below the GATT minimum levels. United States dairy products - particularly milk powders, butter and baby food - were also provided to a number of countries in Eastern Europe and the former Soviet Union as part of food-aid shipments.

Butter and Butter Oil

162. Butter production in 1992 reached 616 thousand tons, up 1½ per cent with much of the increase reflecting the rise in milk production. However, a 10 per cent decline is forecast for 1993 as surplus milk supplies decline and output of cheese continues to grow. Butter consumption decreased in 1992 by 5½ per cent to 510 thousand tons, and a further drop was expected for 1993. New domestic food labelling rules may contribute to the increased production of lower fat versions of high milk fat content products such as butter.

163. As a result of the Dairy Export Incentive Program, United States butter/butter oil exports in 1992 increased sharply to 96.4 thousand tons compared to only 32 thousand tons in 1991. Moreover, a bill passed in the fall of 1991 mandates the export of 113 thousand tons of dairy products to Russia and other countries in that area, including 80 thousand tons of skimmed milk powder and not less than 25 thousand tons of butter. In the first half of 1992, the United States donated 16 thousand tons of butter as food aid to Poland and 21 thousand tons to Russia. In September 1992, the United States announced a fiscal year 1993 Russian food-aid package that included 16.8 thousand tons of butter, 3 thousand tons of baby food and 3.5 thousand tons of milk powder. Furthermore, United States butter and butter oil have reportedly been offered on markets in Africa and in Central and South America, in combination with allocations under the Dairy Export Incentive Program. In July 1992, 34.6 thousand tons of government-owned salted butter were sold to Russia at a price of US\$1,567.50 per ton, freight inclusive Baltic Sea ports, under a three-year credit guarantee programme with deliveries scheduled from August through November 1992.

164. In the United States, the Section 416(b) programme is an important part of a multifaceted aid package announced in November 1991 to assist the transition to a more market-oriented economy in the former Soviet Union area. The US\$165 million package was to concentrate initially on areas particularly hard hit by shortages of food supplies during the winter of 1991/1992. For the fiscal year starting October 1992, 25 thousand tons of butter/butter oil were made available under the PL 480 Program and 80 thousand tons were allocated under Section 416(b). A donation of 16 thousand tons of butter to Poland under Section 416(b) was made in fiscal year 1992. For fiscal year 1993, 80 thousand tons of butter/butter oil are to be made available under the Section 416(b) programme. In this fiscal year, the Russian food-aid package is to include 16.8 thousand tons of butter. Under the Section 416(b) programme of 1993, four agreements were signed, in April 1993, to provide butter and butter oil to

the countries of the former Soviet Union. These agreements total 24 thousand tons of butter. In May 1993, the United States announced food-aid programmes for over 60 thousand tons of butter of which some 50 thousand tons to Russia and 10 thousand tons to various Eastern European States. Bonuses for subsidized sales under the Dairy Export Incentive Program of 48.4 thousand tons of butter/butter oil to 76 countries have been announced for 1993. These donations, credit sales and export offers are causing considerable uncertainty and may add to the downward pressure on prices in the world butter market.

165. Total butter stocks in the United States were at 248 thousand tons at the end of 1991, compared to 189 thousand tons a year earlier. In June 1992, stocks reached 322 thousand tons. Stocks at the end of June 1993 are estimated at 262 thousand tons, thus remaining at a relatively high level.

Milk Powders

166. Non-fat dry milk production in 1992 declined by 3 per cent to 388 thousand tons as larger quantities of milk were diverted to cheese production. The outlook for 1993 is for a further decline in output. Domestic consumption of skimmed milk powder is estimated to have increased by 10 per cent in 1992, regaining its 1990 level of about 340 thousand tons. Its use in animal feed dropped to negligible levels.

167. United States exports of skimmed milk powder increased sharply in 1992 by 76 per cent to 76.4 thousand tons as a result of the Dairy Export Incentive Program. Sales were made, mainly from public stocks, to Algeria and to the traditional Mexican market. There were also shipments of food aid to Russia, Armenia, Albania and India.

168. Increased public stocks allowed foreign donations to be resumed in 1991. The availability of skimmed milk powder for fiscal year 1992 is 22 thousand tons under PL 480, Title II, and 75 thousand tons under Section 416(b). In November 1991, the United States announced a multifaceted aid package to the former Soviet Union. Donations of dairy products under the Section 416(b) programme are an important part of this package. The fiscal year 1993 Russian food-aid package includes 3 thousand tons of baby food and 3.5 thousand tons of milk powder.

169. Total stocks of skimmed milk powder skyrocketed to 100 thousand tons at the end of December 1991 compared to 21 thousand tons one year earlier. However, stocks at the end of September 1992 declined to 63 thousand tons and dropped further to some 37 thousand tons by the end of 1992 and then to 35 thousand tons by the end of June 1993.

170. United States whole milk powder production in 1992 was up sharply to 66 thousand tons from 54 thousand tons in 1991. Exports also increased substantially from 8.5 thousand tons in 1991 to 28.2 thousand tons in 1992, largely due to DEIP activity.

Cheese

171. United States cheese production increased by 6 per cent to 2.9 million tons in 1992 in line with the growth in commercial demand. However, slower growth is forecast for 1993. The United States market continued to show strong growth in cheese consumption with annual gains at 3 per cent in 1991 and around 4 per cent in 1992. Further growth is projected for 1993. Cheese exports from the United States increased by 26 per cent to 15.2 thousand tons in 1992.

172. United States cheese purchases totalled 129.5 thousand tons in 1992, down by 5 per cent on 1991. However, the value of cheese imports increased by 4 per cent despite this decrease in the quantity. The bulk of the imports was from the European Community and New Zealand.

Other Dairy Products

173. United States *whey powder* production increased by 7½ per cent in 1992, to 550 thousand tons and continued to increase by 5½ per cent to 192 thousand tons in the first four months of 1993.

174. In 1992, *concentrated milk* production increased in the United States to 268 thousand tons, 6½ per cent more than in 1991. Production continued to increase in the first four months of 1993, but at a slower rate.

175. United States *casein* imports at 91.3 thousand tons increased by 6½ per cent in 1992 compared to 1991. Their value increased by 24 per cent from US\$294 million in 1991 to US\$365.5 million in 1992, reflecting a substantial increase in average import prices. The main suppliers remained the European Community and New Zealand.

CANADA

176. Canada's milk production declined by 2 per cent in 1992 to 7.8 million tons, as production quotas were again reduced. For the milk marketing year beginning in August 1992, the milk quota has been cut by a further 3 per cent. The resulting 1993 production is expected to total 7.75 thousand tons. The number of dairy cows declined by 2 per cent in 1992 to 1.35 million head, and a 1½ per cent reduction is expected in 1993. Overall consumption of dairy products has been falling, but the trend has varied among products. Liquid milk consumption dropped only slightly in 1992 to an estimated 2.8 million tons, but sales of standard milk fell substantially while demand for fat-reduced milk increased.

177. As of 1 February 1993, target returns for Canadian dairy producers have been increased from Can\$49.76 per hl. to Can\$50.26 per hl. of milk containing 3.6 kgs. of butterfat. In December 1992, the Canadian Government announced that agricultural subsidies were to be cut by 10 per cent for the next two years. It was decided that, effective 1 August 1993, the dairy subsidy would be reduced from Can\$6.03 to Can\$5.43 per hl. A Committee has been formed by the Dairy Bureau of Canada and the Dairy Farmers of Canada to devise an action plan to address the challenges facing the Canadian dairy industry in the future. As the demand for butterfat declines in Canada, it is expected that in 1993/94 Canada will switch from having a surplus in solids-non-fat to a surplus in butterfat.

Butter and Butter Oil

178. Canadian butter production decreased by 3 per cent to 94 thousand tons in 1991/92. For 1992/93 a further drop is projected to about 86 thousand tons, reflecting efforts to adjust production to declining demand. Butter consumption decreased by around 5 per cent to 88 thousand tons in 1991/92, with a further 2½ per cent drop projected for 1992/93. Canadian exports decreased by 21 per cent to 9.8 thousand tons in 1992 compared to 1991. Egypt received 5 thousand tons of this total. For 1992/93, exports are forecast at 10 thousand tons, down marginally from 10.8 thousand tons recorded in 1991/92.

179. Canadian stocks reached 15 thousand tons at the end of 1991, compared to 19 thousand tons a year earlier. Stocks at the end of the dairy year 1991/92 (end July 1992) remained at 15 thousand tons but were expected to increase to around 23 thousand tons at the end of the dairy year 1992/93.

Milk Powders

180. Canadian skimmed milk powder production declined by 7 per cent to 74 thousand tons in 1991/92 due to a reduction in industrial milk quotas, and the fact that more butter was made with fluid skim-off. A sharp decline by 23 per cent to 57 thousand tons is forecast for 1992/93. Canadian domestic consumption declined further by 15 per cent in 1991/92. Consumption is expected to decline by the same order in 1992/93, resulting in annual domestic consumption of less than 32 thousand tons.

181. Exports of skimmed milk powder increased to 61 thousand tons in 1991/92 compared to 35.7 thousand tons in 1990/91. The outlook for 1992/93 is for a substantial drop in exports to only 19 thousand tons. Canada is nearing the point of self-sufficiency in skimmed milk powder and exports may fall sharply in the coming years.

Cheese

182. Production in Canada grew by 1½ per cent to 262 thousand tons in 1991/92, in response to rising domestic demand. The trend continued in 1992/93, and production is expected to increase by a further 2 per cent. Canadian exports of cheese increased by 40 per cent to 12 thousand tons in 1991, but decreased by 9 per cent to 10.9 thousand tons in 1992.

Other Dairy Products

183. *Concentrated milk* production recovered in 1991 and increased to 73.7 thousand tons, 23 per cent higher than in 1990, but was again low in 1992 at 72.6 thousand tons, a decrease by 2 per cent over 1991. Canadian exports at only 6.6 thousand tons in 1992 were halved compared to 13.9 thousand tons exported in 1991.

184. Canadian *whey powder* production recovered in 1991, increasing by 11 per cent to 64.8 thousand tons, and has continued to expand by 7½ per cent to 69.8 thousand tons in 1992.

MEXICO

185. Mexico's milk production rose to an estimated 10.7 million tons in 1992, about 5 per cent above the 1991 level. Output increased as a result of favourable weather conditions in the northern and central regions of the country, and increased production in the south. Improvements in the dairy herd have continued through imports of breeding animals. Milk output is forecast to increase further in 1993 to about 11 million tons, partly in response to increased demand and higher prices. The Mexican Government continues large-scale dairy distribution programmes as part of its social policy. Mexico has been one of the world's largest importers of milk powders in recent years, and is expected to continue in this role. Mexico has been a major beneficiary of bonuses under the United States DEIP.

186. Mexico maintained imports of dairy products at a high level, while domestic output also increased. However, in 1991, imports declined sharply to 50 thousand tons. The estimates for 1992 are that imports increased substantially to some 160 thousand tons. Mexico could still remain the largest importer of skimmed milk powder with 150 thousand tons of imports expected for 1993. It appears that Mexican plans to achieve self-sufficiency in fluid milk production will not be reached soon, and that the country will continue to depend on large imports of powder for recombination.

SOUTH AFRICA*

187. 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. A proposed new Dairy Scheme is, however, at present being considered whereby the instrument of stabilization would be determined independently by milk buyers. The minimum price for butterfat has already been abolished and the Board no longer determines the minimum producer price of milk. The dairy industry is currently in the process of replacing import control measures with tariffs.

188. Production of milk in 1992 decreased by 1½ per cent to 1.93 million tons. However, output exceeded consumption by more than 88 thousand tons, which resulted in higher than expected stocks of skimmed milk powder and butter. Milk production in 1993 is forecast at 1.95 million tons, an increase of 1 per cent over 1992. The projected increase in production together with the decline in aggregate demand may lead to a milk surplus in the magnitude of 155 thousand tons. Fresh milk consumption decreased by 1 per cent to 972 thousand tons.

189. In South Africa, butter supplies were short in 1992, and 1 thousand tons had to be imported in 1992/93. For 1993, both butter production and consumption are forecast to remain stable. Further increases in South African cheese production are estimated for 1993, in the order of 10 per cent.

EGYPT*

190. 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 traditional production of feed, genetic improvement and improvement of cattle health and fertility. In addition, attempts are being made to establish an efficient processing, storage and marketing system. More than half of milk produced in Egypt is buffalo milk. Total production of milk in 1992 reached 2.02 million tons, 4 per cent lower than the previous year. Although production is expected to recover in 1993, the growth in demand was greater and the need for imports increased.

ISRAEL

191. Milk production in Israel declined by ½ per cent to 995 thousand tons in 1992. This decrease was due to cuts in milk production quotas and subsidies in the face of a sharp decline in domestic demand for all dairy products except fresh cheese. Average milk yields in Israel, at 9,045 kgs. per cow in 1992, are the highest in the world.

ALGERIA

192. Algeria continues to be an important import market for dairy products, and in particular for milk powders and butter. In 1991, Algeria imported approximately 78 thousand tons of whole milk powder, 68 thousand tons of skimmed milk powder and 42 thousand tons of butter. Despite internal economic difficulties, imports of dairy products remained high in 1992 with approximately 80 thousand

tons of whole milk powder, 60 thousand tons of skimmed milk powder and 43 thousand tons of butter. Algeria was a major destination for United States dairy exports under the DEIP.

INDIA

193. India is the largest producer among the developing countries and has been pursuing an active programme of development of its dairy industry. About 50 per cent of milk produced in India is buffalo milk. Cow milk production in India is estimated to have increased by about 5½ per cent to 28.5 million tons in 1992. Improved pasture and fodder supplies were largely responsible for the increase in milk output. Following difficulties with deliveries to co-operative dairies in 1991, as increased amounts of milk were processed at the village level into ghee due to the increased price of that product, measures were introduced in mid-1992 to limit the expansion of private dairies and define the areas from which they can collect milk. Cow and buffalo milk production is expected to expand by a further 4 per cent in 1993 to 58.2 million tons compared to 56 million tons in 1992. Total milk output is projected to reach 61 million tons in 1995. Annual per capita consumption is forecast to increase from its present level of 58 kgs. to about 68 kgs. by that time.

194. Skimmed milk powder output in India decreased by 10 per cent in 1991 to 65 thousand tons and remained unchanged in 1992. However, the outlook for 1993 is for a recovery to 75 thousand tons.

CHINA

195. Dairy production in China continued to expand by an estimated 7 per cent in 1992, to approximately 7.5 million tons. Government policies continue to encourage further expansion, and another substantial increase in output, by about 8 per cent, is expected during 1993.

KOREA

196. In the Republic of Korea, milk production increased steadily until about 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.

PHILIPPINES

197. In late 1992, the Philippines established additional import restrictions on certain dairy products. An import tariff of 10 per cent of the c.i.f. price is being imposed, along with an additional 10 per cent on the sales value in the exporting country. The Philippines are eligible to receive US\$2 million in bonuses under the United States DEIP for purchases of milk powder.