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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, and with the aim of facilitating the work of the Council and the Committees at their meetings in March 1993.

In preparing the report, the Secretariat based itself on replies to questionnaires, other information submitted by participants and observers as well as various 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 FAO, the IDF, the UN/Economic Commission for Europe, the OECD, the Commission of the European Communities, Agriculture Canada and the United States Department of Agriculture.

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/120 - Milk Deliveries and Production - Statistical Note by the Secretariat
- DPC/PTL/W/87 - Committee of the Protocol Regarding Milk Fat - Summary Tables
- DPC/PTL/W/88 - Committee of the Protocol Regarding Certain Cheeses - Summary Tables
- DPC/PTL/W/89 - 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 15 February 1993.

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WORLD DAIRY MARKET HIGHLIGHTS

World milk production declined by 2 per cent in 1992, as production continued to drop sharply in Central and Eastern Europe and in the former Soviet Union. Production also decreased in the European Community, the Nordic countries and in Canada, as quotas, prices or other incentives to dairy production were reduced. Favourable climatic conditions led to record milk production in New Zealand and to expanded output in Australia.

World milk production in 1993 is expected to decline further, with continuing reductions in most of Europe and Canada. However, production is expected to rise again in New Zealand and the United States, while Australian production could reach a 20-year high. Further expansion is expected in many developing countries, particularly in India and China.

World production of butter declined in 1992. However, global demand for butter continued to contract at a faster rate than production. Butter exports declined and stocks remained high. World market prices for butter remained very low and there were reports of offers at levels below the GATT IDA minimum price.

World cheese production continued to expand in 1992, however not as rapidly as consumption. Consequently world cheese prices also rose. Cheese exports increased, although the demand was not the same for different varieties.

World production of skimmed milk powder declined in 1992, while that of whole milk powder remained as high as in 1991. However, trade in milk powders rose sharply in 1992, with large purchases by a number of traditional importers, most importantly Mexico. Prices on world markets rose for milk powders in 1992, in response to increased demand and the relatively weak value of the United States dollar.

The United States exported more than 155 thousand tons of dairy products in 1992, with bonuses available through the Dairy Export Incentive Program (DEIP). Bonuses totalling US\$140.3 million were provided for 128.8 thousand tons of milk powders and 23.4 thousand tons of butter and butter oil, as well as 3 thousand tons of cheese. Algeria and Mexico were major beneficiaries of the programme in 1992.

For 1993, the United States has announced the availability of bonuses for 205 thousand tons of milk powders, 48.4 thousand tons of butterfat and 5.8 thousand tons of cheese. These bonuses have the potential of bringing United States export prices below the GATT minimum levels, and for further depressing world butter prices.

Food-aid shipments of dairy products to the former Soviet Union as well as to certain Central and Eastern European countries continued to grow in 1992. Major suppliers remained the European Community and the United States.

THE WORLD ECONOMY IN BRIEF

1. World output is estimated to have somewhat recovered in 1992 from the sluggish performance of the previous year. Higher output growth in North America, and in the developing countries more than offset the slowdown in Western Europe and Japan. Growth accelerated in Asia due to the sharp increase in output of China. In Latin America, slower expansion in Mexico and other oil exporters was offset by higher growth in other countries. In contrast, the output of the region composed of the Central and Eastern European countries and the Commonwealth of Independent States (Central Europe and CIS) declined sharply due to the depression in the former Soviet Union which more than offset the end of recession in several Central European countries.

2. During the first half of 1992, import demand of North America, Asia (apart from Japan), Latin America and the Middle East sustained a merchandise trade expansion estimated at 5 per cent (in volume terms) compared to the corresponding Gulf-war depressed period of 1991. The weakness of import demand in the EC and the EFTA countries led to a slowdown in the growth of Western Europe's imports last year. Trade of Central Europe and CIS shrank in the first half of the year.

3. Data for the second half of 1992 indicate a slowdown in world trade and output growth relative to the pace of the first half, due primarily to the decline of domestic demand in Germany and Japan. Regarding prospects for 1993, the IMF warns in its October 1992 "World Economic Outlook" that "notwithstanding signs of recovery in the industrial countries, the expansion continues to be slow and uneven and the balance of risks remains on the downside".

4. The value of trade rose 5 per cent in the first half of 1992, fuelled by the recovery in the volume growth of world trade. The "valuation" effects of the modest depreciation of the United States dollar relative to the ECU and Yen (which boosts apparent world trade growth) offset the effect on the value of world trade of the decline in the average price of petroleum from its first-half 1991 peak.

5. The value of imports of North America, Asia, Latin America and the Middle East rose in the first half of the year. A sharp expansion in the level of intra-regional trade boosted Asia's import and export growth, but in Latin America and the Middle East import growth was much higher than export growth. While trade developments in Central Europe and CIS are difficult to monitor, there is little doubt that trade between the CIS Republics virtually collapsed in 1992 as the effects of payment uncertainties and inter-republican conflicts, which accompanied the dissolution of the former Soviet Union, added to the difficulties in the adjustment of the economies to market reforms. Exports from Central Europe to CIS and Western Europe also declined.

6. For Africa and the Middle East, trends in export earnings in 1992 were primarily affected by movement in primary commodity prices. After declining 17 per cent in 1991 from Gulf war-related highs, the average spot price of crude petroleum was virtually unchanged in 1992. Prices of metals and minerals were also largely unchanged. Prices for tropical beverages were severely depressed in the first three quarters of 1992, but had recovered by year-end to the levels of the beginning of the year.

OVERVIEW OF WORLD DAIRY MARKETS

Production

7. World milk production (including sheep, goat and buffalo milk) is estimated at 516 million tons in 1992, 2 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 measures 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.

8. 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 conditions and increased supplemental feeding should contribute to production remaining near 1992 levels in Australia and New Zealand. Further increases are 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.

9. Although the Baltic countries and Belarus have considerable potential as dairy producers, it is likely to take several more years before the dairy industries in those countries have been restructured and modernized, and are in a position to begin exporting large quantities of dairy products. The Baltic countries did export an estimated 20 thousand tons of butter in 1992. In the medium term, increased dairy production in Russia and the Ukraine may progressively substitute for imports, but it will most 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.

10. World butter and butter oil production declined by a further 2½ per cent in 1992, to 7.26 million tons. Large carry-over stocks in major producing countries continue to overhang the market at the same time

TABLE 1

MAJOR MILK PRODUCERS (1)
1991 estimates

(Million M.T.)

EEC (2)	103.0
USSR	96.4
USA	67.4
INDIA	54.7
POLAND	14.9
BRAZIL	13.8
JAPAN	8.3
NEW ZEALAND	7.9
CHINA	7.1
MEXICO	6.9

(1) Cow and buffalo milk
(2) Production estimate
Deliveries reported
as 97.0

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 dropped as well in the European Community, New Zealand and Canada as the industry adjusts to the trend of declining demand. World butter production is expected to decline by a further 2 per cent in 1993.

TABLE 2	
MAJOR BUTTER PRODUCERS	
1991 estimates	
(Thousand M.T.)	
USSR	1,570
EEC	1,515
INDIA (1)	1,040
USA	606
PAKISTAN (1)	298
POLAND	190
NEW ZEALAND	170
(1) Including ghee	

TABLE 3	
MAJOR CHEESE PRODUCERS	
1991 estimates	
(Thousand M.T.)	
EEC	4,745
USA	2,760
USSR	1,845
EGYPT	320
ARGENTINA	281
CANADA	261
AUSTRALIA	181
SWITZERLAND	134
NEW ZEALAND	125

11. In 1992, world production of cheese (all kinds including curd) increased by 1 per cent to 14.45 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 remained at 1991 levels. A further 1 per cent growth in world cheese production is expected in 1993.

12. 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. Further declines are expected in 1993 in virtually all major producing countries. Whole milk powder production had increased substantially in 1991 to 2.27 million tons, and remained near that level in 1992. Production declines in the European Community and other European countries were offset by strong growth in New Zealand and Australian output.

13. Whey is produced primarily as a by-product of cheese production. World supplies of whey have hence increased as cheese production has risen. Recently many countries have imposed environmental regulations preventing

whey to be disposed of as waste, further stimulating whey production notably in Australia, Canada, the European Communities and the United States.

14. 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, production increased in 1991 to 4.73 million tons, and continued to expand in 1992.

15. 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 will be further cut in March 1993. Production in the European Community is expected to decline in 1993, which may result in a slight reduction in the world production level.

Consumption

16. World consumption of milk and fresh milk products increased at about 1 per cent in 1992, continuing the trend of recent years. Total world consumption is estimated at 153 million tons. Consumption continued to show strong growth in Asia, where rising incomes and changing dietary habits have been complemented by campaigns to increase milk consumption. In contrast, consumption declined sharply in Eastern Europe and in the former Soviet Republics, where traditional high per capita demand has suffered from increased prices and reduced purchasing power, as well as problems in distribution. In many other developed countries, demand for milk products has been affected by increasing concern over dietary fat levels. Demand for low-fat milk products has grown at the expense of those with higher fat content.

17. Throughout the 1980s, butter consumption showed very little change on average, 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.

18. In contrast to butter, world cheese consumption has grown by about 2 per cent per year since the 1980s. In general, demand has grown most rapidly in those countries which already had relatively high per capita consumption levels such as in Western Europe and North America. 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.

19. 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, and most importantly in Mexico.

20. Demand for liquid whey and concentrated whey as feed for animals, and notably calves, has remained strong. There is a growing demand for whey and whey products for use in food products and in pharmaceuticals. Import demand for concentrated milk and casein also apparently increased in 1992.

Trade

21. The continuing decline in world 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 3½ per cent to 675 thousand tons. However, exports from the United States and from Canada rose sharply in 1992. The increase in United States exports is largely the result of the Dairy Export Incentive Program (DEIP) and 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 is now being offered under special credit terms or as donations.

TABLE 4

MAJOR BUTTER EXPORTERS
1991 estimates

(Thousand M.T.)

EEC (1)	251.0
NEW ZEALAND	207.5
AUSTRALIA	36.6
USA	23.0
SWEDEN	22.2
FINLAND	22.0

(1) Excluding EC-Intra Trade

TABLE 5

MAJOR BUTTER IMPORTERS
1991 estimates

(Thousand M.T.)

USSR	250.0
EEC (1)	68.0
EGYPT	64.0
ALGERIA	42.0
JAPAN	21.0
INDIA	10.0

(1) Excluding EC-Intra Trade

22. World cheese exports reached 923 thousand tons in 1992, 2 per cent higher than year earlier levels. The growth in exports came from the European Community and other Western European countries, as well as from Australia and New Zealand. These countries account for the bulk of world cheese exports. World cheese trade is expected to continue to grow in 1993, as import demand should remain strong.

<u>TABLE 6</u>	
MAJOR CHEESE EXPORTERS	
1991 estimates	
(Thousand M.T.)	
EEC (1)	478.0
NEW ZEALAND	109.1
AUSTRALIA	64.6
SWITZERLAND	61.3
AUSTRIA	30.1
(1) Excluding EC-Intra Trade	

<u>TABLE 7</u>	
MAJOR CHEESE IMPORTERS (1)	
1991 estimates	
(Thousand M.T.)	
USA	136.3
JAPAN	122.0
EEC (2)	109.0
SWITZERLAND	27.6
(1) Information not available for certain major importers	
(2) Excluding EC-Intra Trade	

23. After declining in recent years, world exports of skimmed milk powder increased by 7½ per cent to 860 thousand tons in 1992. Exports increased from the European Community, Australia, the United States and Canada, whereas New Zealand 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, particularly from Mexico and other Latin American countries, fuelled the expansion of trade.

<u>TABLE 8</u>	
MAJOR SKIMMED MILK POWDER EXPORTERS	
1991 estimates	
(Thousand M.T.)	
EEC (1)	253.0
NEW ZEALAND	151.7
AUSTRALIA	118.9
USA	43.5
POLAND	41.5
CANADA	36.1
AUSTRIA	25.0
(1) Excluding EC-Intra Trade	

<u>TABLE 9</u>	
MAJOR SKIMMED MILK POWDER IMPORTERS	
1991 estimates	
(Thousand M.T.)	
JAPAN	117.0
ALGERIA	68.0
MEXICO	50.0
BRAZIL	35.0
INDIA	15.0
PERU	12.0
ARGENTINA	10.6

24. Import demand for various whey products was stimulated in 1992 by Japan's expansion of import quotas. As further implementation of the recommendations of the 1987 Panel Report, quotas for prepared whey for infant formula, mineral concentrated whey and whey powder for animal feed will be progressively increased through fiscal year 1994. World trade in condensed milk recovered in 1992 with increased exports from the European Community and Canada. World exports of casein in 1992 are estimated to have remained near their 1991 level of 150 thousand tons. The European Community and New Zealand continued to be the major exporters while the United States was the largest importer.

Food Aid

25. 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 previous years, were estimated to have fallen below 100 thousand tons in 1990. Although food aid grew again in 1991, this was exclusively due to increased shipments to countries in Central and Eastern Europe and the former Soviet Union. 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.

26. A total of 97 thousand tons of non-fat dry milk and 105 thousand tons of butter and 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, 3.5 thousand tons of milk powder and 16.8 thousand tons of butter.

27. The European Community has been substantially involved, since early 1991, in food-aid operations in favour of Central and Eastern European countries and of the CIS. Since March 1991, the total quantities of dairy products dispatched as food aid include 55 thousand tons of skimmed milk powder, 82 thousand tons of whole milk powder, 16 thousand tons of baby food and 48 thousand tons of butter. In addition to Russia, which received a large portion 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.

Stocks

28. World stocks of butter at the beginning of 1992 were estimated at 1.07 million tons. Stocks declined by 8 per cent during 1992, to reach 988 thousand tons at year's end. At the beginning of 1992, world stocks of skimmed milk powder were at 850 thousand tons. Efforts in various countries to reduce production and stock accumulation and to dispose of surpluses were apparently successful, and stocks decreased substantially by the end of the year.

International Prices

29. During the thirteen-year period in which the Arrangement has been in operation, market prices for butter, milk powders and cheeses have gone through various phases. At the beginning of the 1980s the world dairy market was in reasonable balance. 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, while those for butter and anhydrous milk fat, although improving appreciably, did not regain their levels of the early 1980s.

30. 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 as evident by 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.

31. 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, despite the relatively low value of the US dollar. 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 IDA minimum price were reported. Prices in 1993 are not expected to increase significantly, unless there is a surprising recovery in commercial imports by Russia or some other large market. The IDA minimum price for butter has remained unchanged at US\$1,350 per ton f.o.b. since September 1989.

32. 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. With demand for cheese growing more rapidly than production, cheese prices are expected to remain high in 1993. The IDA minimum export price is US\$1,500 per ton f.o.b.

33. Prices for skimmed milk powder continued their upward trend throughout the first three quarters of 1992, and eased only slightly in the fourth quarter. Reported prices (per ton f.o.b.) in the first quarter of the year ranged from US\$1,550 to US\$1,700; in the second quarter from US\$1,600 to US\$1,900; the the third quarter from US\$1,800 to US\$2,170; and in the fourth quarter from US\$1,775 to US\$1,950. Prices for whole milk powder also increased in 1992. Increased import demand in the face of reduced production levels boosted prices. The high price levels also reflected the relatively low value of the US dollar. Prices are expected to remain high in 1993. The IDA minimum prices are US\$1,200 and US\$1,250 per ton f.o.b. for skimmed milk powder and whole milk powder, respectively.

34. At their September 1992 meetings, the Committees reviewed the minimum export prices for products covered by the Protocols. New Zealand had submitted a written 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.

35. Whey prices experienced considerable fluctuations in 1991 and varied widely between the United States and Europe. In 1992, whey prices in Europe declined continuously. In the United States, prices rose to a peak in May 1992, and declined subsequently. By the end of 1992, prices were low in both the United States and Europe. Casein prices vary widely reflecting different quality products. Following an overall drop in prices during 1991, prices for casein increased throughout 1992.

TABLE 10

International Prices (1990-1991-1992)

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

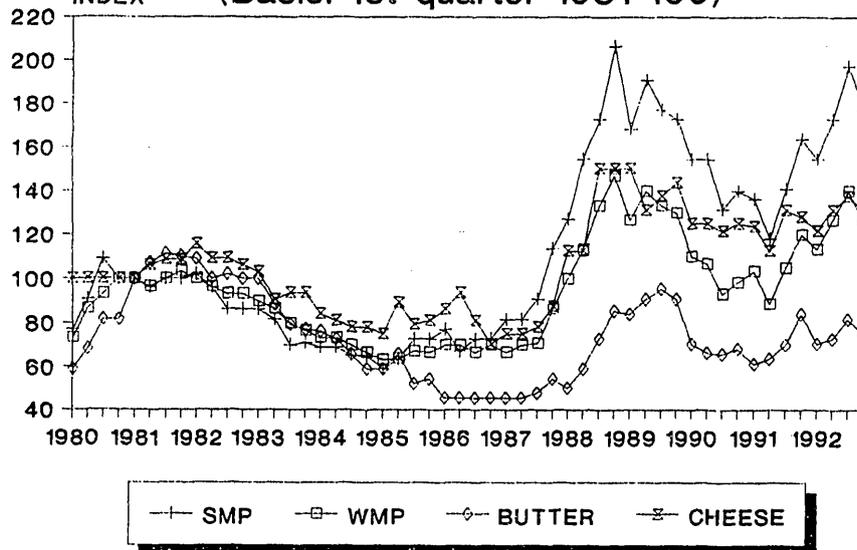
Product	1990	1991		1992			
	January-December	January-June	July-December	January-March	April-June	July-September	October-December
Skimmed milk powder ^a	1,300-1,700	1,250-1,500	1,450-1,800	1,550-1,700	1,600-1,900	1,800-2,170	1,775-1,950
Whole milk powder	1,250-1,650	1,250-1,550	1,440-1,800	1,550-1,700	1,550-1,900	1,750-2,100	1,700-1,900
Anhydrous milk fat ^b	1,625-1,950	1,625-1,800	1,675-2,250	1,700-1,950	1,625-1,950	1,625-2,200	1,625-1,950
Butter ^b	1,350-1,500	1,350-1,400	1,450-1,850	1,400-1,550	1,350-1,600	1,350-1,800	1,350-1,550
Cheddar cheese ^c	1,550-2,000	1,550-1,980	1,550-2,100	1,750-1,950	1,750-2,100	1,800-2,200	1,900-2,100

^aIn 1991, certain sales of skimmed milk powder for animal feed were made at lower prices than the ranges indicated, by derogation under Article 3:5 of the Protocol Regarding Certain Milk Powders.

^bIn 1991, certain sales of butter were made at prices lower than the ranges indicated, by derogation under Article 7:1 of the Protocol Regarding Milk Fat.

^cIn 1991 and 1992, some sales of cheese below normal export quality were made at lower prices than the ranges indicated according to Article 7:2 of the Protocol Regarding Certain Cheeses.

GRAPH 1 - DAIRY PRICE INDICES *
(Basis: 1st quarter 1981=100)



* Upper level of price range.

Dairy Policies

36. There is an almost universal trend towards increased liberalization and less governmental interference, with a reducing of subsidies and re-evaluating of pricing arrangements in response to the alteration in relative values of fat and protein in the market place. The aim is to reduce costly surpluses, for instance by restricting the dairy herd and limiting milk deliveries, or otherwise adapting the capacity to the market. The numbers of dairy farms and cows continue to decline in many countries and a re-organization of the processing industry is taking place. Structural changes are encouraged or facilitated in various ways in many countries in order to raise productivity and efficiency in the sector.

37. In line with the general aim of improving nutritional standards and diversifying agriculture, high priority continues to be given to production, marketing and consumption of milk and dairy products in agricultural and development plans of developing countries. Imports of high yielding breeding stock during recent years and the introduction of better feeding practices have resulted in increasing milk production in many developing countries.

38. Further efforts have been made to encourage improvements in product quality and to adapt the product range to prevalent trends in demand and consumption. Efforts to prevent contamination accidents have been stepped up to keep dairy products safe for human consumption.

39. Most major producing countries took steps to contain public expenditure on dairy price support in 1991 and 1992. Support prices, target prices and advance payments were maintained at previous levels or even lowered. Production quotas have been maintained or reduced and quota systems made effective through the application of two-price systems, penalty payments on production in excess of quotas and levies on production collected to provide funds for market intervention and to cover losses on exports of surpluses.

40. The dramatic and far-reaching political, social and economic changes in Central and Eastern Europe have had a strong impact on the dairy market. Changes in economic policies resulted in higher retail prices which adversely affected domestic demand. There was a consequent increase in exportable surpluses of dairy products, and particularly that of butter. The collapse of intra-regional trade and persisting balance-of-payments problems have led to exports at reduced prices and to new markets in search of convertible currencies. At the same time, commercial import demand has been reduced due to a lack of ability to pay for normal imports, particularly in Russia, which previously has been a major export outlet for butter.

41. Import demand in the Near East recovered in 1991/92 following the end of military operations in March 1991, and oil exporters elsewhere increased their purchases of milk products, i.e. Mexico, Venezuela and Algeria.

42. The potential exists for a strong rise in global productivity in the medium to long term, due to genetic improvements, ample feed supplies and technological progress. The authorization to commercialize yield-increasing hormones is still pending in major dairying countries. There is some concern that strong consumer opposition to their use could result in a possible adverse reaction on demand if extended use of hormones in dairy cows were permitted.

43. Global milk production has the potential in the medium term to increase faster than the growth in import demand and consumption of dairy products, particularly butter. This underlines the need to reduce the use of support and protection measures which have the effect of stimulating production.

44. The steadily growing demand for certain dairy products, notably cheese and dairy proteins, and the increase in their prices have entailed an upsurge in output and sales of a wide variety of dairy imitations and substitutes. In 1992, however, fewer new such products seemed to have been launched than in previous years. Imitations often contain milk components such as casein, whey and skimmed milk powder which are extensively used as ingredients in a variety of food products. In a number of new dairy products, notably light products and flavoured products, milk components, mostly fat, have frequently been replaced by something else, such as ingredients of vegetable origin.

45. The minimum export prices under the Arrangement for skimmed milk powder, whole milk powder, buttermilk powder, anhydrous milk fat, butter and certain cheeses have remained unchanged since 1989.

TABLE 11
Levels of Minimum Export Prices 1980 to 1992

(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	1,100	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

46. World milk production (including buffalo, sheep and goat milk) decreased by a further 2 per cent in 1992, to an estimated 516 million tons. World production of cow's milk alone declined at the slightly higher rate of 3 per cent in 1992, to 450 million tons. The decline is largely due to lower production levels in developed countries, particularly in Europe and in the former Soviet Union. Milk output in developing countries in general continued to increase by an estimated 3 per cent in 1992. Production rose in particular in India, China and a number of Latin American countries. No increase occurred in African production, as output in a number of countries was adversely affected by drought. Developing countries contribute about 30 per cent of total world milk production. Output also rose in the United States, New Zealand, Australia and Japan.

47. Milk production is expected to continue to fall in 1993 by 1 to 2 per cent. Government policies should produce further drops in production in the European Community, Austria, Finland, and Norway, as well as in Canada. The contraction in the former Soviet Union and in Central and Eastern Europe has largely been due to the economic and politico-social upheavals of that region, and milk production is not expected to recover in 1993. In contrast, milk production is expected to grow further in the developing countries of Asia, as well as in Japan. Latin American countries may also increase production in 1993, in response to stronger demand and government price policies. Production is also expected to expand further in the United States, New Zealand and Australia. African production is not expected to increase in 1993, as reduced herd levels will limit the benefits that might arise from improved weather conditions.

48. 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. These world-wide average levels conceal 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 as 2½ kgs.

49. Consumption levels in developing countries are gradually increasing. Rising incomes, changing food consumption habits and growing urbanization 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.

50. 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 quite 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 the European Community and other Western European countries, as well as in North America, have been showing 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.

51. The consumption of other fresh milk products, such as yogurt and other fermented or flavoured milks, has increased steadily in a number of countries and is expected to continue its upward trend. The consumption of flavoured milks is also developing rapidly. In the European Communities, fresh product output increased by 1 per cent in 1992. It is estimated that more than 30 per cent of the milk collected is now marketed in this form. This recent development clearly reflects the underlying trend in consumption. There is a potential demand for yogurt and flavoured milks in many developing countries, but consumption continues to be hampered by relatively high prices.

52. 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. It is generally believed that the role of such products in the market still remains limited in quantitative terms.

Milk Production and Policies in Selected Countries and Regions

53. 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 forecast to differ only slightly from the 1991/92 level. Farms in most regions began the season with limited grass cover, and weather conditions were unfavourable in the early months. Despite this, early season milk flows exceeded last year's levels in most areas, as farmers milked more cows and increased use of feed supplements. The total 1992/93 production level is still uncertain, and will be largely dependent on the end-of-season weather.

54. 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. Excellent seasonal weather conditions, along with increased supplementary feeding and a levelling off of cow numbers, have resulted in 1992/93 production to date in excess of that of the corresponding period of 1991/92. Total 1992/93 production may reach 7.2 million tons, the highest level since 1972. 1991/92 per capita consumption of milk remained steady at 101 litres. Regular milk now accounts for only 68 per cent of total drinking milk consumption as demand for low and reduced-fat milk increases.

55. The main policy objective of the present marketing arrangements 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.

56. In the European Community, milk deliveries in 1992 totalled 100.6 million tons, 2 per cent below 1991 levels. (EC dairy data since 1991 includes the former German Democratic Republic and Portugal. Changes in Italian dairy statistics introduced in 1992 make direct comparisons with previous years inaccurate.) The EC dairy herd continued to contract by a further 5½ per cent, to approximately 22.8 million head. Further herd reductions of about 3½ 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 yields. Consumption of fluid milk in the European Community continued to increase to an estimated 32.6 million tons. A further 2 to 3 per cent growth in consumption is expected in 1993.

57. In March and May 1992, the EC Council took decisions relating to quotas, prices and reform of dairy policy. In March, the Council extended the quota system for the 1992/93 dairy year (April 1992-March 1993), maintaining the deliveries and direct sales quotas at the same level as in 1991/92. The European Communities reserve was also maintained unchanged. In May, the Council decided to maintain the target price for milk at ECU 26.81/100 kgs. for the 1992/93 dairy year. The co-responsibility levy was extended for a further year and remains unchanged at 1½ per cent of the target price. The intervention prices for milk products also remain unchanged at their level of the previous dairy year.

58. The regulations implementing the reform decisions of May 1992 were published in August 1992. There was agreement to extend the quota system for seven years and to reduce the intervention price of butter by 2½ per cent while keeping the intervention price of skimmed milk powder (and in consequence the target price for milk) at the same level. In December, there was agreement to modify the quota system by increasing the flexibility of quota transfers and leasing in the dairy sector. Member States may allow the transfers of quotas without land transfers and may create a national reserve quota. Other decisions, which have yet to be finalized, concern the possible reduction of quotas by 1 per cent in 1993/94 and in 1994/95; provision of compensation for ten years for quota reductions and three-year incentive payments for the total and permanent discontinuation of milk production. In December there was also agreement to continue for another year the provisions permitting the importation of New Zealand butter into the European Community, albeit at a reduced level.

59. 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, deliveries are expected to remain at levels similar to 1992.

60. In Norway, milk deliveries during the first eleven months of 1992 were ½ per cent lower compared to the corresponding period of 1991. Total milk deliveries were estimated to have dropped 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 1.83 million tons in 1993, as the reduction policies continue.

61. Norwegian milk producers receive a basic price subsidy applicable equally to all output within the domestic production ceiling. Dairy farmers are paid a subsidy for each litre of milk delivered to the dairy, which varies depending upon the area in which the farmer is located. As of June 1992, the price subsidy ranges from NKr 0.11 to NKr 1.60 per litre. Consumer subsidies are paid on liquid milk consumed domestically. The subsidy has been reduced from NKr .363 per litre paid before 1 June 1992, to NKr .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.

62. Milk deliveries in Sweden decreased by 2 per cent to 3.08 million tons in 1992. However, the 1992 summer drought led farmers to replace home grown hay by forage products of a higher quality, and the expected increase in yields could result in increased milk deliveries during the first half of 1993.

63. Consumer subsidies and export subsidies for milk and dairy products have been abolished in Sweden as part of the 1990 food policy. Market prices will no longer be maintained by means of internal regulation measures 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 is also available to farmers younger than 60 years of age who cease to produce milk. Special price supports are granted to producers and dairies in northern Sweden.

64. In **Switzerland**, milk deliveries declined by 2½ per cent in the first nine months of 1992, to 2.3 million tons. Total 1992 deliveries are estimated at 3 million tons.

65. In **Japan**, production of raw milk in the first ten months of 1992 was 4 per cent higher than for the same period of 1991. Total 1992 production is estimated at 8.55 million tons, 3½ per cent higher than in 1991. The demand for drinking milk did not increase as rapidly as production. Japanese support prices for milk were not changed, however 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. 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.

66. The marked downward trend in milk production in **South Africa** continued into the early part of 1992, causing concern for the dairy industry. However, the rate of decline began to slow by June 1992, and it is expected that milk production will start to increase again by June 1993. Production of fresh milk during 1992 is estimated to have reached 1.86 million tons, 5 per cent below the 1991 level. Fresh milk consumption is expected to remain at the 1991/92 level of 987 thousand tons.

67. Milk production in **Argentina** is estimated to have increased by 5 per cent to 5.85 million tons in 1992. All restrictions on production and marketing, other than sanitary regulations, have been abolished. There is no guarantee 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 as of 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. The European Community has requested consultations with Argentina under Article XXII.

68. Structural adjustment 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 early 1992. A trend towards consumption of higher value-added products continues.

69. In Uruguay, milk production in the first half of 1992 reached 297 thousand tons, a decrease by 5½ per cent over the same period of 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.

70. 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 by the end of the plan. These objectives are being pursued through increased 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 the milk produced in Egypt is buffalo milk. Total production of milk in 1991 reached 2.3 million tons, 1½ per cent higher than the previous year. Although production is estimated to have increased further in 1992, the growth in demand was greater and the need for imports increased.

71. In Poland, cow numbers and milk production continued to decline in 1992. Milk production is forecast to decline to 12.8 million tons in 1992. This represents a 10 per cent drop compared to 1991 and a 21 per cent decline compared to the beginning of the reforms in 1990. Severe drought in 1992 led farmers to limit fodder usage in an effort to maintain basic stock levels. Annual yields per cow could therefore drop below 3,100 kgs. Milk deliveries have dropped abruptly since 1990 both in absolute and relative terms, from 72 per cent of production in 1989 to 53 per cent in 1992, and are forecast to decline further along with production. In 1992, about 40 per cent of drinking milk, 30 per cent of cottage cheeses and cream and 10 per cent of the butter production were sold at farmgate, on peasant markets or were direct deliveries to shops, hospitals, etc. Fresh milk production is expected to have fallen by 8 per cent in 1992, while long-life milk sales should remain at the level of 1991. Cream production is estimated to be unchanged at 157.6 thousand tons, whereas production of curdled milk, kephir and yogurt increased from 41.2 thousand tons to 56.6 thousand tons. Total milk consumption declined in proportion to production, a decrease of 10 per cent compared to 1991.

72. Output of milk and dairy products in Poland is forecast to drop further by 8 per cent in 1993, as a result of the continuing adjustment difficulties and the effects of the drought. Domestic production of newly introduced products such as long-life milk, ice-cream and milk desserts has been stimulated by a decline in imports and could increase in 1993. As of 17 December 1992, Poland introduced an import surcharge of 6 per cent which will be applied in addition to the 10 to 40 per cent ad valorem tariff on dairy products until the end of 1993. The import surcharge is scheduled to be reduced to 3 per cent in 1994, and phased out in 1995. Furthermore, in 1991, the government introduced an intervention scheme for butter so as to maintain a minimum purchase price for milk. Under an Association Agreement with the European Community, Poland has received expanding import quotas for butter, cheese and milk powders, which will benefit from progressively

reduced customs duties and levies. For 1992, the quotas amounted to 1 thousand tons for butter, 2 thousand tons for cheese and 3 thousand tons for milk powders, with a 20 per cent reduction in the duties and levies.

73. The current dairy situation in **Hungary** is characterized by a drastic drop in consumption, reduction of the cow herd and bankruptcies of State farms and co-operatives. Although there has been a long-term trend towards the reduction of cow numbers, the decline in the past two years has been particularly rapid, in part in response to the introduction of a slaughter premium. At the end of September 1992, Hungary had 518 thousand head, 12 per cent lower than in the corresponding period of 1991. Nonetheless, Hungary's cow herd remains by far the most productive in Eastern Europe, with average yields of 4,920 kgs. per cow in 1991. Average milk yields declined in 1992, however, as a consequence of reduced fodder availability due to drought. In 1992, total cow milk production is estimated to have fallen by 14 per cent to 2.25 million tons. Milk deliveries, which accounted for 70 per cent of total production in 1991, decreased by 9 per cent in the first three quarters of 1992 compared to same period in 1991. Per capita milk consumption dropped to 135-140 kgs. in 1992, down from 180-190 kgs. in 1989-90.

74. Hungary maintains a system of price support for delivered milk. Acquisition prices are agreed between the government and producers and processors and linked to a 15 per cent reduction in production. Although there was a 8 per cent increase in the purchase price in 1992, input costs rose by an estimated 40-45 per cent. Under the EC-Hungarian Association which took effect on 1 March 1992, reciprocal reductions of customs duties and levies are applied to certain quantities of agricultural produce, including 1 thousand tons of cheese in 1992.

75. The major share of the dairy herd in **Bulgaria** continues to be raised on State farms; around 40 per cent of dairy cows were privately owned in 1991. The government controls dairy producer prices by setting acquisition prices. However, price increases for purchased inputs and credit have exceeded the rise in producer prices. As a result, cow numbers have declined by 6 per cent, leading to a serious shortage in milk supplies. Milk production declined by 3 per cent to 2.25 million tons in 1991. In 1992, production declined by a further 6 to 7 per cent, to an estimated 2.1 million tons. On 22 December 1992, Bulgaria concluded an agreement with the European Community which is to take effect on 1 May 1993. The agreement should allow preferential import access for 2 thousand tons of Bulgarian dairy products. Bulgaria also concluded a new barter trade protocol with Russia which could secure that export market for Bulgarian dairy products.

76. **Romania** continues to suffer from shortages of milk and dairy products. The cow herd has declined dramatically since the revolution in 1989. Cow numbers were 24 per cent down in January 1992 compared to the January 1990 census data. The "disappearance" of almost a quarter of the stock is variously attributed to statistical readjustment or illegally slaughtered cattle for export. Romania may have to import cattle in order to alleviate

the shortage. Milk production fell by 10 per cent in 1991 to 3.7 million tons and further declined in 1992. As a consequence, the dairy industry is operating well below capacity. By 1992 capacity utilization was estimated at 57 per cent for milk and cheese and as low as 30 per cent for butter and milk powder.

77. The Romanian government establishes acquisition prices for milk for consumption. Price support takes the form of interest-free credit against contractual product deliveries, with the credit ceiling amounting to 50 per cent of the value. Input subsidies are also available. With effect from 1 January 1992, some temporary reductions or exemptions were introduced from the statutory import tariffs of 20 or 25 per cent. Import duties on fresh milk, cream and certain cheeses were reduced by 10 per cent; on butter by 5 per cent; and to zero on milk powders. An exemption from import tariffs for all of these products except butter has been granted until 15 March 1993. Given the shortages on the domestic market, exports of fresh milk, milk powder and butter were prohibited in 1992.

78. The Baltic countries have traditionally had large dairy sectors. The dairy herd in the Baltic countries in 1990 amounted to some 300 thousand head in Estonia, 560 thousand head in Latvia, and 850 thousand head in Lithuania. Productivity was highest in Estonia, with milk yields approaching 4,200 kgs. Estonia has had a 100-year-long tradition of pedigree breeding. Along with the difficulties arising from the restructuring of political and economic systems, the dairy sectors of these countries were affected by a serious drought in the summer of 1992.

79. Milk production in the Baltic countries fell by 7 per cent in 1991 and is estimated to have dropped by 13 per cent in 1992. Production reached only 5.1 million tcns in 1992, down from 5.84 million tons in 1991 and 6.26 million tons in 1990. In 1993, milk production is forecast to decline by 4 per cent to 4.9 million tons. In Estonia, production reportedly declined by 11 per cent from 1.2 million tons in 1990 to 1.07 million tons in 1991, and by a further 30 per cent (0.75 million tons) in 1992. In Lithuania, production declined from 3.2 million tons in 1990 to 2.9 million tons in 1991. Milk consumption in the Baltic countries is estimated to have fallen by 5½ per cent to 0.97 million tons.

80. In the eleven republics of the former Soviet Union which comprise the **Commonwealth of Independent States (CIS)**, the reduction in cow numbers and lower productivity continued. This was the result of a number of factors, including inadequate forage supplies due to last year's drought; inefficiencies in the processing and storage of feed; unprofitable production as the consequence of rising (marginal) input costs relative to (marginal) revenue; and the decline in demand for dairy products as the result of the general decline in purchasing power. In Russia, average yields per cow fell by 300 kgs. (13 per cent) in the first nine months of 1992. On the other hand, Russian authorities indicate that by the end of 1992 the process of herd reduction had stopped.

81. Milk output in the CIS declined by 12 to 14 per cent in 1992 to an estimated 82.2-84 million tons. The downward trend, which began in 1990,

is forecast to continue in 1993 with a further 9 per cent decrease in milk output. Russia accounted for more than half of the milk production of the 15 republics of the former Soviet Union, with an estimated output of 52 million tons in 1991. In the first nine months of 1992, Russian milk production decreased by 18 per cent compared to the corresponding period in 1991. Ukraine produces roughly one quarter of total CIS milk output, the equivalent of 22.7 million tons in 1991. In the first three quarters of 1992, its production dropped by 21 per cent; Kazakhstan and Belarus output dropped by 22 per cent and 19 per cent, respectively. In Russia, milk continues to be primarily channelled into butter production, while almost half of milk proteins are destined for livestock feed.

82. Consistent with the general trend in Central and Eastern Europe, milk deliveries decreased at a faster rate than milk production. In the four major milk-producing republics - Russia, Ukraine, Belarus and Kazakhstan - State purchases of milk declined by 24 to 28 per cent in the first nine months of 1992. In light of Russia's rampant inflation and declining real farmgate prices, producers were understandably reluctant to deliver to State dairies at government procurement prices. Instead, milk products were increasingly stored on farms and used as a barter commodity. Mandatory delivery provisions for State farms (Sovhozes), co-operatives (Kolhozes) and private farms were still in place in Russia, but the proportion of production to be supplied to the State was reduced to 25 to 45 per cent.

83. Per capita consumption in Ukraine was some 128 kgs. of liquid and milk beverages in 1991, down from 151 kgs. in 1990. Per capita consumption in Russia is estimated to have dropped from 360 kgs. in 1990 to 200 kgs. last year. Total milk consumption in the CIS is estimated to have fallen by 5½ per cent to 18.3 million tons in 1992. Consumer prices were liberalized in two phases in January and April 1992. Retail prices for milk and dairy products shot up, with the effect that the governments resorted to subsidization in order to maintain basic consumption levels. In 1993, milk consumption is forecast to decline by 1½ per cent.

84. Given a level of self-sufficiency estimated at 90-92 per cent, Russia is dependent on imports of milk and dairy products, primarily from the Baltic countries and Belarus. For 1990 and 1991, Russia's net imports of milk products from other republics were estimated at 2.7 million tons. A Russian national food reserve including some 6 million tons of milk and dairy products is being established, with supplies to be procured in Russia, other republics and abroad. The shortage of foreign exchange has compelled the CIS republics to resort increasingly to barter agreements. In early 1992, Russia signed an agreement with Lithuania stipulating the supply of 400 thousand tons of milk and dairy products in return for Russia's delivery of energy. As a consequence of the decline in milk production, delivery agreements between the newly independent republics were only partially fulfilled but private trade replaced some of the shortfall in inter-republic trade.

85. Information available on the dairy situation in the Czech Republic and the Slovak Republic indicates that the size of their combined dairy herds

declined in 1992 to approximately 1.5 million. (The division of the country into two separate republics became effective 1 January 1993, however most available information concerns the total for the two countries.) The 1 July census in the Czech Republic showed a decline in dairy cow numbers by 136 thousand animals to 1 million, most of them held by co-operatives. During the first ten months of 1992, milk production in the two Republics combined declined by an estimated 19 per cent compared to the corresponding period in 1991. Total milk production in 1991 was approximately 5.1 million tons, of which 3.8 million were produced by the Czech Republic. Milk consumption has been declining since 1989 with a drop from 1.4 million tons in 1991 to 1.05 million tons in 1992. In 1993, consumption is forecast to recover to 1.1 million tons. However, structural surpluses in milk and dairy products are expected to persist in 1993. Under an Association Agreement negotiated by former Czechoslovakia with the European Community, export quotas were established for powdered milk, butter and cheese with gradually decreasing tariff rates.

86. Milk production in the United States is estimated to have 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, perhaps reaching 68.9 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 $\frac{1}{2}$ per cent to 26.8 million tons.

87. Substantial quantities of United States dairy products benefited from the Dairy Export Incentive Program (DEIP) in 1992. More than 155 thousand tons of dairy products were exported in 1992, with bonuses totalling US\$140.3 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. Major beneficiaries of the DEIP program 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 13 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.

88. Canada's milk production declined by 1 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, with resulting 1993 production expected to total 7.75 thousand tons. The number of dairy cows declined by $4\frac{1}{2}$ per cent in 1992 to 1.35 million head, and a 2 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.

89. Target returns for Canadian dairy producers were increased on 1 February 1993 to Can\$50.26 per hectolitre of milk containing 3.6 kgs. of butterfat. With the addition of levies to cover carrying charges and the rebate fund for the use of dairy ingredients by food manufacturers, the final target price is Can\$50.36 per hectolitre. 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 the current dairy year, or in 1993/94, Canada will switch from having a surplus in solids-non-fat to a surplus in butterfat.

90. Milk production in Israel rose by 3½ per cent to 937 thousand tons in 1991. This increase occurred despite 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 8,400 kgs. per cow in 1991, are the highest in the world.

91. India is the largest producer among the developing countries and has been pursuing a 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 4 per cent to 29.4 million tons for the year ending 1 April 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, when 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 3½ to 4 per cent in 1993. 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.

92. 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 is expected during 1993.

93. 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 area 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 to 80 kgs. by the year 2000.

94. 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 program for purchases of milk powder.

95. **Algeria** continues to be an important 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. Algeria was a major destination for United States dairy exports under the DEIP program.

96. **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 perhaps 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 also been a major beneficiary of bonuses under the United States DEIP program.

97. Milk production in **Brazil** recovered in 1992 from the previous year's drought. Production increased 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 about 2,600 kgs. 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.

98. In **Chile**, 1992 milk production increased by 7 per cent to 1.6 million tons. 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.

BUTTER AND ANHYDROUS MILK FAT

Butter

99. World production of butter and butter oil was estimated to total 7.26 million tons in 1992, down 2½ per cent from the previous year. This decline was due primarily to excess carry-over stocks in major producing countries, low demand resulting from health concerns, and reduced output in the former Soviet Union area and in the European Community. World production in 1993 is projected to decrease further by 2 per cent to 7.11 million tons.

100. World butter consumption continued to decline substantially in 1992, mainly reflecting economic difficulties in former centralized economies, economic recession in Western economies, and prevailing health concerns. World per capita consumption, which averaged 2.7 kgs. over the last ten years, stagnated or declined slightly through 1992. In 1992, increased retail prices in Central and Eastern European countries adversely affected the consumption of butter. The switch to blended spreads and low-fat spreads (both butter and margarine) accelerated in 1992. In the short and medium term it is likely that the downward trend in world butter demand will continue and even accelerate.

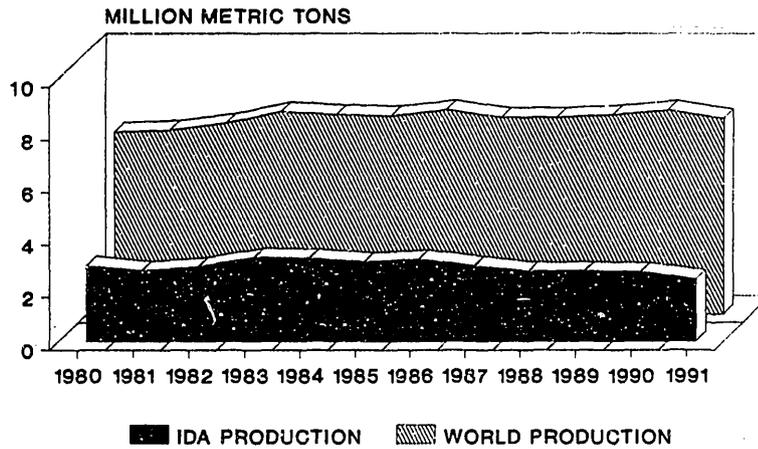
101. A continued decline in milk fat consumption in many countries led to lower import demand on one side and an increase of exportable surpluses on the other, resulting in downward price pressure. In 1991, world butter exports declined to 698 thousand tons, 3 per cent below the 1990 level. World exports are estimated to have declined further by 3½ per cent to 675 thousand tons in 1992.

102. Since 1991, there has been a substantial need for dairy products and other food items to be supplied to Russia as food aid and on other than normal commercial terms. The European Community and the United States have been the main suppliers. A third source of supply could be through triangular arrangements whereby food would be purchased by OECD countries from some exporting countries in Central and Eastern Europe for shipment to former Soviet Republics. A number of participants to the Arrangement have stressed the commercial importance of this market and sought assurances that any decision to provide food aid should be such as to cause minimum disruption to the commercial market and that the FAO "Principles of Surplus Disposal and Consultative Obligations" should be observed.

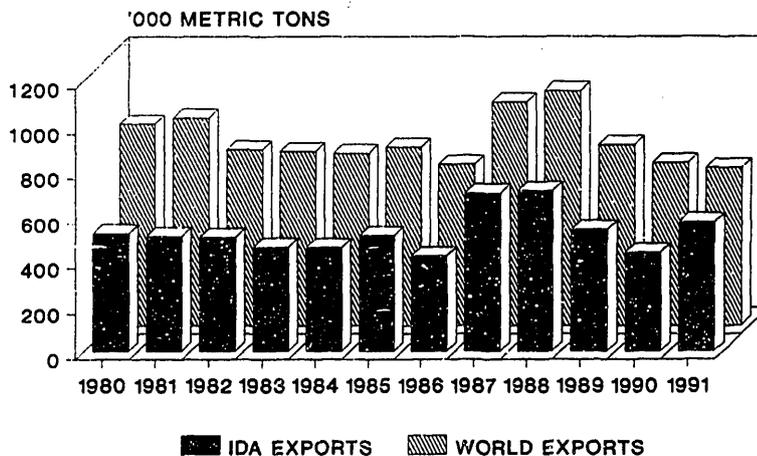
103. On 1 January 1992, total stocks of butter in the European Community, North America and Oceania amounted to 631 thousand tons, 2 per cent less than their level one year earlier. However, concerns have been expressed that stocks held by the United States, as well as the European Community, are still high. World stocks at the end of 1991 were 1.07 million tons, primarily held by the European Community and the United States. At the end of 1992, world butter stocks declined to an estimated 988 thousand tons, down by 8 per cent as compared to the beginning of the year, with decreases both in the European Community and the United States.

104. In the first half of 1992, a persisting decline in butter consumption in many countries and weak international demand led to a further drop in world butter prices to the range of US\$1,350-US\$1,600 per ton f.o.b. Few sales were reported although certain offers and sales were allegedly made at prices below the minimum export price. (The minimum export price has remained unchanged at US\$1,350 per metric ton f.o.b. since September 1989.) In the second half of 1992, prices for butter remained low at or slightly above the minimum export price, mainly due to weak commercial demand. Developments for 1993 will be primarily affected by the level of commercial and other imports into Russia. Expectations are that butter prices will remain depressed due to low demand and higher stock levels.

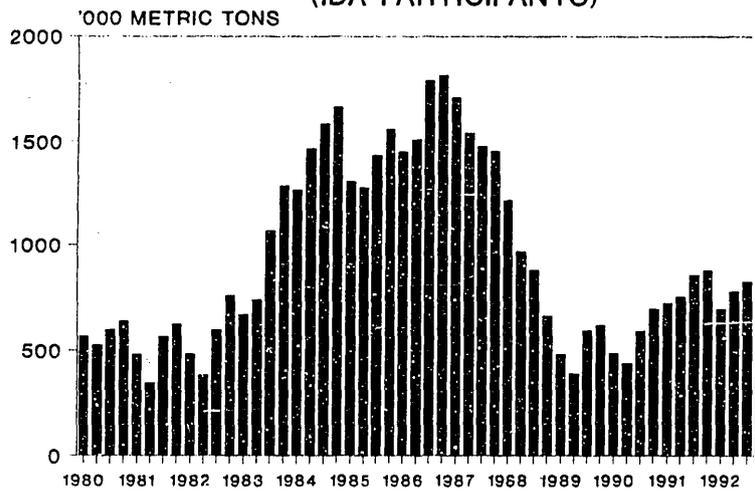
**GRAPH 2 - BUTTER PRODUCTION
1980-1991**



**GRAPH 3 - BUTTER EXPORTS
1980-1991**

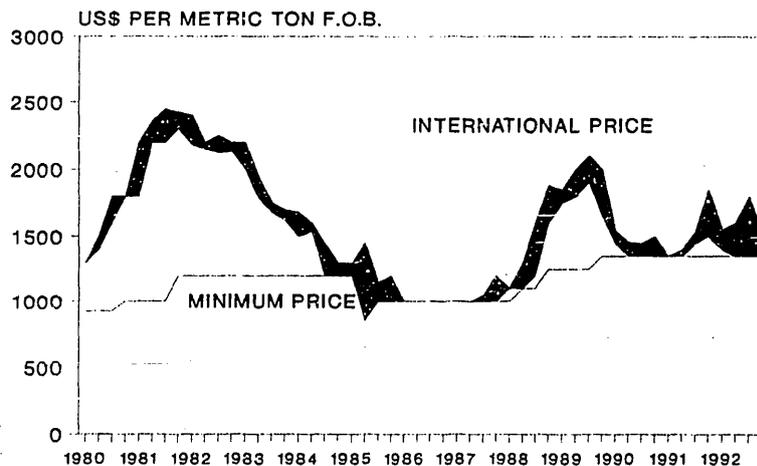


GRAPH 4 - BUTTER STOCKS 1980-1992
(IDA PARTICIPANTS) *



* Includes Austria, Canada and the US

GRAPH 5 - BUTTER PRICES
1980-1992



The Butter Situation in Selected Countries and Regions

New Zealand

105. The New Zealand the dairy industry has continued to pursue the objective of reducing the proportion of milk used in butter manufacture in face of reduced access to traditional markets. In line with industry goals, butter and butter oil production in 1991/92 was reportedly down by 3½ per cent to around 260 thousand tons despite the increase in milk output. The production of butter and butter oil is forecast to decline further in 1992/93. Nonetheless the industry remains heavily dependent on butter output which accounts for over 60 per cent of all milk fat.

106. 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 projected for 1992/93. Greater expenditure on general and branded butter promotions may help reduce the decline in butter consumption to some extent.

107. During the first nine months of 1992, New Zealand exports of butter decreased by 46 per cent to 81 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 sold in all EC countries and not just the United Kingdom. Other important outlets for New Zealand butter in 1992 were Argentina and Morocco.

Australia

108. Australian 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 production is expected to increase further by about 8 per cent to 125 thousand tons in 1992/93. Despite the pessimistic export market outlook, manufacturers' decided to increase butter production because of better relative returns for skimmed milk powder.

109. Sales of butter, butter blends and butter oil in Australia 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 are expected to remain at their previous level in 1992/93.

110. The export outlook for Australian butter is pessimistic. Butter exports are estimated at 18.6 thousand tons in 1992/93, compared with 21 thousand tons in 1991/92.

111. On 1 January 1992, stocks of butter in Oceania, at 60 thousand tons, were 40 per cent lower than a year earlier. Increased export sales by Australia and deliveries by New Zealand, mainly to Russia and Iran, helped to maintain stocks at normal levels, although Australian stocks slightly increased at the end of the 1991/92 season. However, Australian stocks are likely to remain high throughout 1992/93.

European Community

112. 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. There was a decline of almost 4 per cent in the first nine months of the year compared with the corresponding period of 1991. For the year as a whole, the estimates are for a decline in butter output of the same order, with production amounting to about 1.51 million tons compared to 1.57 million tons in 1991. The outlook for 1993 is for a further decline in butter output.

113. Butter from intervention storage continues to be available at a discount price for non-profit-making 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 and 1992, 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 360 thousand tons in 1992. Total European Community consumption of butter is expected to decline annually by about 2 per cent, although this is not apparent from the information available for the first nine months of 1992. The projected decline is due to higher prices, increased supply of imitation products in some member States and dietary concerns. Current per capita butter consumption in the European Community is about 7 kgs., but is expected to decrease sharply in the coming years. Consumption of margarine seems to be stable at a level of about 4½ 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 reduced price butter sales to recipients of social security has been reintroduced.

114. European Community exports of butter to third countries increased by 124 per cent amounting to 251 thousand tons in 1991, the main destination being the former Soviet Union. However, exports of butter during the first nine months of 1992 decreased by 36 per cent to 122 thousand tons. The European Community imports of butter decreased by 18 per cent to 31 thousand tons in the first nine months of 1992, largely supplied by New Zealand. The quota for New Zealand butter has been reduced to 51.8 thousand tons for 1993, compared to 55 thousand tons for 1992.

115. Butter stocks at the end of 1991 were at 302 thousand tons. In 1992, about 120 thousand tons of butter were released from intervention stocks for industrial use, food aid and other exports. In October 1992, butter stocks stood at 328 thousand tons compared to 475 thousand tons a year earlier. Stocks declined further throughout the remainder of 1992.

Other Western European Countries

116. In the Nordic countries, the decrease in butter production accelerated in 1992. Production in the first nine months of the year fell by 8 per cent in Finland, 10 per cent in Norway and 11 per cent in Sweden, compared to the same period in 1991. Consumption in the Nordic countries

continued to decline sharply in 1992, particularly in Norway and Finland. Finnish butter exports, as well as those of Norway and Sweden, continued to decrease in 1991 and 1992. The outlook for 1993 was for further decreases in exports.

117. In **Switzerland**, a number of measures have been taken to promote butter consumption, including by way of subsidies. Consumption has remained stable in 1992.

Central and Eastern Europe

118. Butter production in **Poland**, which had already dropped 30 per cent in 1991, continued to decline sharply in 1992. In the first three quarters of 1992, output was 119.5 million tons a decrease of almost 22 per cent compared to the same period in 1991. Butter consumption declined as sharply as production, reaching 122 million tons in the first nine months of 1992. Butter exports subsided in 1991 and 1992, and butter stocks began to increase, after having been non-existent in the latter three quarters of 1990. Commercial butter imports in comparison to domestic production were small both in 1991 and 1992 (up to the third quarter), but showed an increase in 1992.

119. Butter production in **Hungary** dropped by 31 per cent in the first three quarters of 1992 compared to the corresponding period in 1991. Consumption continued to decline to 14 thousand tons in 1992, 28 per cent below the 1991 level. Exports fell by 70 per cent during the first three quarters of 1992. Hence, on a calendar year basis, butter output and exports will be significantly lower than the 1991 levels, which were 25,000 tons for production and 10,200 tons for exports.

120. In **Bulgaria**, butter production almost halved in 1991 to 12 thousand tons, and declined further in the first three quarters of 1992 to 7.1 thousand tons. Domestic consumption dropped by 40 per cent to 13 thousand tons in 1991, followed by a further 30 per cent decline in the first three quarters of 1992. Exports were nil.

121. Butter production in **Romania** has fallen sharply since the revolution in 1989. By 1992, the butter output had halved compared to 1989. In 1992, Romania experienced yet another drop in production. In the first three quarters of 1992 production was 16.3 thousand tons, 13 per cent down compared to the same period in 1991. The decline in output was, however, more than offset by food aid donated by the United States. The United States supplied some 7.5 thousand tons of butter, with the effect that butter consumption in 1992 is likely to have exceeded consumption in 1991. Food aid seems to have replaced commercial imports, which declined from 6 thousand tons in 1991 to almost zero in the first three quarters of 1992. Butter exports were subject to a prohibition in 1992, whereas in 1988 and 1989 Romania exported butter in the magnitude of 18 thousand tons.

122. In the **Czech Republic** and the **Slovak Republic**, combined butter production is estimated to have decreased by 11 per cent to 118 to 120 thousand tons in 1992. Available data on consumption are contradictory

with some sources reporting a 7 per cent increase in butter consumption to 93.4 thousand tons, whereas others report consumption remaining stable at 139 thousand tons. Butter exports in 1992 are estimated at 39 thousand tons, of which 16.8 thousand tons were subsidized by the Czech and Slovak governments. The Fund for Market Regulation of the Czech Republic has allocated funds to subsidize the export of 9.3 thousand tons of butter in 1993. There were no imports of butter; the Czech and Slovak governments instituted import levies on certain commodities in January 1992.

Former Soviet Union

123. Butter production in the CIS continued to decline in 1992, but less steeply than the reported 13 per cent drop of 1991. Production in 1992 has been variously estimated at 1.3 to 1.7 million tons. A further 4 to 5 per cent decline in production is expected in 1993. Butter production in Russia is estimated at 726 thousand to 767 thousand tons in 1992. The second largest butter producer in the CIS, Ukraine, had an estimated production of 376 thousand tons in 1991, i.e. roughly half of the Russian output. Operation of pricing and subsidization mechanisms in Russia and most of the other Republics has made the manufacture of butter more profitable than other dairy products. Butter consumption in the CIS fell by an estimated 14 thousand tons to 1.71 million tons in 1992. Nonetheless, average per capita consumption of butter remains relatively high by international standards. It has been reported that Russian imports of butter, primarily through food aid or concessional arrangements, totalled 350 thousand tons in 1992. Butter exports from the CIS were reported at 20 thousand tons.

124. In the Baltic countries, preliminary assessments of the butter market situation indicate a 10 per cent decrease to 120 thousand tons. The 1993 forecast is for a further decline of 8 per cent to 110 thousand tons. Consumption stabilized at some 90 thousand tons and is forecast to remain at this level in 1993. Exports were in the magnitude of 20 thousand tons: destinations included the CIS and, possibly Finland, Estonia's major trading partner.

Other IDA Participants

125. Japanese imports of butter reached 21 thousand tons in 1991. In the first nine months of 1992, only 3 thousand tons were imported, less than one third of imports in the first nine months of 1991.

126. In South Africa, butter supplies were short in 1992, and it was expected that 1 thousand tons would have to be imported in 1992/93.

127. Exports of butter by Argentina declined sharply from 7.4 thousand tons to 2.9 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 the first quarter of 1992, exports of butter were nil while imports increased from 160 tons to 1.3 thousand tons as compared to the corresponding quarter of 1991. Argentina was most likely a net importer also in 1992.

North America

128. Butter production in 1992 in the United States is estimated at 615 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 1991 by 6½ per cent to 540.7 thousand tons and a further drop was estimated for 1992. New domestic food labelling rules may contribute to the increased production of lower fat versions of high milk fat content products such as butter.

129. United States butter and butter oil exports during the first ten months of 1992 increased sharply to 78.3 thousand tons compared to only 20 thousand tons in the corresponding period of 1991. Data for 1992 as a whole may show a substantial increase in exports to some 100,000 tons as a result of the implementation of the Dairy Export Incentive Program. Moreover, a bill passed in the fall of 1991 mandates the export of 113,000 tons of dairy products to Russia and other countries in that area, including 80,000 tons of skimmed milk powder and not less than 25,000 tons of butter. In the first half of 1992, the United States donated 16,000 tons of butter as food aid to Poland and 21,000 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. Bonuses for subsidized sales under the Dairy Export Incentive Program of 48.4 thousand tons of butter and butter oil to 76 countries have been announced for 1993.

130. 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 1992 are estimated at 225 thousand tons, thus remaining at a relatively high level.

131. 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 90 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 3 per cent drop projected for 1992/93. Canadian exports decreased by 55 per cent to 5.5 thousand tons in the first three quarters of 1992 compared to the same period of 1991. Egypt received 5 thousand tons of this total. For 1992/93, exports are forecast to drop by 25 per cent to 9 thousand tons.

132. 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 by the end of July 1993.

Anhydrous Milk Fat

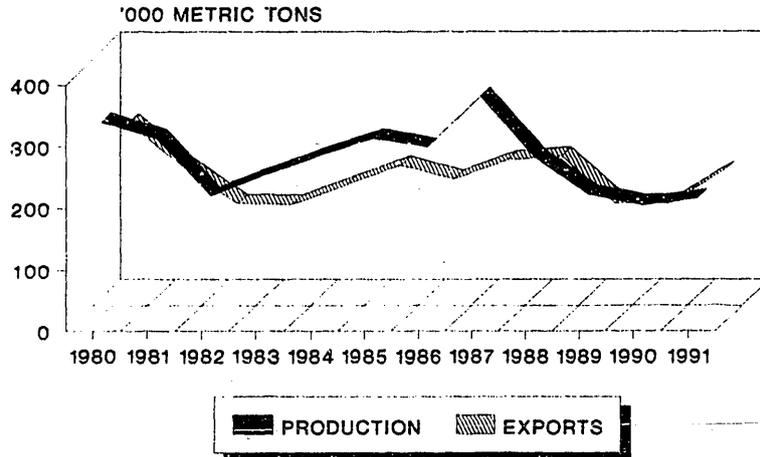
133. Output and exports of **Australia** and the **European Community** were higher in 1992 than in the previous year. **New Zealand** registered decreases in both production and exports in 1992.

134. **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 the first nine months of 1992 amounted to 4 thousand tons, down from 7 thousand tons in the corresponding period of 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 CIS. 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.

135. 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 in October 1992, 25 thousand tons of butter and 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) is to be made in fiscal year 1992. For fiscal year 1993, 80 thousand tons of butter and 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.

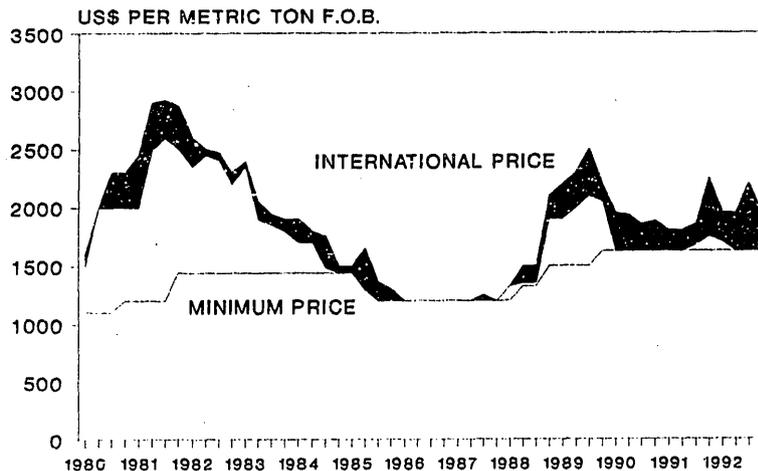
136. In the first half of 1992, **international** prices of anhydrous milk fat continued to weaken, ranging between US\$1,625 and US\$1,950 per ton f.o.b. Prices remained depressed in the second half of 1992, ranging between US\$1,625 and US\$2,200 per ton f.o.b. Certain sales had reportedly been made at prices below the minimum export price. 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 6 - ANHYDROUS MILK FAT
PRODUCTION AND EXPORTS 1980-1991 *



* IDA participants only

GRAPH 7 - ANHYDROUS MILK FAT PRICES
1980-1992



CHEESE

137. World production of cheese (all kinds, including curd) was estimated to have totalled 14.45 million tons in 1992, 1 per cent more than in 1991. In most countries, cheese production was encouraged by a generally favourable outlook and was forecast to grow further by about 1 per cent in 1993. However, production of cheese in developing countries, which accounts for about 12 per cent of total world output, hardly changed in 1992.

138. World per capita cheese consumption grew at an average annual rate of around 2 per cent during 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. A notable growth in cheese consumption can be observed in North Africa and the Middle East since 1990.

139. World exports of cheese were up 2 per cent for 1992 and reached some 923 thousand tons. The outlook for 1993 is for a further growth of the same order. The international cheese market is dominated by exports from Western Europe and Oceania, which together account for over 80 per cent of world cheese exports.

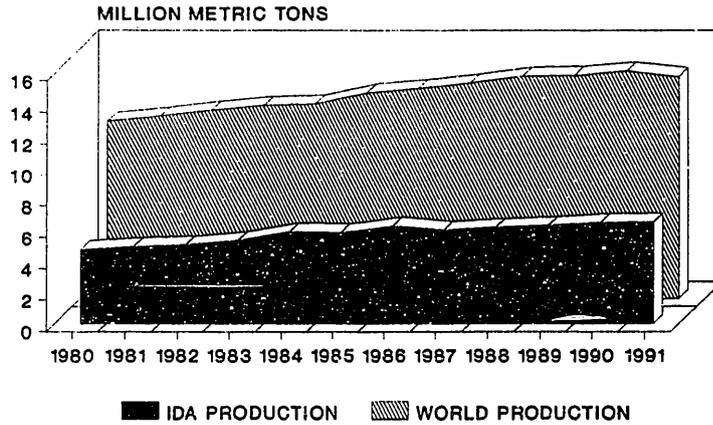
140. Developed countries remain the main importers of cheese, particularly Japan and the United States. However, import demand continues to grow in many developing countries, particularly in the Middle East. Imports into Iran, an important market in the region, began to recover in 1991 following the disruptions caused by the Gulf War.

141. On 1 January 1992, world cheese stocks were more than 3 per cent lower than a year earlier, and a further decline of 4 per cent was estimated for the end of 1992. With the exception of the United States and 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. The inclusion of Cheddar cheese in the Dairy Export Incentive Program might dampen the growth also in United States cheese stocks in the immediate future.

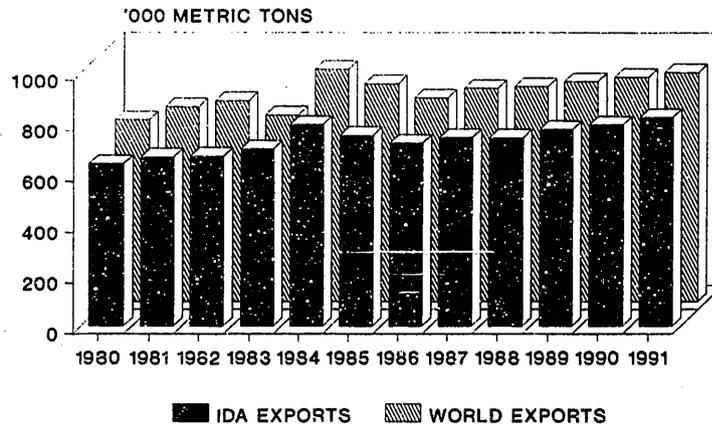
142. International Cheddar cheese prices continued to increase during 1992, when they were in the range of US\$1,750 to US\$2,200 per ton f.o.b. For most of the cheeses covered by the Protocol, the market situation is stable with expectations of steadily increasing demand. Prices remain well above the IDA minimum export price. The outlook is positive but could be adversely affected by developments in the butter market. The IDA minimum export price has been maintained unchanged at US\$1,500 per ton f.o.b., a level established in September 1989.

143. The expansion in demand and consumption of cheese has encouraged the development and production of imitation cheeses, but such products still captured only a marginal market share in 1991 and 1992. 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.

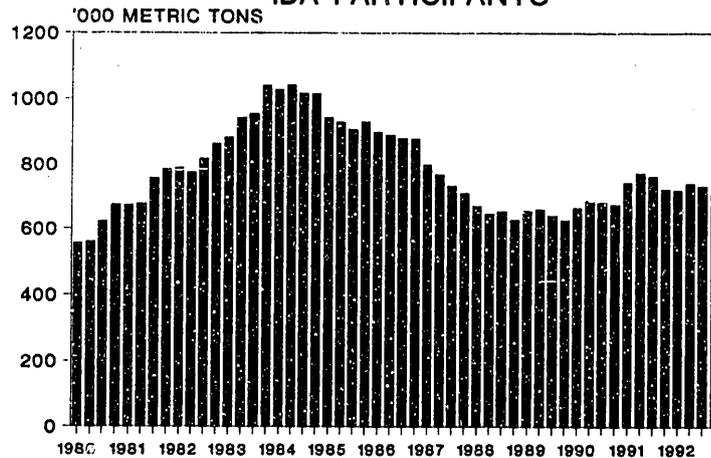
**GRAPH 8 - CHEESE PRODUCTION
1980-1991**



**GRAPH 9 - CHEESE EXPORTS
1980-1991**

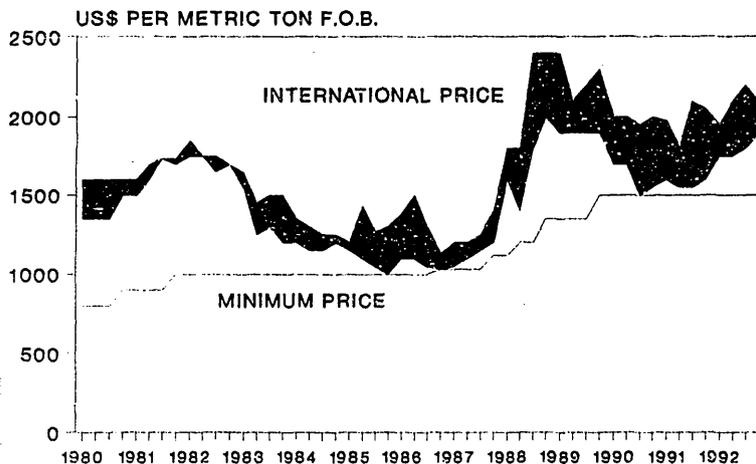


**GRAPH 10 - CHEESE STOCKS 1980-1992
IDA PARTICIPANTS ***



* Includes Austria, Canada and the US

**GRAPH 11 - CHEESE PRICES
1980-1992**



The Cheese Situation in Selected Countries and Regions

New Zealand

144. 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 the first nine months of 1992, cheese production increased 6½ per cent to 65 thousand tons and for the year as a whole, a greater increase has been estimated. Much of the increased output ended up in stocks as export markets were weak. A reduction in cheese production is expected in 1993.

145. New Zealand exports increased a further 6 per cent in the first nine months of 1992, with the main outlet remaining Japan. New Zealand made an advance notification of sales of cheese under derogation in 1992 and had, until August of that year, 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.

Australia

146. 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. However, cheese production in 1992/93 is expected to be slightly less than in 1991/92, reflecting lower relative returns and limited export opportunities. The forecast for cheese production is 195 thousand tons, compared with 197 thousand tons in 1991/92.

147. There was an appreciable recovery in Australian cheese exports in 1991/92 when they amounted to 66.4 thousand tons. Exports to Japan 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. However, the growth in Japanese import demand has eased in line with increased Japanese milk production and the downturn in the Japanese economy.

European Community

148. Cheese production in the European Community grew by almost 6 per cent in the first nine months of 1992. For the year 1992 as a whole, a considerable increase is expected. The outlook for 1993 is for a further growth in cheese output based on continued increase in domestic and export utilization.

149. Cheese consumption expanded by about 2 per cent in 1992, and is expected to grow by another 2 per cent in 1993. The great variety of cheese available and further product diversification (i.e. low-fat cheeses) are the main reasons for this development.

150. In the first nine months of 1992, European Community cheese exports reached 345 thousand tons, 3½ per cent more than in the corresponding period of 1991. For 1992 as a whole, exports increased by about 3 per cent. Imports, which were mostly from Switzerland, recovered to 86 thousand tons in the first three quarters of 1992, an increase of about 9 per cent.

Other Western European Countries

151. Little change or further declines in cheese production are estimated in Finland, Norway, Sweden and Switzerland. Cheese consumption continues to increase in most of the Western European countries. Exports by Switzerland recovered appreciably in 1992, increasing by almost 10 per cent in the first nine months of the year compared to the same period of 1991. Swiss imports of cheese declined by 3 per cent to 19.5 thousand tons in the first nine months of 1992 compared to the same period of 1991. Exports of Finland fell to 26 thousand tons in 1992, down by 7 per cent compared to 1991. Norwegian cheese exports recovered strongly in 1992, increasing by almost 17 per cent to 26 thousand tons.

Central and Eastern Europe

152. Polish cheese production has declined continuously since 1990. In the first three quarters of 1992, production at 72.8 thousand tons was 14 per cent lower compared to the period under consideration in 1991. Production of cottage and spread-type cheeses decreased only slightly while the production of cream and milk desserts rose as a result of more favourable prices. Cheese exports were negligible compared to output but increased in 1992. Polish cheese imports went up from minute quantities in 1990-91 to 16 thousand tons in the first three quarters of 1992. Moreover, cheese stocks were reduced in response to the rising demand for cheese products. In contrast to the decline in butter and milk powder consumption, cheese

consumption in the first nine months of 1992 increased by 14 per cent over the corresponding period in 1991. Consumption of cream cheeses increased while that of cottage cheeses fell slightly.

153. **Hungary's** cheese production showed another decrease in 1992, a trend which continues the fall in production of 1991. In 1991, output had dropped to 52 thousand tons, a decline of 18 per cent. The fall in production equalled 14 per cent in the first three quarters of 1992, compared to the same period in 1991. Domestic demand remained stable in the first three quarters of 1992 compared to the corresponding period in 1991. Market equilibrium was achieved by sharply declining exports in the first three quarters of 1992 (down 38 per cent) and declining stocks. Exports in 1991 amounted to 14.9 thousand tons.

154. Cheese production in **Bulgaria** declined by 4 per cent in the first nine months of 1992 to 72.6 thousand tons, after an 18 per cent drop in output in 1991. Consumption data show an increase of as much as 60 per cent in first three quarters of 1992 compared to the same period in 1991. This has resulted in a decrease in cheese stocks. Exports decreased by 20 per cent to 16.5 thousand tons in that period - nonetheless, this represented 22 per cent of production. The major destinations were Turkey and Yugoslavia. Imports were negligible.

155. In **Romania**, cheese production dropped by 28 per cent in 1991 and declined by another 35 per cent in the first three quarters of 1992. As there was no compensatory increase in imports nor food aid, nor a reduction in exports or stocks, cheese consumption declined as steeply as production.

Former Soviet Union

156. Cheese production in the CIS (including curd and fresh cheese) is estimated to have fallen from 2.1 million tons in 1990 to 1.89 million tons in 1991. Cheese production is concentrated in the Republics of Russia, Ukraine and Belarus. Per capita cheese consumption in 1992 is estimated at 6.8 kgs. for the CIS as a whole, although there are substantial differences among regions. Russia's cheese imports in 1991 are estimated in the range of 9 to 13 thousand tons.

157. In the Baltic countries, cheese production is estimated to have declined by 21 per cent to 50 thousand tons in 1992. Forecasts indicate that the Baltic countries will maintain this level of production also in 1993. Cheese consumption apparently exceeded production by some 10 thousand tons. This situation is forecast to continue in 1993.

Other IDA Participants

158. In **Japan**, domestic demand for cheese has nearly doubled in ten years and a further 5 per cent increase is expected in 1993. Japanese cheese imports in the first nine months of 1992, at 92 thousand tons, were 4½ per cent higher than for the corresponding period of 1991. The European Community, New Zealand and Australia remained the main suppliers.

159. For most other participating countries, a significant increase in production was recorded in 1992. Further increases are estimated for 1993, particularly South Africa (up 10 per cent). Following the sharp drop in cheese exports from Argentina in 1991, exports declined further in 1992, partly in response to changed economic policies.

North America

160. United States cheese production increased by 7 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 marginally in 1991 to 12.1 thousand tons and increased again by 27 per cent to 12.6 thousand tons in the first ten months of 1992.

161. United States cheese purchases totalled 98.3 thousand tons in the first ten months of 1992, down by 9 per cent on the corresponding period of 1991. However, the value of cheese imports remained unchanged despite this decrease. The bulk of imports was sourced from the European Community and New Zealand.

162. Production in Canada grew by 1½ per cent to some 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 38 per cent to 11.9 thousand tons in 1991 and apparently remained at that level in 1992.

MILK POWDERS

Skimmed Milk Powder and Buttermilk Powder

163. In 1992, world production of skimmed milk powder reached 3.55 million tons, an 8 per cent decline from 1991. Decreases occurred in a number of countries, including the European Community and New Zealand. 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. World consumption of skimmed milk powder declined in 1991. With smaller supplies and firming world prices, consumption is estimated to have dropped further in 1992.

164. Following a decline in world exports of skimmed milk powder in 1991, exports recovered in 1992 to about 860 thousand tons. Canadian exports reached a record level in 1992, but are expected to be far below that level in 1993. Strong growth in exports are also estimated from the United States and the European Community for 1992, as traders reacted to

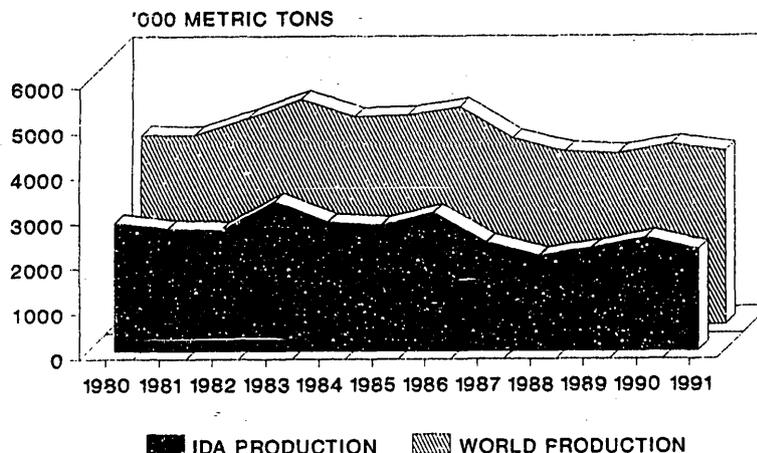
the upturn in world skimmed milk powder prices and increased demand from traditional customers, especially in Mexico and other Latin American countries. In 1991, certain sales of skimmed milk powder for animal feed were made at prices below the minimum export prices, but no such sales were reported in 1992.

165. 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 of 167 thousand tons in 1984, 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.

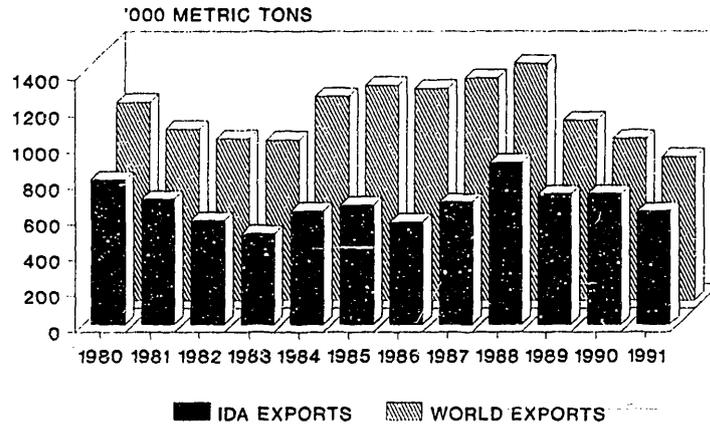
166. Despite efforts by major producers to slow down the accumulation and disposal of surplus stocks, world stocks were at around 850 thousand tons at the end of 1991. However, world stocks decreased substantially in 1992, reflecting successful efforts to reduce production and increase exports. By the end of 1992, stocks were low in all major producing countries.

167. In the first half of 1992, world market prices for milk powders, and particularly for skimmed milk powder, continued to increase. This was primarily due to large purchases by major importers, notably Mexico, Venezuela and Algeria. In the first quarter of 1992, reported prices increased to the range of US\$1,550-US\$1,700 per ton f.o.b., and further to the range of US\$1,600-US\$1,900 per ton f.o.b. in the second quarter. The market remained firm in the latter half of 1992. Reported prices in the third quarter ranged between US\$1,800 and US\$2,170 per ton f.o.b., and for the fourth quarter, between US\$1,775 and US\$1,950 per ton f.o.b. Minimum export prices for both skimmed milk powder and buttermilk powder have been maintained unchanged at US\$1,200 per ton f.o.b. since September 1989, as no consensus has yet been reached on a proposal to raise them.

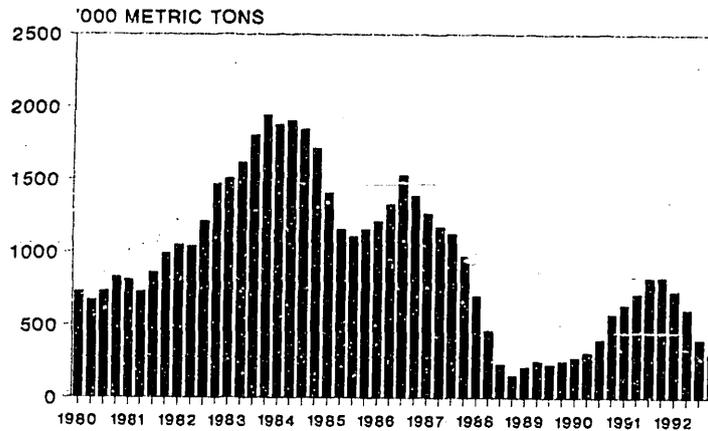
GRAPH 12 - SKIMMED MILK POWDER
PRODUCTION 1980-1991



GRAPH 13 - SKIMMED MILK POWDER EXPORTS 1980-1991

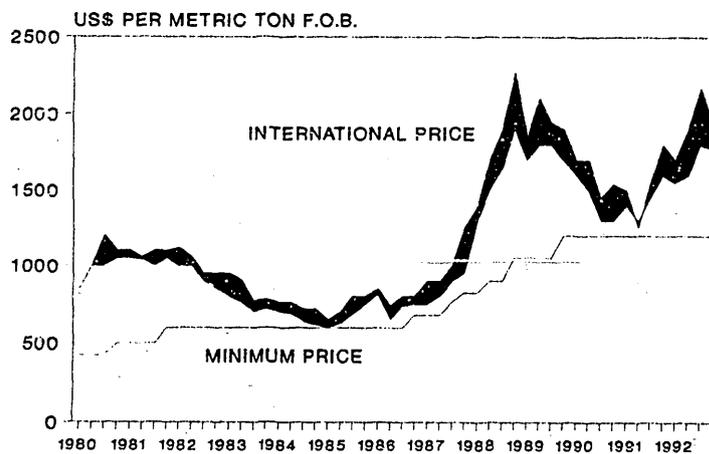


**GRAPH 14 - SMP STOCKS 1980-1992
IDA PARTICIPANTS ***



* Includes Austria, Canada and the US

GRAPH 15 - SKIMMED MILK POWDER PRICES 1980-1992



The Skimmed Milk Powder Situation in Selected Countries and Regions

New Zealand

168. Production of skimmed milk powder in New Zealand dropped by 10 per cent to 132 thousand tons in 1991/92 and remained at a low level in the first three quarters of 1992. In the first nine months of 1992, exports were down to only 88 thousand tons, 20 per cent less than in the first nine months of 1991. The main destinations were countries in Southeast and Eastern Asia and Mexico. Buttermilk powder exports increased in the first nine months of 1992.

Australia

169. In Australia, the 1991/92 production of skimmed milk powder and buttermilk powder amounted to 149 thousand tons, up by about 3 per cent from 1990/91. The outlook 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 135 thousand tons in 1992/93, compared with 121 thousand tons in 1991/92, reflecting stronger demand coupled with a sustained recovery in prices.

170. In Oceania, stocks remained at normal levels throughout 1991. Stocks were low at the end of September 1992, with supplies very tight.

European Community

171. Output of skimmed milk powder in the European Community fell in 1992 to 1.15 million tons, a decrease of 20 per cent since 1991. Production of skimmed milk powder fell more sharply than milk deliveries. The decline in production was due not only to the reduction in deliveries to dairies but also to the considerable increase in the proportion of milk processed to liquid milk, fresh products and especially cheese. A further substantial drop in skimmed milk powder production is expected for 1993.

172. Total domestic consumption increased by 13½ per cent to 1.09 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 led to a fall in demand from the feed compound industry of 7 per cent during the first nine months of 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.

173. Following a 24 per cent decline in 1991, European Community exports increased by 50 per cent to an estimated 380 thousand tons in 1992. Since the early 1980s, the European Community has been reducing the share of milk products in food aid, replacing it by larger supplies of vegetable foods, notably cereals. Annual allocations of skimmed milk powder available for food aid were reduced from 150 thousand tons at the beginning of the decade

to 83 thousand tons in 1991. In 1991, actual European Community food-aid deliveries amounted to 61 thousand tons of skimmed milk powder compared to 68 thousand tons in 1990. The food-aid programme for 1992 included 53 thousand tons of skimmed milk powder, a decrease by 36 per cent in relation to the 1991 programme. Since early 1991, the European Community has been substantially involved in food-aid operations in favour of Central and Eastern European countries and of the CIS. Since March 1991, the total quantities of dairy products dispatched as food aid include 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 were major beneficiaries. The bulk of these deliveries were carried out during the second half of 1991 and the first half of 1992.

174. 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 and were at 421 thousand tons at the end of 1991, compared to 333 thousand tons a year earlier. However, 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 subsequently declined further to less than 80 thousand tons in October 1992, compared to more than 500 thousand tons a year earlier. Stocks continued to decline throughout the remainder of 1992 and in early 1993. They amounted to only 37 thousand tons at the end of January 1993 compared to 400 thousand tons a year earlier.

Central and Eastern Europe

175. Following a 15 per cent drop in the production of skimmed milk powder in Poland in 1991, it appears that output stabilized in 1992. Consumption during the first three quarters of 1992 fell by 40 per cent compared to the same period in 1991. Exports rose sharply to 64.8 thousand tons in the first three quarters of 1992, an increase of 77 per cent compared to the same period in 1991.

176. In Hungary, skimmed milk powder production in the first three quarters of 1992 amounted to 8.4 thousand tons, a decrease of 37 per cent compared to 1991. Exports totalled 8.3 thousand tons in 1991. Exports in the first three quarters of 1992 were 16 per cent below the previous year's volume for the corresponding time period. Consumption dropped by 68 per cent in the first three quarters of 1992 compared to the same period in 1991, and for 1992 as a whole will be well below the 1991 level of 10.1 thousand tons.

177. Production of skimmed milk powder also decreased in Romania and Bulgaria. No trade in the product was reported for either country. In the Czech Republic and the Slovak Republic, preliminary estimates indicate a continuing structural surplus of total milk powder production in 1992 but converging supply and demand trends. Their combined production decreased by 15 per cent to 159 thousand tons while consumption reportedly rose by

35 per cent to 86 thousand tons. Milk powder exports are estimated at 92 thousand tons in 1992, of which 9 thousand tons were subsidized by the Fund for Market Regulation. For 1993, the Czech Republic has allocated funds under this programme to subsidize the export of 5.3 thousand tons of milk powder.

Other IDA Participants

178. In Japan, production increased by 15 per cent to 156 thousand tons in the first nine months of 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. 1991 imports of skimmed milk powder into Japan recovered substantially and reached a new record of 117 thousand tons. In the first nine months of 1992, imports were down by 10 per cent compared to the first nine months of 1991. For the year 1992 as a whole, imports are estimated to be lower than in 1991.

North America

179. In the United States, non-fat dry milk production in 1992 is estimated to have declined by 2½ per cent to 390 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 expected to have increased by 10 per cent in 1992, regaining its 1990 level of about 340 thousand tons. The use in animal feed dropped to negligible levels.

180. United States exports of skimmed milk powder increased to 43.5 thousand tons in 1991 as a result of the implementation of the Dairy Export Incentive Program. Under this programme alone, 113.1 thousand tons of skimmed milk powder were exported in 1992. 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. Total United States exports in 1992 are estimated to be 120 thousand tons, more than twice their 1991 level.

181. For fiscal year 1992, 22 thousand tons of skimmed milk powder have been made available for food aid 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 included 3 thousand tons of baby food and 3.5 thousand tons of milk powder.

182. Public stocks of skimmed milk powder skyrocketed to 129 thousand tons in early May 1991, and at the end of December 1991 stood at 100 thousand tons compared to 21 thousand tons one year earlier. However, stocks at the end of September 1992 declined to 63,000 tons and were estimated to have dropped further to some 55,000 tons by the end of 1992

183. Canadian 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.

184. In Canada, exports of skimmed milk powder increased to a record 60 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 20 thousand tons. Canada is nearing the point of self-sufficiency in skimmed milk powder and exports may fall sharply in the coming years.

Other Countries

185. 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 for a substantial increase in imports to some 160 thousand tons, and 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.

186. Brazilian production decreased to 55 thousand tons in 1991. The estimates for 1992 are for a sharp increase by 45 per cent to 80 thousand tons. Output is expected to remain unchanged at that level in 1993. Brazilian imports remained at the low level of 35 thousand tons in 1991 due to a general decline in demand for dairy products. The estimates for 1992 are for a decrease to 10 thousand tons and imports are expected to remain at that low level also in 1993.

187. Milk powder production in the Baltic countries is estimated to have declined by some 1 thousand tons to 13 thousand tons in 1992. In 1993, production should stabilize. Estimates indicate that production equalled domestic absorption in 1992. In May of 1992, Lithuania exported milk powder (in the magnitude of 17 thousand tons milk equivalent) to Japan. In the CIS, production dropped by 5 per cent to 710 thousand tons in 1991.

188. Output in India decreased by 10 per cent to 65 thousand tons in 1991 and remained unchanged in 1992. However, the outlook for 1993 is for a recovery to 75 thousand tons.

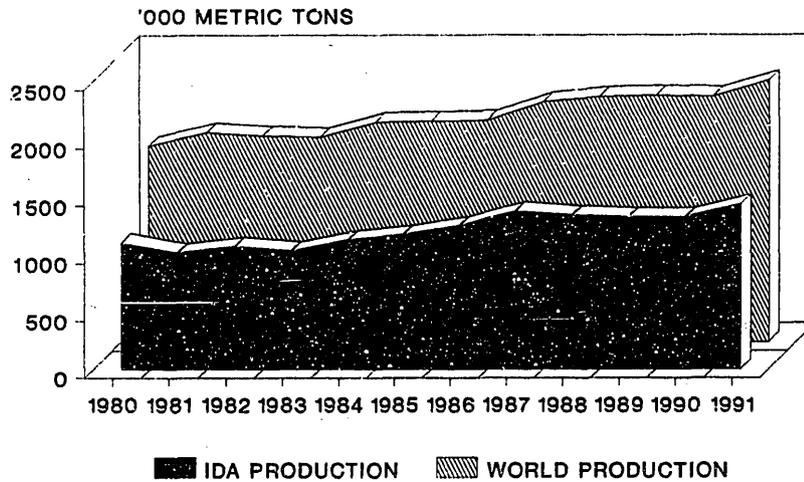
Whole Milk Powder

189. World whole milk powder production recovered appreciably in 1991, following further increases in New Zealand production and strong recoveries in the European Community, Poland and Australia. For calendar year 1991, world whole milk powder production increased by 6½ per cent to 2.27 million tons. It is estimated to have remained at that level in 1992.

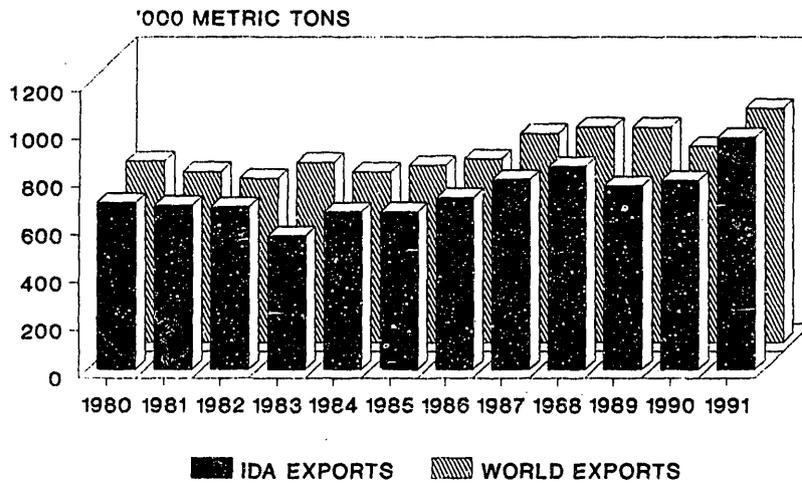
190. Whole milk powder exports recovered to 980 thousand tons in 1991, recapturing its earlier trend. Whole milk powder exports are estimated to have further risen in 1992, the decline in European Community exports being more than offset by the increase of sales of Oceania. Whole milk powder imports 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.

191. International prices of whole milk powder continued to increase in 1992 with the reported range of prices moving from US\$1,550-US\$1,700 to US\$1,700-US\$2,100 per ton f.o.b. The minimum export price has been maintained at US\$1,250 per ton f.o.b. since September 1989, as no consensus has yet been reached on a proposed increase.

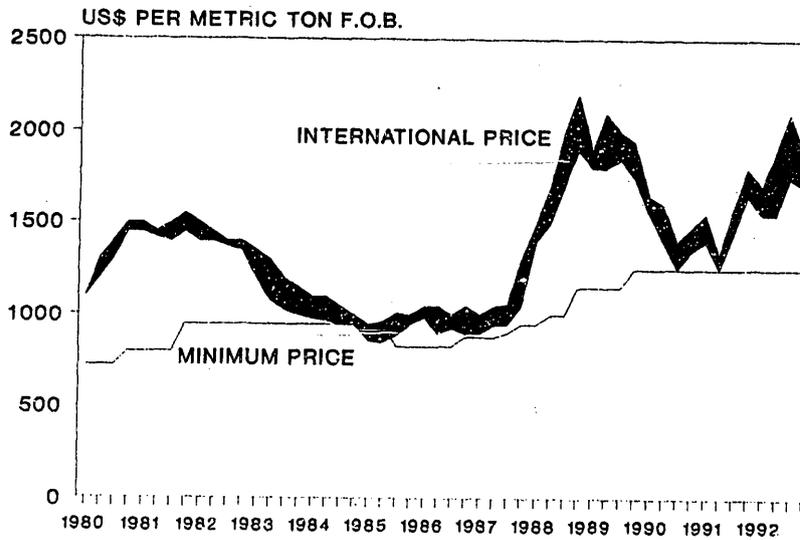
**GRAPH 16 - WHOLE MILK POWDER
PRODUCTION 1980-1991**



GRAPH 17 - WHOLE MILK POWDER EXPORTS 1980-1991



GRAPH 18 - WHOLE MILK POWDER PRICES 1980-1992



The Whole Milk Powder Situation in Selected Countries and Regions

New Zealand

192. In 1991, New Zealand production continued to increase strongly with an output of 243 thousand tons, an increase by 17 per cent compared to 1990. Production expanded by another 10 per cent to 177 thousand tons in the first nine months of 1992. New Zealand's whole milk powder production has more than doubled that of ten years ago.

193. Exports from New Zealand, the world's second largest exporter, continued to recover in 1991. Exports amounted to 254 thousand tons, an increase of 32 per cent compared to 1990, and corresponding to two and a half times their 1980 level. The main outlets remained South and East Asia and in South America. The outlook for 1992/93 is for exports increasing to some 300 thousand tons, with possible annual increases in subsequent years of 50 thousand tons.

Australia

194. In Australia, production of whole milk powder rose by 16 per cent to 69 thousand tons in 1991/92, reflecting a shift away from butter and skimmed milk powder production to whole milk powder for which prices were more attractive. Production for the season 1992/93 is expected 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 58 thousand tons for 1992/93, an increase by a further 6 per cent over 1991/92. Demand from buyers in major Asian markets was particularly strong.

European Community

195. Whole milk powder production increased by 14 per cent to 914 thousand tons in 1991, following strong demand in international markets. In the first nine months of 1992, whole milk powder production declined by 11 per cent to 637 thousand tons. European Community exports recovered to 627 thousand tons in 1991, an increase by 25 per cent compared to 1990. Following a Council decision in March 1991, the European Community provided 50 thousand tons of whole milk powder to the former Soviet Union as part of an emergency action to provide food aid to that area. For 1992, exports are estimated at 580 thousand tons, a decrease by 8 per cent over 1991.

Other IDA Participants

196. Production in Finland, which was entirely for exports, declined in 1991 to 11 thousand tons, a level corresponding to two fifths of that in the early 1980s. A further sharp decline to 2.6 thousand tons was estimated for 1992, due to the loss of traditional export outlets. The outlook for 1993 was for production declining to almost negligible levels. Exports from Finland, exclusively to the former Soviet Union, reached only 10 thousand tons in 1991. Exports are estimated to have fallen to only 3 thousand tons in 1992, and the forecast is for no exports in 1993.

197. **Hungary's** production of whole milk powder amounted to 11,300 tons in 1991. In 1992, output fell by 38 per cent in the first three quarters compared to the corresponding period in 1991. At the same time, domestic consumption multiplied by a factor of 2.6. This strong recovery can be explained by the extremely low consumption level in 1991, when consumption was only 29 per cent of production.

198. In **Poland**, production of whole milk powder amounted to 59.2 thousand tons in 1991, of which 6.7 thousand tons were exported. In the first three quarters of 1992, production was unchanged compared to last year, while exports increased to 7 thousand tons.

199. In **Argentina**, output decreased by 20 per cent to 69 thousand tons in 1991 and has continued to fall in 1992. Exports by Argentina continued their downward trend in 1991 when they dropped further to less than 9 thousand tons. The main destinations remained Brazil and Peru.

Other Countries

200. **United States** production fell by more than 30 per cent in 1991 to some 48.4 thousand tons and continued to fall in 1992. In **Austria**, output fell by 20 per cent in 1991 to some 10 thousand tons and continued to decline in 1992. Production in the **CIS** dropped by 13 per cent to 250 thousand tons in 1991.

OTHER DAIRY PRODUCTS

Whey in Powder or Block or Concentrate

201. World production of whey powder increased by about 2 per cent to 1.65 million tons in 1991, following developments in the production of cheese. Furthermore, the production of other related milk concentrates, including lactose, continued to expand, but the magnitude of the production of such products remains difficult to evaluate. These products are mainly by-products of cheese production. 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. Lately this has been forbidden, mainly for environmental reasons, and the whey has to be recuperated and disposed of otherwise. Liquid whey and concentrated whey are still extensively fed to animals, notably calves. The demand for whey and whey products for use as food and feed ingredients and in pharmaceutical applications has remained strong, stimulating production in several countries.

202. Late in 1991, whey powder prices generally strengthened in the United States market to US\$550 per ton in December 1991. Prices in Europe at that time were about 65 per cent higher than a year earlier but expressed in dollar terms they were at around US\$800 per ton due to the weakening of the United States dollar in the second half of 1991. In May 1992, 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 36 per cent on November 1991. In Europe, whey powder prices fell throughout the year of 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.

203. **European Community** production of whey powder has expanded at a rate of 5 per cent in recent years and reached 879 thousand tons in 1991, accounting for 53 per cent of world production. Production increased again in 1992 by 7½ per cent to 945 thousand tons. In 1991, the European Community imported 19 thousand tons and exported 30.3 thousand tons of whey powder, mainly in connection with forward processing. It furthermore exported 81 thousand tons of lactose, one third more than the average of recent years. The European Community discontinued the forward processing arrangements for most dairy products, including whey powder, effective 28 February 1991. As a result, imports and exports declined in 1991, notably for whey concentrate for which European Community imports in 1990 amounted to 48 thousand tons.

204. **United States** production increased by ½ per cent in 1991, to 511 thousand tons and continued to increase by 9 per cent to 417 thousand tons in the first nine months of 1992. **Canadian** production recovered in 1991, increasing by 11 per cent to 64.8 thousand tons, and continued to expand by more than 7 per cent to 34.5 thousand tons in the first half of 1992.

205. 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.

Concentrated Milk

206. Following a decrease in 1990, world production of condensed milk recovered in 1991, increasing by 2 per cent to 4.73 million tons. World output is estimated to have increased further in 1992. From a peak of nearly 1 million tons in 1985, world trade in condensed milk declined to about 350 thousand tons in 1991. However, world trade reportedly recovered in 1992 when it was estimated at 375 thousand tons.

207. Dutch quotations for condensed milk continued to increase throughout 1991, and in December reached Hfl. 3,550 per ton or US\$1,940. In the first half of 1992, Dutch quotations remained at Hfl. 3,550 per ton. The quotation was increased to Hfl. 3,620 per ton in December 1992, which at the lower corresponding exchange rate was equivalent to US\$2,038 per ton.

208. In the **European Community**, output had also decreased in 1990, mirroring the decline in international outlets. In 1991, output remained relatively stable at around 1.22 million tons. However, production increased in 1992 by 5 per cent to around 1.28 million tons as traditional buyers have increased their purchases while East European countries emerged as buyers. European Community exports fell by 7 per cent to 337 thousand tons in 1991. However, they recovered to some 360 thousand tons in 1992.

209. **Australian** production fell by 2½ per cent to 89 thousand tons in 1991 and showed little change in 1992. In **Japan**, production increased by another 5 per cent in 1991, reaching 66 thousand tons and there was a further increase of production in 1992.

210. In 1991, production fell in the **United States** to 252 thousand tons, 4½ per cent less than in 1990. Production recovered in the first nine months of 1992. In **Canada**, production recovered in 1991 and increased to 73.7 thousand tons, 23 per cent up on 1990. Production was again low in 1992. **Canadian** exports declined to 7 thousand tons in 1990/91, but almost doubled (to 13.7 thousand tons) in 1991/92. A further increase to 12 thousand tons is expected for 1992/93.

211. Concentrated milk production in the former **Soviet Union** area continued to expand, amounting to 635 thousand tons in 1991, an increase by 2½ per cent over 1990. Condensed milk production increased in Asia and Latin America in 1990 and 1991.

Casein

212. Since 1990, casein markets have been undergoing major adjustments, not least due to programme adjustments in the European Community market for skimmed milk powder. World casein production decreased by 5 per cent to 214 thousand tons in 1990 and declined further in 1991, reaching some 200 thousand tons. The European Community accounted for nearly all of the reduction, which resulted from its reduced milk output and lower supplies of milk being available for casein production. Recoveries in production in New Zealand and Poland were more than offset by decreases in Australia and the European Community. World casein production is estimated to have totalled 227 thousand tons in 1992, up 13 per cent from 1991, with increases registered both in the Community and New Zealand. A 1 per cent decrease is forecast for 1993. World exports, which had recovered in 1990, remained at 150 thousand tons in 1991. They remained relatively stable or increased slightly in 1992.

213. Casein prices vary widely with quality. During the first nine months of 1991, there was still some downward pressure on prices of casein in the United States, and at around US\$3,500 a ton in September 1991, prices were 15 per cent lower than a year earlier. Prices firmed later in 1991, following 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. Consequently, prices increased to US\$3,720 a ton in November 1991, but were still 6 per cent lower than a year earlier. In subsequent months, prices continued to strengthen,

reflecting the tight market conditions for skimmed milk powder, in both Europe and North America. United States quotations increased further throughout 1992, in December reaching US\$5,280 per ton, 37 per cent higher than a year earlier.

214. **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 by 9 per cent in 1991, and the upward trend continued into 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. A further reduction to ECU 6.30 per 100 kgs. of skimmed milk will be effective from 1 March 1993. In 1991, European Community exports fell to 56.6 thousand tons.

215. **New Zealand** production of casein for 1991/92 was estimated at 74 thousand tons, compared to 64 thousand tons in 1990/91. The outlook for 1992/93 is for a decrease to some 72 thousand tons. New Zealand's exports of casein increased to 77.2 thousand tons in 1991.

216. In **Poland**, production of casein amounted to 12 thousand tons, down from 21 thousand tons in 1991. Poland is a net exporter of casein, with exports amounting to 10 thousand tons and imports of 5 thousand tons in 1992.

217. In 1991, **United States** casein imports increased only marginally (by $\frac{1}{2}$ per cent) to 85.6 thousand tons, and their value fell from US\$370 million to US\$298 million. All supplier countries, except New Zealand, suffered losses in their share of the market. Total imports from the European Community fell by 12 per cent to 40.2 thousand tons in 1991. In the first ten months of 1992, United States casein imports at 75.2 thousand tons increased by $5\frac{1}{2}$ per cent compared to the corresponding period of 1991, the main suppliers remaining the European Community and New Zealand.