

# GENERAL AGREEMENT ON

RESTRICTED

## TARIFFS AND TRADE

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International Dairy Arrangement

### INTERNATIONAL DAIRY PRODUCTS COUNCIL

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

##### Note by the Secretariat

###### Explanatory note

The present note 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 1992.

In preparing the note, the secretariat based itself mainly 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 note provides information on production, consumption, trade, stocks, and prices for milk and principal dairy products and covers developments in dairy policies up to 1991, and the outlook for 1992. The note should be read in conjunction with the statistical information circulated in the following documents:

- |              |   |   |
|--------------|---|---|
| DPC/W/112    | - | Milk Deliveries and Production - Statistical Note by the Secretariat      |
| DPC/PTL/W/71 | - | Committee of the Protocol Regarding Milk Fat - Summary Tables             |
| DPC/PTL/W/72 | - | Committee of the Protocol Regarding Certain Cheeses - Summary Tables      |
| DPC/PTL/W/73 | - | 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 relevant submissions to the secretariat, preferably in writing as soon as possible. Such submissions might cover both the present note, and the statistical information mentioned above. It should be noted that the drafting of the present note was completed on 14 February 1992.

TABLE 1

Levels of Minimum Export Prices

(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

The minimum export prices are fixed for pilot products defined in the Arrangement taking account, in particular, of the current market situation, dairy prices in producing participants, the need to ensure equitable prices to consumers, and the desirability of maintaining a minimum return to the most efficient producers in order to ensure stability of supply over the longer term. New minimum prices for all pilot products became effective on 20 September 1989 and have since then remained unchanged. Minimum export prices must not be considered as market prices, but merely the floor price levels which the participants have agreed to observe.

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### Overview of the Situation

#### Some points regarding the economic situation in general

1. The growth in the value of merchandise trade in 1991 decelerated to about 3 per cent following a 13 per cent increase in 1990. Although data for trade in commercial services were not yet available, a markedly lower growth rate than in 1990 (17 per cent) should be expected. This slowdown of the nominal expansion of world trade in merchandise and commercial services was mainly due to the variation in the value of the US dollar vis-à-vis other major currencies. A contraction of the Western European trade in terms of US dollars was linked to the appreciation of the US dollar vis-à-vis the ECU in 1991 (by about 3 per cent). In addition to this exchange rate factor, oil prices which experienced a strong rise in 1990, declined in 1991, leading to a nominal decline in fuel trade. Non-fuel commodity prices continued to decline in 1991, depressing further the export values of non-fuel primary commodities.
2. There was an overall slowdown in the value expansion of merchandise trade, but with divergent regional trade performances. Exports of Central/Eastern European countries and of the USSR area shrank as the intra regional trade collapsed. Exports of OPEC countries decreased as prices fell and output stagnated. The strengthening of the US dollar vis-à-vis the ECU in 1991 and the weaker growth in Western European demand resulted in a deceleration in trade growth for that area. Exports of North America and Asia could not escape the trend towards lower nominal growth. Asia experienced the highest trade growth of all regions in 1991, following a below average expansion in 1990.
3. The slowdown in the volume growth of world merchandise trade continued unabated into 1991. Exports from Central/Eastern Europe and from the USSR contracted. The regions' larger shipments to Western Europe did not fully offset the intra-regional decline in trade. Western European export growth decelerated sharply in 1991, reflecting both a weaker growth in European demand and a decline in competitiveness vis-à-vis North American and Asian competitors. The impact of German unification provided increased export opportunities for Germany's trading partners. Furthermore, German exports were limited as domestic output was redirected to supply the enlarged internal market. In 1991, above average export growth was recorded for the United States and a number of dynamic developing exporters in Asia.
4. Following two years of decline, the expansion of world output came near to a standstill in 1991. A marked contraction of the output was observed for Central/Eastern Europe and the USSR. Following a modest growth in 1990, North American growth in the GDP became slightly negative in 1991. Western European GDP growth slowed down markedly with a number of countries reporting decreasing output (e.g. Finland, Sweden, Switzerland and the United Kingdom). In Latin America, output recovered somewhat in 1991. For Asia, the regions output continued to expand by more than 4 per cent. The GDP of Japan rose by 4.5 per cent and developing countries in South East Asia recorded output growth of above 5 per cent.

World dairy situation

Highlights

5. - After having increased continuously since 1987, world milk production fell by 2 per cent in 1991 and the decline continued into 1992, when production was expected to decrease further by 1 to 2 per cent.
- World butter production was also reduced by 2 per cent. The decrease was limited by milk fat left over due to a persisting vigorous demand for light products. Consumption continued to decline, and stocks increased notably in the early part of 1991. Prices for butter and anhydrous milk fat remained depressed at or just above the agreed minimum prices during the first half of 1991. Later in the year, prices recovered slightly, but uncertainties persisted mainly related to the market situation in the USSR area and the butter market remained fragile in 1992.
  - Cheese production grew by another 1 per cent in 1991 and the trend continued into 1992. Further growth in consumption and import demand entailed an expansion of cheese trade in 1991, with world market prices firming and remaining well above the agreed minimum export prices.
  - Milk powder prices firmed notably in the latter half of 1991, following reduced supplies coming on to the market, and a weakening of the United States dollar. Prices were expected to remain firm in 1992.
  - In 1991, substantial quantities of butter were sold to the USSR area under a derogation. Deliveries were considerably delayed due to payment problems and only part of the quantity contracted was finally delivered. At the beginning of 1992 there was no derogation for sales below the minimum export price in operation.
  - Food aid in dairy products started to increase in 1991 and might be substantial again in 1992 as United States availability of dairy products for aid was increased. Furthermore, a request was made for massive food aid to the USSR area in 1991/92. The response to this request, through aid or otherwise, might have major implications on the dairy market in 1991/92 and for some time beyond.

Dairy policies

6. Further efforts were made to contain public expenditure on dairy price support in 1991. Support prices, target prices and advance payments were maintained at the previous level or even lowered. Production quotas were maintained or reduced and quota systems were 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.

7. Efforts were also continued in many countries to encourage or facilitate structural changes. In some countries the aim was to raise productivity and efficiency in the industry. In others it was to reduce costly surpluses, for instance, by restricting the dairy herd and limiting milk deliveries, or otherwise adapting the capacity to the market. The number of dairy farms and cows continued to decline in many countries.

8. In line with the general aim of improving nutritional standards and diversifying agriculture, high priority continued 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. As an example, India plans to double its milk output by the year 2000, to a level of 80 million tons.

9. Further efforts were 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.

10. Developments in Central and Eastern Europe had a strong impact on the dairy market. Changes in economic policies resulted in higher retail prices which adversely affected domestic demand. Export availabilities of dairy products increased substantially, notably for butter. The collapse of intra regional trade and persisting balance-of-payments problems led to exports at reduced prices and to new markets in search of convertible currencies.

11. Developments in the Near East, notably the embargo on trade with Iraq and Kuwait, adversely affected dairy trade in 1990/91. The situation was further aggravated by transportation difficulties and increased costs. However, at the same time, increased purchasing power in other OPEC countries following increased petrol prices stimulated import demand for dairy products by some countries. Import demand in the Near East recovered in 1991/92 following the cease-fire and the end of military operations in March 1991. Oil exporters elsewhere remained important buyers of milk products, i.e. Mexico, Venezuela and Algeria.

12. The potential exists for a strong rise in productivity in the medium to long term, due to genetic improvements, ample feed supplies and technological progress. The authorization to commercialize yield-increasing hormones was still pending in major dairying countries. Strong

consumers' opposition to their use could result in a possible adverse reaction on demand if extended use of hormones in dairy cows were permitted.

13. Views have been expressed that the milk production potential in the medium term could be much greater than what projections and forecasts might have indicated. A danger persisted that supplies were to increase faster than a relatively steady but nevertheless insufficient growth in import demand and consumption. Concerns persisted that a stagnant or falling consumption notably of butter, and an expansion of production, would result in greater supplies available for exports. It would therefore remain imperative that production should not be unnecessarily stimulated through support and protection.

14. 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. These developments have caused, or threatened to cause, certain problems to the marketing of traditional dairy products and to the protection of consumers' interests. 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. Furthermore in a number of new dairy products, notably light products, milk components, mostly fat, have frequently been replaced by something else, notably ingredients of vegetable origin. Consequently it is increasingly difficult to draw the line between what should be designated as milk or non-milk products.

#### Milk and dairy production

15. In 1991, world milk production (including sheep, goat and buffalo milk) amounted to 525 million tons and decreased by some 2 per cent from the previous year. The output of cow's milk decreased by 2 per cent amounting to 466 million tons. The decline in total milk production was particularly marked in Central and Eastern Europe and the USSR area. Lower decreases were registered in Western Europe. Output remained unchanged in North America while it increased in Oceania and Japan. Output continued to rise in Asia, particularly in India. Elsewhere in the developing regions milk production seemed to have stagnated in 1991.

16. For 1992, a decrease in milk production by 1 to 2 per cent was expected, but supplies could nevertheless exceed demand. In the USSR area, a substantial drop in milk output was expected due to decreasing yields and cow numbers but production was likely to start to recover following efforts made to improve food supplies in general. With demand shrinking and subsidies being removed, profitability in dairying decreased in Central and Eastern Europe. In the Community also, milk deliveries might decrease while a relative stability in production was forecast in other European countries as well as in North America and in Africa. In Oceania, assuming normal weather conditions, milk production might remain fairly stable.

17. Efforts were being made in many developing countries to increase milk production, but gains were partly offset by adverse effects of tight feed

supplies and higher feed costs. India and several other developing countries in Asia were expected to increase milk production once more in 1992. Strengthening of demand in domestic markets might benefit producers in several Latin American countries.

18. Considerable uncertainty was attached to the medium-term. As bovine somatotropin become commercially available, its application might, together with scientific progress, improved breeding and production management, boost productivity in milk production over the next five-year period. In the medium term, increased dairy production in the Federation of Russia may progressively substitute imports. For Ukraine, Byelorussia and the Baltic countries, increased milk production and reduced domestic consumption may result in larger supplies available for export, for instance, to Western Europe and the Middle East.

19. World butter and butter oil production decreased by 2 per cent in 1991 amounting to 7.55 million tons. Butter production decreased in the Community, Oceania and the USSR. World butter production in 1992 was forecast to decrease by 2.5 per cent from the previous year, mainly due to more milk being allotted to the production of cheese, excess carry-over stocks in major producing countries, and reduced output in the USSR area. The shift in consumption towards light dairy products continued in 1991. Further developments in production and sales of light products resulted in increased supplies of butter becoming available for export, a tendency notably apparent in Europe and North America.

20. World cheese production continued its upward trend in 1991, totalling 14.80 million tons (all kinds of cheese). The trend was similar in all regions, but with variations from one country to another. In most countries cheese production was encouraged by a generally favourable market outlook for cheese, and a further growth of the same order was anticipated for 1992.

21. World skimmed milk powder production decreased in 1991 by 3.5 per cent to 3.85 million tons, with declines in the European Communities and Poland. World production in 1992 was forecast to again drop by 6 per cent following projected declines in the European Communities and North America. World production of whole milk powder recovered appreciably in 1991 and was estimated to have increased by 3 to 5 per cent compared to 1990.

22. Environmental regulations preventing whey to be disposed of as waste and increased supplies of cheese stimulated production of whey powder notably in the European Communities, Australia, Canada and the United States.

23. World production of condensed and evaporated milk declined in recent years, being increasingly replaced by whole milk powder in the market. For 1991, increases were reported for the European Communities and the United States and production recovered in Canada and Australia.

24. World casein production reached a level of 200 thousand tons in 1991, 6.5 per cent down on 1990. This decline was mainly due to a reduction in Community output which continued to fall in 1991, as it was more profitable to produce skimmed milk powder and to use liquid skimmed milk as feed.

### Consumption

25. World consumption of milk and fresh milk products, which had increased at an annual rate of about 1 per cent over recent years, showed a stronger increase of 1.5 to 2 per cent in 1990 and 1991. There was a lively demand for low-fat milk products in most regions of the world and it was expected that the protein component of milk would be facing increased demand in the near future. For a number of countries, consumption of fresh milk followed variations in supplies of milk.

26. Throughout the 1980's, butter consumption showed very little change on average, and annual world per capita consumption of butter remained at a level of 2.8 kgs. The trend remained unaffected by an increasing substitution of blended spreads of butter and vegetable oil. In 1991, world consumption declined by 2 per cent, with sharper decreases registered in particular regions. However, in the United States and India, consumption was reportedly up on 1990. The trend toward blended spreads and low fat spreads had accelerated in 1990 and 1991. This development resulted from a combination of factors such as consumer preferences for products with reduced fat and cholesterol and changes in legislation permitting the sale of blended products to consumers. In the short and medium term it was likely that this trend would continue or even accelerate. In 1990 and 1991, increased retail prices in Central and Eastern European countries affected adversely the consumption of butter, which in some cases fell to only one half of its previous level.

27. The upward trend in cheese consumption continued in 1991, with further advances in most countries. In general, increases for speciality cheeses were significantly above the rate of growth for traditional cheeses. The great variety of cheese available, active product development (i.e. low fat cheeses) and brand advertising were the main reasons for these positive developments in cheese consumption. World per capita cheese consumption has been increasing at an average annual rate of 2 per cent since the early eighties, and might continue to increase at that rate in the near future. Per capita cheese consumption showed great variation from one country to another, it being particularly high in some countries of Western Europe and in North America, which also showed the strongest annual increase in consumption. At close to 14 kgs., annual per capita consumption of cheese in the United States in 1990 was about 30 per cent higher than in the early 1980's. Average consumption per head in the Community, though rising more slowly than in the United States, reached nearly 15 kgs. in 1990. The general upward trend was maintained in 1991 although the rate was slightly weaker.

28. World consumption of skimmed milk powder declined in 1991. With smaller supplies and firming world prices this downward trend was likely to continue in 1992. Consumption of whole milk powder increased in 1991 following greater supplies by the Community, New Zealand and Australia.

29. In the medium term, world butter consumption was expected to decrease further as the trend towards a diet with less fat will persist and remain irreversible. The decline would primarily be in household consumption,

while industrial use of butter could be stimulated through various actions. The comparatively strong rate of growth in cheese consumption was expected to continue at a rate in excess of population growth, with the strongest growth found for low fat cheeses. Both for cheese and fermented milks and products such as yogurt and fresh and frozen desserts, an increase in consumption in a range of 2 to 3 per cent could be expected. Demand for fresh liquid milk could also increase at rates between 1 and 2 per cent a year and a range of new dairy products could be introduced. Health concerns and concerns related to intake, or avoidance of fat and cholesterol, would remain important factors for future demand of dairy products.

### Trade

30. Import demand for butter has continued to weaken, reflecting a continued decline in milk fat consumption in many countries. As a result of a further deterioration of the market for butter, world exports in 1991 decreased to some 680 thousand tons, 6 per cent below 1990 levels. However, some recovery in world exports was expected for 1992. The emergency situation in the USSR created an urgent requirement for imports of food, including butter, on special terms, and consequently a derogation for sales of butter to the USSR was granted in December 1990. Sales contracts concluded by several participants under this derogation amounted to some 311 thousand tons. However, a large portion of the shipments were delayed mainly due to payment difficulties experienced by the USSR, and total deliveries under this derogation reached only 214 thousand tons.

31. Cheese trade expanded further in 1990 with world exports reaching 905 thousand tons. This was due to higher exports from the European Community, New Zealand and Australia. Japanese cheese imports recovered appreciably, and there were higher imports into OPEC countries and other developing countries, which more than outweighed a certain stagnation in the volume of cheese imported into the United States. The general expansionary tendencies were expected to continue in 1992.

32. There was a further decline of 11 per cent in world exports of skimmed milk powder in 1991, when they amounted to 800 thousand tons. Sharp decreases registered by the European Communities were not offset by increases in Australian and United States exports. New Zealand and Polish exports also decreased in 1991. However, import demand in some developing countries remained strong and imports into Japan recovered appreciably. The outlook for 1992 was for an increase in international trade due to increased efforts by major producers to reduce growing powder stocks and renewed interest from traditional customers (Mexico and South American markets).

33. The upward trend in whole milk powder exports was reversed in 1989 and declined further to 820 thousand tons in 1990. In 1991, however, exports by major suppliers recovered strongly and might have reached new record levels.

34. The international whey powder market continued to be supply-driven in 1990 and 1991. Although demand was stimulated by reduced skimmed milk powder supplies, feed compounders were not able to absorb the greater supplies of whey. World trade of condensed milk continued to decline in 1990 and 1991, following lower supplies. World exports of casein recovered in 1990, notably as exports by New Zealand recovered and as Central and European countries succeeded in raising their sales of casein to OECD countries. United States imports of casein fell for a third consecutive year in 1991.

#### Food aid

35. Reduced supplies and declining surplus stocks adversely affected the amount of dairy products available for donations under food-aid programmes. The volume of dairy products provided as food aid, notably by the European Communities and the United States (the major donators) was further reduced in 1990 and 1991. Food-aid shipments of dairy products, which had averaged nearly 400 thousand tons (product weight) in the early eighties, were estimated to have fallen below 100 thousand tons in 1990. The increase in prices at the same time aggravated expenses and made the financing of food aid in dairy products more difficult. Moreover, probably because of the reduced needs of India and China, dairy food aid to developing countries remained at a low level in 1990. However, the volume of dairy products provided as food aid increased in 1991 as supplies were again more plentiful and stocks rising.

36. The United States availability of dairy products for fiscal year 1992 was 22 thousand tons of non-fat dry milk and 25 thousand tons of butter/butter oil under the PL 480 Programme. Moreover, 75 thousand tons of non-fat dry milk and 80 thousand tons of butter/butter oil were made available under Section 416(b) for the same fiscal year, giving a total of 97 thousand tons of non-fat dry milk and 105 thousand tons of butter/butter oil being available under both programmes for fiscal year 1992.

37. The USSR was in need of substantial supplies for food relief purposes in 1991/92 and made a request for massive food aid including butter and milk powders (baby food). In light of the commercial importance of the USSR market, concerns were expressed that any response to the request should be such as to cause a minimum disruption to the commercial market. Early in 1992, supplies of food aid to Moscow, St. Petersburg and other large cities in the area, were provided and were expected to continue throughout the winter.

#### Stocks

38. Butter stocks in the European Communities, North America and Oceania on 1 January 1992, estimated at 670 thousand tons, remained relatively stable compared to their level one year earlier. However, concerns had been expressed that stocks held in the EC and the United States were still high. Skimmed milk powder stocks, at the same time, estimated at 575 thousand tons, were 21 per cent higher than a year earlier.

39. World stocks at the end of 1991 were estimated at around 1 million tons for each product, the Community and the United States being the principal holders. However, world ending stocks in 1992 were expected to decrease for each product, reflecting successful efforts to slow accumulation and dispose of surpluses.

#### International prices

40. Prices for milk fats continued to deteriorate in 1990 and some offers and sales had reportedly been made at prices below the minimum export prices. In the first half of 1991, the market situation for butter continued to worsen with the accumulation of stocks, following a persisting decline in butter consumption in many countries and an extremely weak international demand. In the second quarter of 1991, prices of butter and anhydrous milk fat were at or slightly above the respective minimum export prices, but in practice, few sales had been made. Moreover, certain offers and sales had again reportedly been made at prices below the minimum prices.

41. Prices started to recover in the third quarter of 1991 partly due to the weakening of the United States dollar, but traded volumes remained low. Prices continued to firm in the fourth quarter of 1991 and ranged between US\$1,500 and US\$1,850 per ton f.o.b. However, considerable uncertainty persisted as to the situation for butter and anhydrous milk fat in the coming months as the final quantities to be delivered as food aid to the USSR area were not known as well as the quantities which could be commercially sold to that area. The situation in that area remained crucial to the butter market which continued to be fragile. At the September 1991 review, the minimum export prices of butter and butter oil were again maintained unchanged.

42. Cheese prices started to recover in the fourth quarter of 1990, fluctuating between US\$1,550 and US\$2,000 per ton f.o.b. In the first nine months of 1991, Cheddar cheese prices fluctuated between US\$1,500 and US\$2,100 per ton f.o.b. In the fourth quarter of 1991, they ranged between US\$1,600 and US\$2,050 per ton f.o.b., thus remaining fairly stable since the beginning of 1991. For most cheeses covered by the Protocol, the market situation was steady and prices were expected to remain at current levels or even increase throughout 1992. The minimum export price was maintained unchanged.

43. The market situation for milk powders started to improve in the fourth quarter of 1990 and continued to do so early in 1991. Although requirements of milk powder markets remained basically unchanged, international prices were eroded later in 1991, due mainly to a temporary strengthening of the United States dollar. Thus, for the second quarter, prices of skimmed milk powder decreased to the range of US\$1,250 to US\$1,300 per ton f.o.b. and those for whole milk powder to the range of

US\$1,250 to US\$1,330 per ton f.o.b. In the third quarter of 1991, the market situation for milk powders improved somewhat in part due to a weakening of the United States dollar. Prices firmed and ranged between US\$1,450 and US\$1,550 per ton for skimmed milk powder and between US\$1,440 and US\$1,575 per ton f.o.b. for whole milk powder. In the fourth quarter of 1991, the market situation continued to improve partly due to a further weakening of the United States dollar and to tight supply conditions for milk powders. Prices continued to firm and ranged between US\$1,600 and US\$1,800 per ton f.o.b. for skimmed milk powder and between US\$1,650 and US\$1,800 per ton f.o.b. for whole milk powder. Powder prices were expected to remain firm in the coming months. At the September 1991 review, the minimum export prices of milk powders covered by the Protocols were again maintained unchanged, although a proposal was made for increasing them.

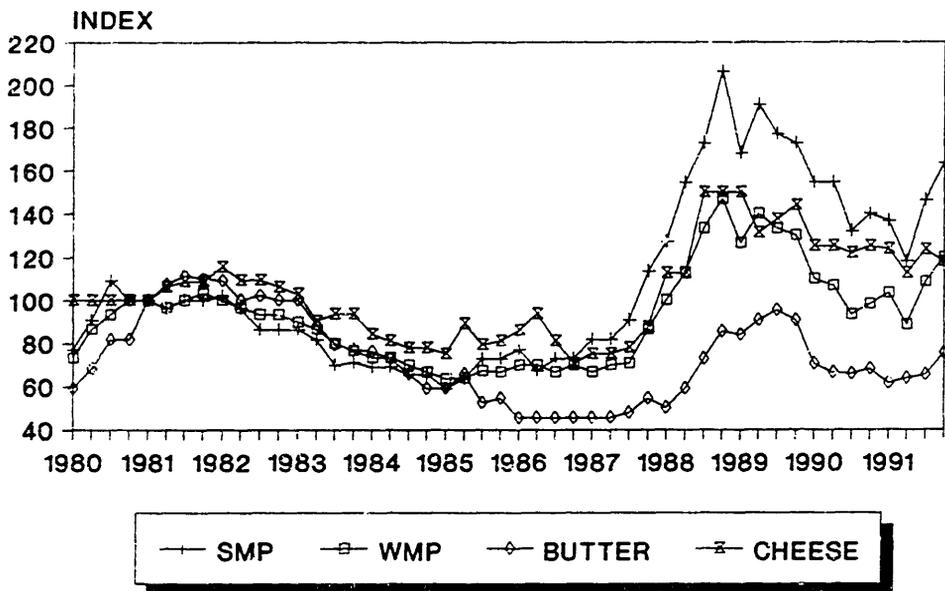
44. Prices for condensed milk rose in early 1990, remained stable throughout that year and increased again in 1991. Prices of casein for technical use and of edible casein were in December 1990 down to US\$3,735 per ton, probably because of users' reaction to high prices and there was still some downward pressure on prices of casein in the United States early in 1991. A slight recovery could be seen from September on, and prices had in November 1991 reached US\$3,720 a ton. Whey prices, which had recovered towards the end of 1989, declined again in the first part of 1990. While the decline continued in the United States, a recovery was registered in Europe towards the end of 1990. In 1991, prices continued to recover in Europe and firmed also in the United States.

45. The Arrangement having been in operation for twelve years, is considered to be working very well. It has proven to be a valuable means of imposing a concerted measure of discipline on export price fixing thus effectively limiting the application of export subsidies. This has contributed to the maintenance of a certain stability of markets and returns and alleviated the adverse effects of temporary difficulties in the market. During the period, market prices have gone through various phases. At the beginning of the 1980's 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.

46. 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 1980's. Since 1989, prices for powders tended to weaken and fluctuate with the changing exchange rate for the United States dollar. Prices for milk fats continued to weaken, following a continued decline in butter consumption in many countries and generally increasing production. Recent steps agreed upon under the Arrangement might help to restore the balance in the butter market, although uncertainties persisted as to the price situation in the coming months. The cheese market has been characterized by balanced supplies and reasonably stable and in some cases firming prices.

47. Milk proteins had few substitutes and were still, even at the higher price level, in a strong competitive position with vegetable proteins. This has not been the situation for milk fat, which had been facing stiff competition from vegetable fat. Furthermore, demand for fats in general has been contained through dietary philosophy and advice. Such advice also favoured demand for milk protein evident by the recent developments in powder prices, with good quality skimmed milk powder for recombination commanding a premium compared to whole milk powder. Developments in market prices, and changes in the agreed minimum export prices, clearly illustrate the difference in market trends for various milk components.

### DAIRY PRICE INDICES \* (Basis: 1st quarter 1981=100)



\* Upper level of price range.

TABLE 2  
International Prices (1989-1990-1991)

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

Product	1989	1990		1991			
	January-December	January-June	July-December	January-March	April-June	July-September	October-December
Skimmed milk powder <sup>a</sup>	1,700-2,100	1,500-1,700	1,300-1,540	1,400-1,500	1,250-1,300	1,450-1,550	1,600-1,800
Whole milk powder	1,750-2,100	1,400-1,650	1,250-1,475	1,400-1,550	1,250-1,330	1,440-1,575	1,650-1,800
Anhydrous milk fat <sup>b</sup>	2,050-2,500	1,625-1,950	1,625-1,880	1,625-1,800	1,625-1,800	1,675-1,850	1,750-2,250
Butter <sup>b</sup>	1,650-2,100	1,350-1,550	1,350-1,500	1,350	1,350-1,400	1,450-1,540	1,500-1,850
Cheddar cheese <sup>c</sup>	1,900-2,400	1,700-2,000	1,550-2,000	1,600-1,980	1,550-1,800	1,550-2,100	1,600-2,050

<sup>a</sup>In 1990 and 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.

<sup>b</sup>In 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.

<sup>c</sup>In 1990 and 1991, 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.

Developments in World Milk Production  
and National Dairy Policies

48. World milk production (including buffalo, sheep and goat milk) at 525 million tons in 1991 showed a decrease of some 2 per cent over the previous year. The production of cow's milk decreased by 2 per cent amounting to 466 thousand tons. While output remained unchanged in North America and increased in Oceania and Japan, it decreased in Western Europe and particularly in Central and Eastern Europe and the USSR area. Output continued to rise in the developing countries, particularly in Asia, notably due to continued expansion in India. Elsewhere in the developing regions, milk production seemed to have stagnated in 1991. In most Western European countries and Canada, production remained subject to quotas and changed only moderately.

49. The short-term outlook was for some further decline in world milk output. The EC was considering another reduction of quotas. Other Western European countries and Canada might also lower quotas again, while Japan was likely to pursue its recent policy of enabling foreign suppliers to satisfy most of the rise in domestic demand. In Oceania, weather in the present marketing year would be crucial though farmers' purchases of inputs might have been discouraged by the low milk prices. The United States expected little change in 1992 milk output but the contraction in the USSR area and in Central and Eastern Europe might continue.

50. In the developing regions, milk production was likely to show further growth in Asia, stimulated by rising demand, in particular in India. Strengthening of demand in domestic markets would also benefit producers in several Latin American countries. However, as substantial stocks were carried over, global supply would probably continue to exceed effective demand in 1992.

51. Milk deliveries in the European Communities, decreased by 1.9 per cent to 97 million tons in 1991. Cow numbers fell by 2 per cent but productivity per cow increased by 1.5 per cent in 1991. For 1992, milk deliveries were expected to decrease by a further 2 per cent to 95 million tons. In the medium term, milk deliveries were expected to stabilize. Cow numbers would continue to fall, not least in light of measures implemented to encourage some farmers to give up milk production. Yields were expected to increase by 1.4 per cent a year, and might, together with improved feeding techniques, tend to increase production. Following German unification, total Community milk delivery forecasts would have to be revised upwards by around 6 per cent.

52. The Community quota system has been prolonged until March 1992 and might be further extended as its operation was considered to be beneficial to the financial situation of the dairy sector. The limitations to the intervention system for butter and skimmed milk powder have been extended for the same period. The suspension of 5.5 per cent of reference quantities was also retained, with compensations to be paid to producers. Out of a total of 600,000 tons eligible for re-assignment, 580,000 tons were provisionally allocated to accommodate the needs of producers that had previously and temporarily given up milk production.

53. For the 1990/91 dairy year, the target price for milk was set at ECU 26.81/100 kgs., 3.7 per cent less than in 1989/90. The co-responsibility levy remained unchanged at 1.5 per cent of the target price. For the 1991/92 dairy year, the target price for milk, the intervention prices for milk products and the co-responsibility levy remained unchanged at their level of the previous dairy year. A voluntary buy-out scheme for a quantity of up to 3 per cent of deliveries would be implemented. The cost of the buy-out scheme would be financed by the EC at the rate of ECU 10 per 100 kgs. New guidelines were introduced to suspend permanent intervention of both skimmed milk powder and butter. The buying-in price for butter into intervention in 1991/92 was to be fixed by the Commission to take account of the quantities offered and the state of the market. The buying-in price would not be lower than 90 per cent of the intervention price. Moreover, the main factors depressing deliveries in 1991/92 would be the 2 per cent linear reduction in quotas and the additional quota buy-out period agreed by the EC Council. Furthermore, another 3 per cent reduction in dairy quotas was being proposed for 1992/93.

54. In Finland, milk deliveries in 1991 at 2.41 million tons were 10.1 per cent lower than in 1990. The reason for this rapid decrease was the milk buy-out scheme implemented in December 1990/May 1991, covering 221,000 tons of milk. In 1992, milk deliveries were expected to decrease further by 1 per cent to 2.39 million tons. The Milk Quota Act had been revised, with the result that the penalties for exceeding quotas had been reduced and the share of free quotas had been increased.

55. In Norway, total milk deliveries decreased by 3 per cent to 1.86 million tons in 1991 due to reductions in milk quotas and a tightening of the two-price system. Milk deliveries were expected to decline in 1992 as well, due to a further tightening of the milk quota system.

56. In Sweden, a new food policy based on the principle that agriculture should be subject to the same conditions as other sectors was laid down in June 1990. The Parliament decided to abolish consumer subsidies for milk and dairy products from 1 January 1991. In the case of dairy producers, internal price controls (including export subsidies) will be abolished over a transitional period of five years. In addition, the internal controls include a profitability equalization scheme designed to eliminate differences in the profitability of different products. Complete abolition of the equalization scheme as from 1 July 1995 would mean that prices would be set in relation to production costs. Milk deliveries decreased from 3.43 million tons in 1990 to 3.20 million tons in 1991 as the dairy market was deregulated and subsidies were removed so that returns to producers declined.

57. In Switzerland, milk deliveries which were down in 1990, in the first ten months of 1991 increased by 2.8 per cent compared to the corresponding period of 1990. Dairy cow numbers were expected to decline in the coming years while yields would increase further. Premiums were paid for non-marketing of milk and for processing of milk into cheese which had a relatively higher price in domestic and international markets. The

basic price of milk was increased as from 1 February 1990 by 5 centimes to SwF 1.07. Domestic prices of cheese were consequently raised but the price of table butter remained unchanged and the price of cooking butter was reduced. Import charges for cheese remained unchanged.

58. In New Zealand, climatic variations continued to have a major impact on milk production. Good pasture conditions resulted in an increase of 3 per cent in milk production in the 1990/91 season to 342 million kgs. of milk fat, or 7.32 million tons of milk. Depending on seasonal weather and pasture growth conditions experienced later in the season, total production in 1991/92 was likely to be closely in line with the 1990/91 season. For the medium term, it was forecast that cow numbers would remain steady, yields per cow would stabilize at 3,400 kgs. per year and milk production would remain stable averaging 7.5 million tons a year. In light of the market situation, the price for milk for the 1990/91 season was reduced to NZ\$3.70 per kg. milk fat, 36 per cent lower than in 1989/90. An interim advance price, also of NZ\$3.70 per kg. milk fat was set for the 1991/92 season as the basis for establishing export purchases by the Board. These prices were the lowest in real terms which the industry had faced in modern times, i.e. since the end of World War II. As the market situation improved, the advance price for 1991/92 was in October 1991 increased to NZ\$4.10 and in February 1992 to NZ\$4.70 per kg. milk fat. Final price for 1991/92 was expected to be between NZ\$5.10 and NZ\$5.20 per kg. milk fat. Producer prices for milk continued to be determined directly by export market realizations.

59. In Australia, milk production increased by 2.2 per cent to 6.59 million tons in 1990/91, primarily due to exceptionally good climatic conditions. Milk production in the 1991/92 season was expected to return to a more normal level of 6.49 million tons. Dairy cow numbers were expected to continue to decline, but production per cow was projected to increase through genetic and management improvements. The dairy policy in place since 1986/87 aimed at the development of a more efficient market-oriented dairy industry responsive to market conditions.

60. Japanese milk production in 1991 at 8.30 million tons was 1 per cent higher than in 1990. The increase was mainly due to a further improvement in yields, while dairy cow numbers continued to fall. The forecast for 1992 was that output would be at least 1 per cent higher than in 1990 in spite of a decline in cow numbers. However, the demand for drinking milk was also increasing at almost the same rate. The general balance between supply and demand for dairy products was being maintained by the LIPC mainly through substantial imports of all additional domestic requirements. Japan has lowered its support price for manufacturing milk further in 1991/92 and allowed larger imports to meet rising demand. Shipments of cheese have increased, while restrictions on imports of butter and milk powder have been relaxed. Milk production in Japan was not expected to rise much in the near future so that the growth in demand should be met from imports. After the decline in 1989 and 1990, Japanese imports of dairy products (including casein and lactose) reached some 2 million tons of milk equivalent in 1991, making it one of the world's largest net importers in quantitative terms, and probably the world's largest in value terms.

61. In South Africa, improved yields and climatic conditions led to a recovery in milk output which increased by 16.1 per cent in 1990 to 2.02 million tons. Cyclical shortages of milk solids occurred regularly followed by shorter periods of over-supply or surpluses. Since the beginning of 1990, South Africa had experienced a situation of over-supply of milk together with a decline in the total consumption of dairy products resulting in the build-up of surpluses of skimmed milk powder and butter. Economic factors were mainly responsible for the decline in demand. In view of this, South Africa had encountered difficulties regarding the disposal of the surplus product. However, there had been a marked downward trend in milk production since the second quarter of 1991 and by the end of December 1991, stocks returned to normal levels.

62. In Argentina, milk deliveries declined by 18 per cent in 1990 to 5.76 million tons. Deliveries declined further in 1991 owing to adverse climatic factors. Various issues related to the overall quality of raw milk, such as composition, microbial count and other sanitary aspects were under consideration, and work was going on with the aim of establishing a new basis for payments of the milk delivered to dairies. There were no subsidies on production or exports of dairy products. Certain trade liberalization measures had been adopted with effect from 1 April 1991, under which the custom duties would be reduced to zero and specific duties would also be removed. As a result of this new economic policy, during the second half of 1991, the Argentine dairy market was in the opposite situation to that of earlier years. The market was characterized by a decline in exports and a rise in domestic consumption, together with a growth of imports. The prospects for 1992 were for a return to the previous trend of exports.

63. In Uruguay, milk deliveries continued to increase significantly in 1990 at the rate of 5 per cent, reaching a level of 672 thousand tons, entailing a further significant increase in the output of dairy products. However, in the first half of 1991, production remained stable compared to the corresponding period of 1990. Uruguay had in recent years been the largest net exporter of dairy products among the developing countries. Exports which were high in 1989 fell in 1990 but recovered appreciably in 1991 for all dairy products except butter.

64. In Egypt, changes had been made to the import régime of certain dairy products. Total production of milk (including buffalo milk) in 1990 at 2.27 million tons, was 0.3 per cent higher than in 1989. Efforts were being made to develop and increase dairy production. The target for milk production in year 2000 was 4 million tons, and the aim was to achieve full self-sufficiency of liquid milk and fresh milk products. Efforts were being made to reach the objectives through increased traditional production of feed, genetic improvement and improvement of cattle health and fertility. Attempts were also made to establish a sound processing, storage and marketing system.

65. In Bulgaria, total production of milk in 1990 fell by 7 per cent to a level of 2.32 million tons due to a drop both in cow numbers and productivity per cow. Production continued to decrease in 1991. From

February 1991, a comprehensive price reform eliminated almost all restrictions on producer and consumer prices. For essential foodstuffs, including milk and dairy products, the government had assessed new market prices, involving an average five-fold increase from the previous levels. A far-reaching privatization programme was being evolved, which also affected monopoly structures in the production and trade of agricultural products, including dairy products. A comprehensive reform of the exchange system based on an interbank foreign exchange market was introduced and new fiscal and tax policies had been implemented. Under an Ordinance dated 8 February 1991, in connection with acute domestic shortages, the government temporarily prohibited the export of milk powder, milk and yoghurt, cream and buttermilk and imposed an export tax on cheese amounting to 30 per cent of the export price. These restrictions were gradually eliminated during the year.

66. Hungarian production of milk decreased in 1990 by almost 10 per cent to reach a level of 2.52 million tons due to the deteriorating market situation and decreasing dairy cow numbers. A further decrease was registered in 1991 due to the same reasons. The Hungarian dairy sector faced many difficulties in 1990 and 1991. As part of the market-oriented policies introduced in 1990, the previously large-scale consumer subsidies were phased out resulting in major price increases for dairy products and in a substantial decrease in domestic consumption. The consumption of dairy products declined by 35 per cent in the four years between 1987 and 1991. This drop was attributable to the decline in purchasing power in general and the rise in dairy prices in particular. Export possibilities also deteriorated, partly due to a near collapse of trade with the former CMEA countries, especially with the USSR, and partly due to the overall unfavourable situation in the international market.

67. In Romania, production of milk from cows and buffaloes decreased by 2.2 per cent in 1990 to 4.03 million tons due to both decreasing yields and a drop in cow numbers. In Romania, cow numbers in early 1991 were 14 per cent lower than in the year before, while the average yield per cow increased by 10 per cent. Total milk production in 1991 was estimated to have increased by 1 per cent over 1990. Since early 1990, Romania embarked upon a wide process of reform in order to move to a market economy. Significant changes were affecting production, consumption and prices of dairy products. Unlike other East European countries, Romania continued to control consumer prices of basic foods, including milk. While other Eastern European countries had reintroduced export subsidies, in Romania, exports have been restricted since 1990 and the country has received some dairy products as food aid from Western Europe. As of 1 January 1992, Romania applied a new import customs tariff, the great majority of customs duties being between 20 per cent and 25 per cent. The import licences régime was liberalized and import licences were being issued automatically. No surcharges and no quantitative restrictions for imports of dairy products had been introduced so far.

68. In Poland, a system of market-oriented prices was introduced on 1 August 1989 and subsidies to the dairy industry were abolished. The deregulation of prices after forty years of State control resulted in

a substantial rise in retail prices adversely affecting the consumption of dairy products. The Polish dairy sector suffered from the removal of subsidies on domestic consumption and the loss of markets in the USSR and Eastern Europe. Foreign trade was based on hard currency, but the liberalization of foreign trade meant greater competition from other exporting countries. The effect of such competition on the Polish domestic market was reduced when Poland devalued its currency and raised import duties. In addition, Poland sold calves to Western Europe as a way of lowering its milk and beef production capacity and earning foreign exchange at the same time. However, these sales have been checked after the EC restricted imports of calves from Eastern Europe. Milk production decreased by 4 per cent in 1990 to 15.76 million tons. Deliveries declined by as much as 14 per cent to 10 million tons. In the first ten months of 1991, production of liquid milk for drinking reportedly declined by 30 per cent while deliveries decreased by 21 per cent as compared to the corresponding period of 1990. This was due to a decrease in the profitability of milk production as a result of the abolition of all subsidies. Following these developments Poland, in 1990, exported 30 thousand tons of butter, but had to import certain quantities of butter in 1991. An intervention purchasing scheme for butter and skimmed milk powder was introduced early in 1992.

69. Milk production in Czechoslovakia remained around 7 million tons in recent years, with an average yield per cow of 3,900 kgs. Provisional data for 1990 and 1991 indicated a decline in dairy cow numbers, from 1.7 to 1.6 million, due to a combination of lower returns to producers dry weather and poor fodder crops. Milk production fell by 11 per cent in the first half of 1991 and deliveries to dairies decreased even more sharply (by 18 per cent). Cow numbers and milk production were forecast to decline in the short term. Consumption of milk and dairy products in terms of milk equivalent has averaged 250 kgs. per head. However increases in retail prices mainly due to the removal of consumer subsidies adversely affected consumption, notably of butter and increased quantities became available for export. During the past two to three years, there have been various market reports that Czechoslovakia had, at times, exported butter and milk powders at prices below the GATT minimum export prices. During late 1990 and early 1991, this caused additional pressure on international dairy product prices and was the source of some concern among participants to the Arrangement.

70. The Baltic countries, Estonia, Latvia and Lithuania, regained their independence in 1991. Dairy products have traditionally been major agricultural export items of these countries and it should be expected that substantial quantities earlier being sold to the USSR would be offered on Western European markets or other markets in order to earn convertible currencies. Statistical information for these countries was still scarce but would hopefully improve soon. Milk production has remained stable during recent years. In 1990, Estonian milk production was reported to be around 1.3 million tons; Latvian production at 2 million tons; and, that of Lithuania 3.7 million tons. The productivity was comparatively good with yields around 3.5 tons per cow in Latvia and Lithuania, and well above 4 tons per cow in Estonia. With a total population for the three countries of 8 million, which is comparable to that of Sweden, and a total milk

production of 7 million tons, which is twice that of Sweden, the actual surplus of dairy products available for export could be estimated to total some 4 million tons of milk. Efforts being made to improve productivity, feed supplies, and to rationalize the dairy industry, might result in increased availabilities of dairy products to be offered on international dairy markets in coming years.

71. In the USSR, milk output had grown significantly in the second half of the past decade, with a further slight increase in 1990 to 108.7 million tons. However, in the first half of 1991, milk production on State and collective farms decreased by 10 per cent and milk procurement by the State processing industry by 13 per cent. Poor feeding conditions, quality as well as quantity, lower animal numbers and reduced milk yields per cow were the main reasons for this decline. For calendar year 1991, milk output reportedly dropped by 10 per cent to 97.83 million tons.

72. The changes taking place in the USSR area would be likely to affect the dairy market for some time. In the Commonwealth of Independent States, Byelorussia appeared to be the only country having a surplus to export, with a milk production of around 750 kgs. per capita. In 1990, milk production in the Federation of Russia, Ukraine and Byelorussia, at 56, 24 and 7.5 million tons respectively, accounted for 90 per cent of total milk production in the Commonwealth of Independent States. Yields per cow were less than 3 tons per cow and could, of course, be substantially improved with better feed supplies and improved management. With a dairy cow population of 32 million, the potential for increasing milk supplies would be substantial. However, in the prevailing social and economic situation, a rational collection, processing and distribution of milk and dairy products would be very difficult to achieve. Until a reasonable commercialization is established, larger cities, such as Moscow and St. Petersburg, will have to be supplied from abroad, to a great extent through concessional sales or donations.

73. In the United States, the sustained period of favourable returns to milk production entailed increases in milk cow numbers and expansion in production by early 1991. However, these developments collided with the effects of sharply lower milk prices. Thus, sizable early-1991 production increases were eroded as the year progressed. In the fourth quarter of 1991, prices received by milk producers decreased from their relatively high 1990 level, as demand for milk and dairy products, notably cheese, has been curbed by economic recession, and stocks increased. In this situation, the expansion of milk production has levelled out, with output falling below year earlier. For all of 1991, milk output at 67.36 million tons remained almost unchanged compared to 1990. Commercial consumption of dairy products in 1991, was slightly higher than the previous year. Shifts in consumption from higher-fat products toward lower-fat products persisted, entailing an increased surplus of butter available for export. Prospects for 1992 pointed to milk production being little changed from 1991; commercial use increasing 2 to 3 per cent and farm milk prices being slightly higher. The Commodity Credit Corporation (CCC) effected significant purchases of butter and skimmed milk powder in 1991. In 1992, CCC purchases were forecast to be about a third below those of 1991.

74. The support price for manufacturing milk was lowered by 50 cents to US\$10.10 per cwt. as of 1 January 1990 and have since then remained unchanged. The Food, Agriculture, Conservation and Trade Act of 1990, ensured that the minimum support price would stay at US\$10.10 per cwt. through 1995. This was the strongest guarantee against support price declines given to dairy farmers since the early eighties. In order to ensure the minimum support price for milk, price supports were increased by 7 per cent for non-fat dry milk and there was also a slight increase for Cheddar cheese early in 1992.

75. The 1990 Farm Bill re-authorized the Dairy Export Incentive Program, extending it until 31 December 1995. The programme provided for substantial subsidies on shipments to specific countries. However, until 1991, only limited sales had been made under the programme.

76. Low domestic milk prices generated legislative proposals to ease price pressure on farmers and stabilize the dairy industry. Reacting to the outcry from the farm level, several legislative approaches to address the problem of weak domestic prices were introduced in Congress. To date, legislative efforts focused upon boosting milk support prices, attempting to establish production quotas, revival of the dairy cattle export enhancement programme under the Dairy Export Incentive Program, and herd buy-outs. However, the Department of Agriculture took several administrative actions to boost consumption of dairy products under government programmes and an alternative dairy legislation had not been adopted early in 1992.

77. Canadian milk production in 1991 at 7.86 million tons decreased by 2.4 per cent compared to 1990, as the reduction in cow numbers was not offset by increased productivity. A further drop of 1 per cent was projected for 1992. Effective 1 August 1991, the target return was raised by 2.5 per cent to Can\$49.92 per hectolitre of milk. Effective in the 1991/92 dairy year, the Market Sharing Quota (MSQ) was reduced by 4.7 per cent following a decrease in the estimated domestic requirements for butterfat and increased low-fat fluid milk sales. A task force, with representatives from the Federal Government, farmers, the dairy industry and consumers, identified options for a long-term dairy policy. Given that the supply of skim-off cream from the fluid milk sector was forecast to increase at an annual rate of about 2.9 per cent and that consumer tastes were trending away from butter, it was anticipated that the total MSQ would continue to be lowered over the next five years by an average of 0.7 per cent per annum.

78. In Israel, production continued to decline in 1990 by 3.9 per cent to 906 thousand tons. In 1991, Israel had an average yield of 8,400 kgs. per cow, the highest in the world. Faced with a sharp decline in domestic demand for all dairy products except fresh cheeses, the Milk Marketing Board took steps to cut milk production quotas. Subsidies were cut and retail prices increased by 9 per cent in real terms.

TABLE 3

Some Data Related to (a) Cows' Milk Production or  
(b) Deliveries for Selected Countries or Regions

		Milk Production/ Deliveries (million tons)	Percentage change from previous year		
			Production/ Deliveries	Milk yield	Dairy cow numbers
EC-12	1990	(b) 98.87	0.0	+ 1.4	- 1.9
Preliminary	1991	(b) 97.00	- 1.9	+ 1.5	- 2.0
Forecast	1992	(b) 95.00	- 2.0	+ 1.4	- 2.0
USSR	1990	(a) 108.70	+ 0.2	+ 1.0	- 0.2
Preliminary	1991	(a) 97.83	- 10.0		
United States	1990	(a) 67.26	+ 3.0	+ 3.0	0.0
Preliminary	1991	(a) 67.36	+ 0.2	+ 1.0	- 1.0
Forecast	1992	(a) 67.49	+ 0.2		
Poland	1990	(a) 15.76	- 4.0	- 0.4	- 6.0
Preliminary	1991	(a) 14.64	- 7.0		- 4.0
Forecast	1992	(a) 13.90	- 5.0		
New Zealand	1990	(a) 7.72	+ 5.0	+ 0.3	+ 4.9
Preliminary	1991	(a) 7.75	+ 0.4	+ 0.3	+ 1.0
Forecast	1992	(a) 7.75	0.0		
Canada	1990	(a) 8.05	0.0	+ 3.0	- 3.0
Preliminary	1991	(a) 7.86	- 2.4	+ 0.5	- 2.0
Forecast	1992	(a) 7.78	- 1.0		- 1.5
Japan	1990	(a) 8.22	+ 2.0	+ 3.0	- 1.0
Preliminary	1991	(a) 8.30	+ 1.0	+ 1.8	- 0.8
Forecast	1992	(a) 8.38	+ 1.0		- 1.6
Australia	1990	(b) 6.41	- 1.8	+ 1.0	- 1.5
Preliminary	1991	(b) 6.41	0.0	+ 2.6	- 2.6
Forecast	1992	(b) 6.41	0.0		

79. Milk production in individual developing countries generally remained at low levels due to technical and economic factors. However, the overall output of developing countries increased by 2.6 per cent to 155 million tons in 1991 and the degree of self-sufficiency was expected to increase in the next few years. Several importing developing countries embarked on very ambitious development programmes.

80. The largest producer in the developing regions, India, experienced further rapid expansion of its dairy industry as a combined result of favourable weather, strong consumer demand and conducive government policies. During the seventh five-year plan period, which ended in 1989/90, total milk production grew by almost 30 per cent to 51.5 million tons. However, the expansion in production has slowed down in 1991, following an increase by more than 50 per cent in the past decade. In 1989/90, India, which had long been the biggest recipient of food aid in dairy products, even had some surpluses for export. However, there was a slowdown in production in the first half of 1991 due to adverse weather in some dairy districts. At the same time, milk collection by the modern dairy plants fell by over one tenth. The main reason for this decline was the increased processing of milk into ghee (butter oil) in the rural sector, reflecting a shortage of edible fats. Consequently, in calendar year 1991, total milk production increased by only 1.1 per cent to 55.5 million tons. The 1991/92 milk production target was 57.5 million tons compared with a production of 55 million tons in 1990/91. Milk output was projected to rise by about 10 per cent to 61 million tons by 1995. Per capita consumption could increase from its present level of 58 kgs. per year to about 68 kgs., and should, together with a population growth of 2.2 per cent, result in a balance between production and consumption.

81. China's production of milk increased throughout the 1980's, as a result of increased cow numbers and more emphasis in national plans on the nutritional value of milk consumption. Following some slowdown in 1990, growth seemed to have accelerated again in 1991. China's production of milk from cows and goats in 1991 was somewhat over 5 million tons, 6 per cent more than in 1990. Original plans which indicated a target of 30 million tons by the year 2000 were revised downwards as feed supply was lagging behind the requirements of the livestock sector and fodder prices were increasing. Even so, by the beginning of the next century, China might establish itself as the second largest milk producer in developing regions.

82. In the Republic of Korea, demand for milk products and production of milk rose by as much as 10 per cent to some 1.7 million tons in 1990. There was slower growth in 1991 following a virtual doubling of milk output over the past half decade. Demand has remained strong, leading to the first significant imports of dairy products and relaxation of a previously restrictive import policy. Milk prices were left unchanged.

83. In a few Latin American countries, the dairy industry continued to be stimulated by economic growth and rising demand. Mexico's milk production continued to rise sharply, up an estimated 9 per cent for 1991 to

10.2 million tons, mainly due to favourable weather conditions. A further increase by 5 per cent was projected for 1992. Assuming normal weather, Mexican milk output should rise further, reflecting the up-grading of the genetic potential of the dairy cattle population through sizable imports of breeding animals and more conducive government policies. Even so, as the government was committed to large-scale distribution of dairy products under social programmes, Mexico would remain one of the world's largest importers of milk powder due to a growing domestic demand. Milk production in Brazil decreased by 5 per cent in 1991 to 13.8 million tons. However, strong growth in output was expected in 1992 provided inflation could be controlled and other economic reforms proved successful. The Government of Brazil recently began implementation of its March 1990 tariff reform programme. The programme will result in import tariffs on dairy products ranging from zero to 40 per cent, with an average tariff of 20 per cent by 1994. The dairy commodities that would be affected by this revision were skimmed milk powder, butter and cheese. South American and other exporters would thus have easier access to the Brazilian market. Favourable milk prices in Chile stimulated production in 1991 which then reached 1.49 million tons. Production was projected to increase by as much as 5 per cent in 1992. Cuba's dairy industry, which depended heavily on imported milk powder and butterfat for recombining, encountered increasing difficulties owing to economic adjustment and reorientation of trade with its traditional trading partners. Following stagnation during most of the 1980's, Cuban milk production decreased by about 3 per cent in 1990 to 1.1 million tons. A further decrease was estimated for 1991.

#### Consumption

84. World consumption of liquid milk over the last ten years increased at an average annual rate of 1 per cent. In per capita terms, the consumption of milk remained rather stable at nearly 46 kgs. throughout this period. In 1991, worldwide fluid per capita milk consumption was expected to have reached the 1984 record level of 47.6 kgs. For obvious reasons, variations existed between countries and regions in the annual per capita intake of milk. On one end of the spectrum were developed countries, with 160 kgs. of liquid milk consumption; but the intake was as low as 2.5 kgs. in certain developing countries. However, while consumption levels were gradually increasing in developing countries with growing urbanization and population/income increase, milk intake was getting saturated in some developed countries either on health grounds or due to the availability of a wide variety of substitute drinks and milk imitations of low caloric content, at moderate prices. Consumers showed preference for semi-skimmed types of milk and other light products. The switch from whole milk to partially skimmed milk continued in 1991, with sharp increases in consumption of the latter registered in many countries in Europe and in North America. In some Central and Eastern European countries, where per capita consumption had been comparatively high, strong increases in retail price distribution problems and other structural inefficiencies had adverse effects on the consumption of milk and fresh milk products. World consumption of liquid milk in 1992 was expected to increase by 1 per cent compared to 1991. Significant gains in consumption were anticipated in the United States, Japan, Mexico, Argentina, Brazil, India and Chile.

Little change in consumption should occur in the Community. Central and Eastern Europe as well as the USSR area, were expected to experience significant declines in milk use also in 1992.

85. The principal area of growth in consumption was Asia, where both in developed and developing countries, rising incomes and changing food consumption habits provided a strong boost to demand for milk and dairy products. Many countries subsidized school milk and other campaigns to promote milk consumption. As a result, per capita milk consumption steadily increased, principally in Japan, the Republic of Korea, Thailand, Indonesia, China and India. In 1991, the biggest gains in total consumption of liquid milk came from Japan and China, whose milk consumption increased 6 per cent from 1990 levels. This was largely due to changes in the eating habits and, in turn, an increased demand for milk by consumers. Consumption increased to some extent as a consequence of milk distribution programmes also in Latin America.

86. The consumption of other fresh milk products such as yoghurt and other fermented or flavoured milks increased steadily in a number of countries and was expected to continue its upward trend. The consumption of flavoured milks was also developing rapidly. In the Community, fresh product output increased by 0.8 per cent in 1990 and 1 per cent in 1991. It was estimated that more than 30 per cent of the milk collected was now marketed in this form. This recent development clearly reflected the underlying trend in consumption. There was a potential demand for yoghurt and flavoured milks in many developing countries, but consumption continued to be hampered by relatively high prices.

87. The strong demand for milk products has encouraged the development and production of dairy substitutes and imitations, which to a variable degree contain milk components. Market information for such products have been difficult to obtain, but it was generally believed that their rôle in the market still remained limited in quantitative terms. The appearance and developments of dairy substitutes and imitations entailed some concern as to the effect this could have on the dairy market in the future and a possible need for measures to protect the marketing of traditional milk products. In September 1988, the International Dairy Federation adopted some guidelines for the designation and presentation of substitute products. These guidelines were intended to identify and prevent misuse of designations reserved for milk and milk products, and to achieve a proper labelling of substitutes providing warning and assurance to consumers.

The Situation for Individual Dairy Products

Butter and Anhydrous Milk Fat

Butter

Production

88. World production of butter and butter oil, was estimated to total 7.55 million tons in 1991, down 2 per cent from the previous year. The accumulation of stocks and weakening prices were the principal reasons for these decreases. World production during 1992 was projected to decrease further by 2.5 per cent to 7.36 million tons due primarily to excess carry-over stocks in major producing countries and reduced output in the former USSR area.

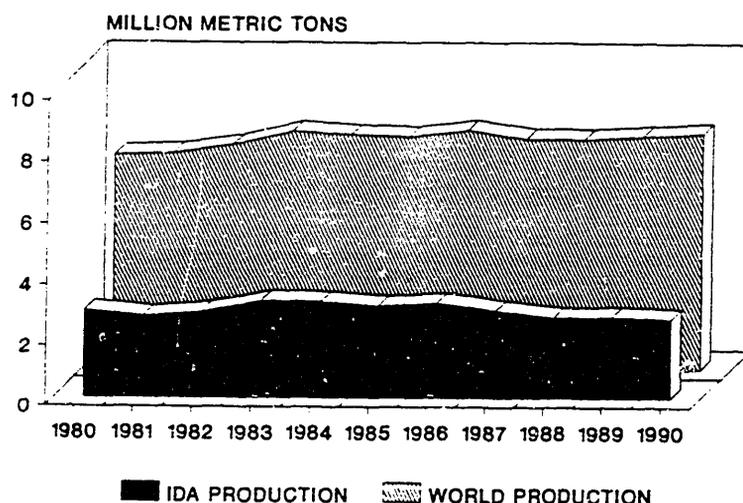
89. In the period January to August 1991, Community butter production decreased by 6.6 per cent compared with the corresponding period of 1991. For the year as a whole, the estimates were for a decline in butter output of the same order, production then amounting to about 1.50 million tons compared to 1.60 million tons in 1990. The outlook for 1992 was for a further major decline in butter output.

90. In New Zealand, production of butter/butter oil in 1990/91 at 275 thousand tons was similar to that in the previous season, despite the increase in milk output. The dairy industry was continuing to pursue the objective of reducing the proportion of milk used in butter manufacture in face of reduced access to traditional markets and the lack of secure alternative markets. In line with industry goals, butter/butter oil production in 1991/92 would likely be down by between 5 and 10 per cent to around 250 thousand tons. Australian butter/butter oil production rose by 2.1 per cent during 1990/91 to 113.5 thousand tons. 1991/92 production was forecast to be 111 thousand tons which was slightly below the 1990/91 level. In 1991, butter production declined in the Nordic countries with further decreases forecast in 1992. In Poland, production of butter decreased by 6.5 per cent to 270 thousand tons in 1990 and a sharper decrease (by 30 per cent) was registered in 1991 when output amounted to 190 thousand tons.

91. United States butter production increased by 4.9 per cent in 1991, reaching 620 thousand tons. The shift in consumption toward lower-fat milk products has been an incentive to increase the output of such products, resulting in an increased quantity of milk fat being diverted to butter production. However, the outlook for 1992 was for a decline in butter output by 9.7 per cent to 560 thousand tons. The projected drop was linked to forecasts for expanded cheese production. Canadian butter production decreased by 2.3 per cent to 96.8 thousand tons in 1990/91, due to quota cuts caused by declining consumer demand and increased production of cheese. The outlook for 1991/92 was for a sharp decrease in output of butter by 4 per cent to 93 thousand tons. For 1992/93 a further drop was projected to about 90 thousand tons as production would be following the declining demand.

92. USSR production, which had increased in 1990 amounting to 1.80 million tons, dropped by as much as 13 per cent in 1991 to 1.57 million tons as a result of the shrinking supply of milk. Moreover, margarine production fell sharply in 1991, down by 22 per cent in the first half of the year.

## BUTTER PRODUCTION 1980-1990



### Consumption

93. World butter consumption for 1991 declined by about 2 per cent from the previous year reflecting economic difficulties in former centralized economies, economic stagnation in Western economies, and prevailing health concerns. World per capita consumption, which averaged 2.7-2.8 kgs. over the last ten years, stagnated or declined slightly through 1991. In 1990 and 1991, increased retail prices in Central and Eastern European countries adversely affected the consumption of butter. The trend to switch to blended spreads and low fat spreads (both butter and margarine) accelerated in 1990 and 1991. In the short and medium term it was likely that the downward trend in butter demand would continue or even accentuate.

94. In the Community, butter from intervention storage continued to be available at a discount price for non-profit making organizations and for the armed forces. Member States also subsidized butter for social purposes and the Community contributed financially to national schemes for school milk. Measures under the milk co-responsibility regime continued in 1990 and 1991, providing funds for subsidized butter to be used in pastry products, ice-cream and sugar confectionery. Such disposals of butter increased to about 400 thousand tons in 1991. Total Community consumption of butter nevertheless declined by 3.2 per cent in 1990 and by another 3 per cent in 1991. The decline was due to higher prices, increased supply of imitation products in some member States and dietary concerns. Butter consumption was expected to decrease to a level of around 4.4 kgs. per head by 1997. Consumption of margarine seemed to be very stable at a level of about 4.7 kgs. per head, whereas consumption of spreads appeared to increase.

95. In Switzerland, a number of measures were taken to promote butter consumption and the product was being sold at prices considerably below cost, mainly with the help of subsidies. However, domestic consumption of butter continued to decline in 1990 and 1991, as it did in the Nordic countries.

96. Increased retail prices adversely affected butter consumption in Central and Eastern Europe in 1990 and 1991. In 1990, average consumption per head in Poland was estimated to have been halved. In early 1990, Romanian exports were curbed and restrictions on imports eased, with commercial imports being supplemented by food aid and consumption increased. Later in 1990 Bulgaria took a similar decision with a view to maintaining supplies for domestic consumption.

97. In Australia, domestic sales of butter, butter blends and butter oil increased marginally (by 0.5 per cent) to 57 thousand tons in 1990/91 and might remain static throughout the 1991/92 season. However, the rapid growth of the butter blend market allowed butter to increase 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.

98. The repeal of the Margarine Act from 1 January 1990, meant that the manufacture and sale of cheap saturated fat margarines on the New Zealand market became legal. The repeal of the Margarine Act also allowed for sale on the New Zealand market of blended spreads; i.e. margarines with milk fat added, claiming both the benefits of margarine and the taste of butter. These developments threatened to make significant inroads into the market share for butter which had accounted for 65 per cent of the New Zealand consumer yellow fats market, remaining one of the biggest selling product categories in grocery outlets. Butter consumption declined by 2.2 per cent in 1990/91 and a further decline was forecast for 1991/92. Greater expenditure on general and branded promotions reduced the decline in butter consumption to some extent.

99. In the United States, butter consumption increased in 1991 by 2 per cent to 500 thousand tons and was expected to rise an additional 2 per cent in 1992. This increase was largely due to lower butter prices. Beyond 1992, new domestic food labelling rules may provide incentives for the increased production of lower fat versions of high milk fat content products such as butter. In Canada, butter consumption was forecast to decrease by around 5 per cent to 88 thousand tons in 1991/92 with a further 3 per cent drop projected for 1992/93.

100. The Canadian Milk Supply Management Committee has given the Canadian Dairy Commission the mandate to develop market initiatives to promote increased milk fat consumption in Canada and to develop specific projects to achieve this goal. The objective of the programme is to increase the utilization of butterfat in the domestic market, and thereby to moderate the future cost in Market Sharing Quota (MSQ). Under this programme, the Commission will provide assistance on an initial three-year basis to processors to market products such as clarified butter, ghee (semi-fluid clarified butter), butter with reduced cholesterol, butter oil and milk

fractions. These are all full-fat products which would offer new market opportunities or would enhance existing low volume markets that are now in decline. The assistance granted will be financed through levies collected from dairy producers.

101. Consumption of butter and milk products in general rose in the USSR, notwithstanding reported local shortages and widespread rationing of distribution by State shops. With domestic output and imports increasing, total butter consumption in the USSR reached about 2.2 million tons in 1990, more than a quarter of global consumption. However, the relatively high consumption level of about 7.5 kgs. per head reflected, to a large extent, heavy subsidization. Economic reforms affected domestic prices and per capita consumption of dairy products in 1991 and butter consumption declined. Even so, average consumption of butter remained relatively high by international standards, but the differences between individual republics, and within republics between income groups, have been widening. However, increases in butter consumption were expected in 1992 in the USSR area, as proposed food-aid efforts by the EC and other western countries gained momentum.

#### Trade

102. A continued decline in milk fat consumption in many countries resulted in lower import demand on one side and increased exportable availabilities on the other. Increased quantities of butter were offered on international markets in 1990 and 1991, facing a slack import demand and the market deteriorated further. World exports at 720 thousand tons in 1990 declined in 1991 to 680 thousand tons, 6 per cent below 1990 levels. However, a recovery in world exports was expected for 1992.

103. At its meeting of December 1990, the Committee of the Protocol Regarding Milk Fat noted that economic changes in the USSR were disrupting the established channels for food procurement and distribution and that an emergency situation had developed with an urgent requirement for imports of food, including butter, on special terms. In light of the situation and the facts presented, the Committee, acting in conformity with Article 7:1 of the Protocol, granted a derogation from the provisions of the Protocol with respect to the minimum export price for butter for exports to the USSR up to a maximum quantity of 200,000 metric tons per participant, for butter exclusively for consumption in that country. Sales contracts were to be concluded before 15 January 1991 and deliveries completed by 30 September 1991. However, a provision of the derogation permitted deliveries to be completed during the period 1 October-31 December 1991 if the USSR was unable to take receipt of the deliveries by 30 September 1991. Sales of 311 thousand tons were contracted under the derogation. However, not all participants were able to complete the deliveries by 31 December 1991, mainly due to payment difficulties experienced by the USSR. Total deliveries under this derogation therefore reached only 214 thousand tons.

104. In 1991/92, there was a substantial need for dairy products, and other food items, to be supplied to the USSR area for food relief purposes and on other than normal commercial terms. A number of participants to the

Arrangement stressed the commercial importance of this market and sought assurances that any decision to provide food aid in response to such requests should be such as to cause minimum disruption to the commercial market.

105. The Community exports of butter to third countries (including butter oil) declined by 43 per cent amounting to only 225 thousand tons in 1990. However, exports of butter during the first nine months of 1991 increased by 62 per cent to 143 thousand tons, the main destination being the USSR. Pursuant to the Decision adopted on 12 December 1990, a contract for the supply of 200,000 metric tons of Community butter to the USSR had been concluded. However due to payment difficulties experienced by the USSR, shipments were delayed. Thus, it was not possible to deliver the quantities initially contracted. Total deliveries had only been 136,500 tons. The average price was ECU 60 per 100 kgs.

106. In 1990, exports by New Zealand recovered to 163 thousand tons compared to 138 thousand tons in 1989. In the first three quarters of 1991, exports totalled 150 thousand tons, an increase by 19 per cent over the corresponding period of 1990. The European Communities remained a major market. Under special arrangements for imports of New Zealand butter into the Community, the global volume of butter which New Zealand could export to the European Community was for 1991 and 1992 progressively reduced to the following quantities: 58,170 and 55,000 tons respectively. The arrangements provided for a reduction in the special import levy from 25 per cent ad valorem to 15 per cent. Other important outlets for New Zealand butter were Iran and the USSR. Pursuant to the Decision adopted on 12 December 1990, New Zealand contracted to supply some 100,000 metric tons of butter to the USSR at a price of US\$1,150 per metric ton f.o.b. stowed. Deliveries under this contract were delayed due to payment difficulties experienced by the USSR. Thus, it had not been possible to deliver the quantity initially contracted. Total deliveries had been around 67 thousand tons.

107. Australian exports of butter/butter oil recovered in 1990/91, the main outlets being the USSR, Japan and traditional Asian markets. Export sales of butter/butter oil, mainly to Asia, increased significantly in the first nine months of 1991 with butter sales up 60 per cent compared to the same 1990 period. Consequently, for the calendar year 1991, exports registered a substantial increase. Within the terms of the Decision adopted on 12 December 1990, Australia contracted to supply 4,000 metric tons of butter to the USSR at a price of US\$1,150 per metric ton stowed. Shipments were completed in the first half of 1991.

108. In accordance with the Decision adopted on 12 December 1990, Finland concluded a contract to deliver 7,000 tons of butter to the USSR, at a price of US\$1,200 per metric ton and deliveries were completed. Finnish butter exports as well as those of Norway and Sweden continued to decrease in 1991.

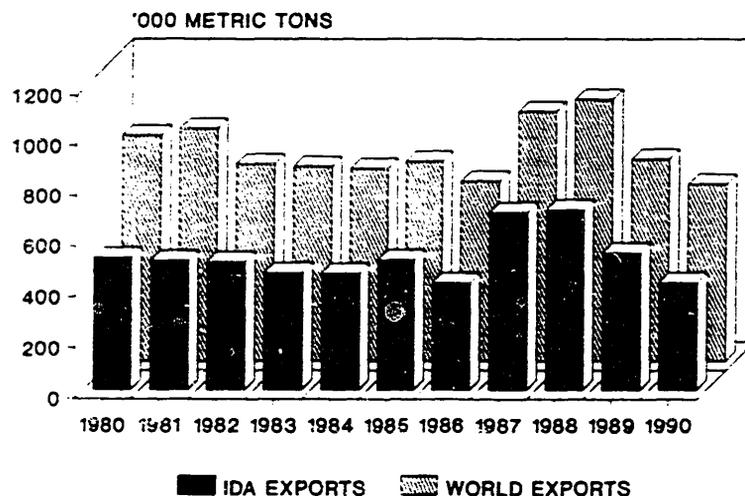
109. Exports of butter by Argentina increased by 20 per cent in 1990, amounting to 7.4 thousand tons, and the expansion continued in early 1991. These increases were mainly due to reduced domestic consumption. However,

during the second half of 1991, exports declined and for the whole year 1991 a drop in exports was estimated.

110. As a consequence of increased production and decreased consumption, Poland resumed its exports of butter in early 1990. For the whole year of 1990, exports amounted to 30 thousand tons. However, as a result of the significant decline in milk output in the autumn and winter, Poland imported some 10 thousand tons of butter in 1991 and would have to import again some 20 thousand tons in early 1992. In early 1990, Romania restricted its exports and allowed greater imports of dairy products with a view to increasing supplies for domestic consumption. Thus, Romanian imports of butter in 1990 amounted to 23.8 thousand tons out of which 12.5 thousand tons were within the food-aid programme, mainly supplied by the EC and the United States. In the first three quarters of 1991, imports of butter amounted to 3.5 thousand tons.

111. United States butter exports declined for two consecutive years to a level of some 20 thousand tons in 1991, the principal destination being Mexico. However, large public sector butter stocks (230,000 tons at the end of 1991) would motivate the United States to move butterfat out of storage through subsidized exports. Consequently, the outlook for 1992 was for a substantial increase in exports to some 100,000 tons mainly due to the implementation of the Dairy Export Incentive Program. Moreover, a bill passed in the fall of 1991 required the export of 113,000 tons of dairy products to the Soviet Union and former constituent republics, including 80,000 tons of skimmed milk powder and not less than 25,000 tons of butter.

## BUTTER EXPORTS 1980-1990



112. The Community imports of butter, recovered to 116 thousand tons in 1990. However, in the first three quarters of 1991 imports decreased to 38 thousand tons compared to 64 thousand tons in the corresponding period of 1990. New Zealand remained the main source of the Community imports. Imports into Switzerland again decreased substantially in 1990 and remained low also in 1991. Polish butter imports resumed in 1991 and amounted to some 10 thousand tons.

113. Imports of butter into Japan decreased to 7 thousand tons in 1990. However, in the first nine months of 1991 some 10,000 tons of butter were imported as the butter market situation continued to firm. Further imports of 11 thousand tons of butter were announced in September, bringing cumulative imports in fiscal year 1991 to 18 thousand tons.

114. The USSR, where consumption of milk and dairy products rose faster than production, remained the world's biggest importer of dairy products, mainly butter. In 1990, imports totalled approximately 3 million tons of milk equivalent. In 1990, USSR imports of dairy products and meat were facilitated by a grant from Germany. Butter imports for the whole year of 1990, at 299,000 tons, increased by 20 per cent accounting for about half of world trade in this commodity. However, butter imports dropped by as much as 56 per cent during the first half of 1991 compared to the corresponding period of 1990.

115. The derogation adopted in December 1990, permitted sales at prices below the agreed minimum export price for butter, and at the closing date for contracting sales under that derogation, contracts had been concluded for 311 thousand tons. However, shipments were delayed mainly due to payment difficulties experienced by the USSR and total deliveries under this derogation had only been about 214 thousand tons.

116. USSR consumption was expected to decrease following changes towards a market economy and reduced food subsidies. In April 1991, the USSR significantly increased retail prices for food commodities, including butter. At the same time the government announced income compensations. It was difficult to assess what the impact of these developments would have on the USSR market, especially on the demand side. A fall in demand in the USSR would have major repercussions on international trade in dairy products, especially butter. In addition, the lack of hard currencies might have negative effects on imports of butter, given the need for the USSR to import other agricultural products. For these reasons annual imports of butter in the near future might not exceed 200 thousand tons compared to annual average imports of 350 thousand tons between 1987 and 1990. However, if butter was to be offered at exceptionally low prices or as food aid, substantially larger quantities could be imported. Early in 1992, food-aid supplies, including butter, were arriving in Moscow and St. Petersburg.

117. A major unknown factor in the medium term was the outcome of economic reforms in the USSR area which could have a major impact on total volumes of OECD dairy product exports over the period, since commercial imports into the USSR area in the medium term were not expected to return to their level of the late 1980's.

118. In March 1991, the Community took urgent action to supply Bulgaria and Romania with certain agricultural products, including respectively 2,000 tons and 5,000 tons of butter.

### Stocks

119. Total stocks of butter in the European Communities, North America and Oceania on 1 January 1991, at 653 thousand tons, had registered an increase of 70 per cent as compared to 1 January 1990. Aggregate stocks of butter in the same area on 1 January 1992, estimated at 670 thousand tons remained relatively stable compared to their level one year earlier. However, concerns had been expressed that stocks held by the EC and the United States were still high. Stocks of butter in Central and Eastern Europe on 1 January 1992 were lower than a year earlier but were projected to increase throughout 1992. World stocks at the end of 1991 were estimated at 1.07 million tons, with the EC and the United States being the principal holders. World butter stocks at the end of 1992 were expected to decline to 988 thousand tons, down 7.8 per cent as compared to the beginning of the year with decreases forecast both in the EC and the United States.

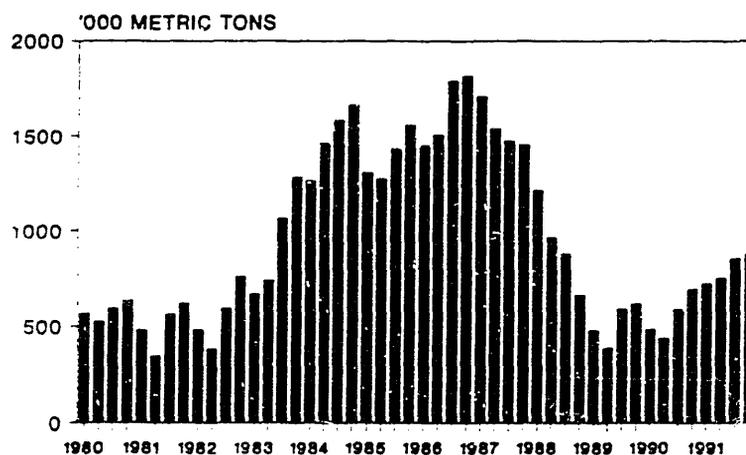
120. The Community stocks of butter were at 335 thousand tons (public and private) at the end of 1990 compared to 124 thousand tons one year earlier. Intervention purchases continued in 1991. Despite the reduction in milk deliveries and the decrease in the production of butter, the reduction in exports and in the consumption of butter led to a consequent increase in butter stocks. Total stocks were at around 500 thousand tons at the end of September 1991 compared to 368 thousand tons a year earlier. However, in the fourth quarter of 1991, intervention stocks were used to stabilize prices with both butter and skimmed milk powder being sold for intervention for this purpose. Consequently, butter stocks at the end of 1991 were at 274 thousand tons compared to 335 thousand tons at the end of 1990.

121. In Oceania, stocks of butter at 115 thousand tons on 1 January 1992 remained relatively stable compared to their level a year earlier. Increased export sales by Australia and deliveries by New Zealand, mainly to the USSR and Iran, helped to maintain stocks at normal levels.

122. In Poland, stocks of butter at 13 thousand tons on 1 January 1992 were low as production had continued to decline throughout 1991.

123. In the United States, total stocks were estimated at 248 thousand tons at the end of December 1991, compared to 189 thousand tons a year earlier. However, they were expected to decline by 15 per cent to 210 thousand tons by the end of December 1992. Canadian stocks reached 20 thousand tons at the end of December 1991, compared to 28 thousand tons a year earlier. Stocks at the end of the current dairy year 1991/92 (end July 1992) were expected to remain around 20 thousand tons.

## BUTTER STOCKS 1980-1991 IDA PARTICIPANTS \*



\* Includes Austria, Canada and the US

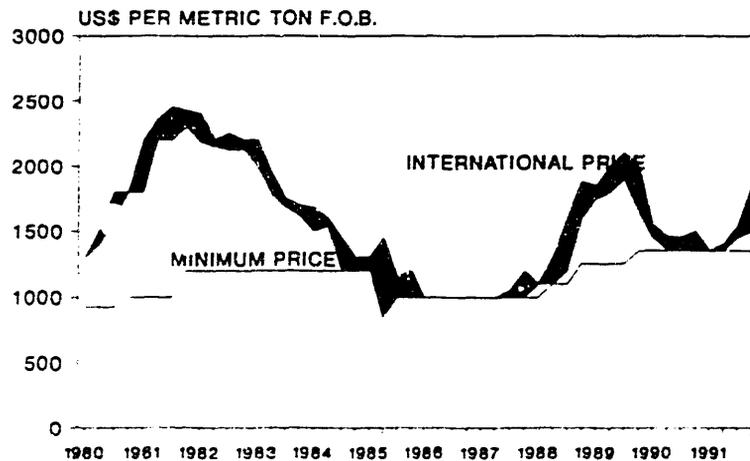
### International prices

124. International prices declined to the range of US\$1,350-US\$1,500 per ton f.o.b. in the last three quarters of 1990. In the first two quarters of 1991, the market situation continued to worsen with the accumulation of stocks. A persisting decline in butter consumption in many countries and an extremely weak international demand led to a further drop in prices to the level of US\$1,350 per ton f.o.b., i.e. the minimum export price. In practice, few sales were made at the minimum price. Moreover, certain offers and sales were reportedly made at prices below the minimum export price.

125. Prices firmed slightly in the third quarter of 1991, ranging between US\$1,450 and US\$1,540 per ton f.o.b. The market situation improved further towards the end of the year partly due to a further weakening of the United States dollar and to tight supply conditions. Prices increased to a range of US\$1,500 and US\$1,850 per ton f.o.b. Developments in 1992 would depend heavily on the ability of the USSR area to absorb supplies, both commercial and other supplies, and the market situation remained rather unpredictable.

126. In its review of September 1990 and September 1991, the Committee decided to maintain the minimum export price unchanged at US\$1,350 per metric ton f.o.b.

## BUTTER PRICES 1980-1991



### Anhydrous Milk Fat

#### Production and trade

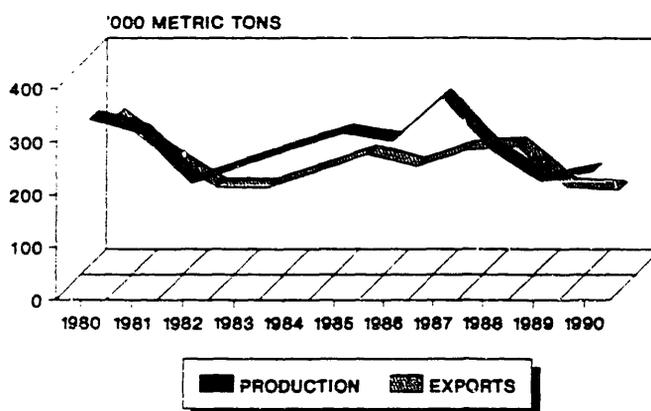
127. Output and exports of anhydrous milk fat for the European Communities and New Zealand were lower in 1991 than in the previous year, while for Australia, a substantial increase in both production and sales was registered.

#### Food aid

128. Community food-aid programmes provided for a maximum of 18 thousand tons of butter oil in 1990, while actual food-aid deliveries in that year amounted to 9 thousand tons. In the first three quarters of 1991, food and deliveries reached 6 thousand tons in relation to 7 thousand tons delivered in the corresponding period of 1990.

129. In the United States, the availability of butter/butter oil for fiscal year 1992 was 25 thousand tons under the PL 480 Program and 80 thousand tons under Section 416(b).

### ANHYDROUS MILK FAT PRODUCTION AND EXPORTS 1980-1990



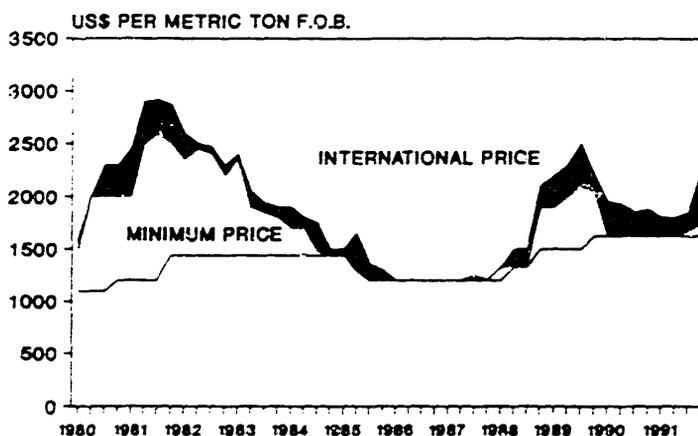
• IDA participants only

#### International prices

130. International prices of anhydrous milk fat continued to decrease in 1990, ranging between US\$1,625 and US\$1,880 per ton f.o.b. at the end of that year. In the first half of 1991, prices fluctuated between US\$1,625 and US\$1,800 per ton f.o.b. Certain sales had reportedly been made at prices below the minimum export price of US\$1,625 per ton f.o.b. Some firming in the market was registered in the third quarter of 1991 when prices ranged between US\$1,675 and US\$1,850 per ton f.o.b. mainly due to the weakening of the United States dollar. Prices firmed further in the fourth quarter of 1991, fluctuating between US\$1,750 and US\$2,250 per ton f.o.b. The market situation remained, however, unstable.

131. As regards the future outlook, prices and sales of anhydrous milk fat remained sensitive to competition from vegetable oils and uncertainties persisted in the market. However, the minimum export price has been kept at US\$1,625 per ton f.o.b. since September 1989.

### ANHYDROUS MILK FAT PRICES 1980-1991



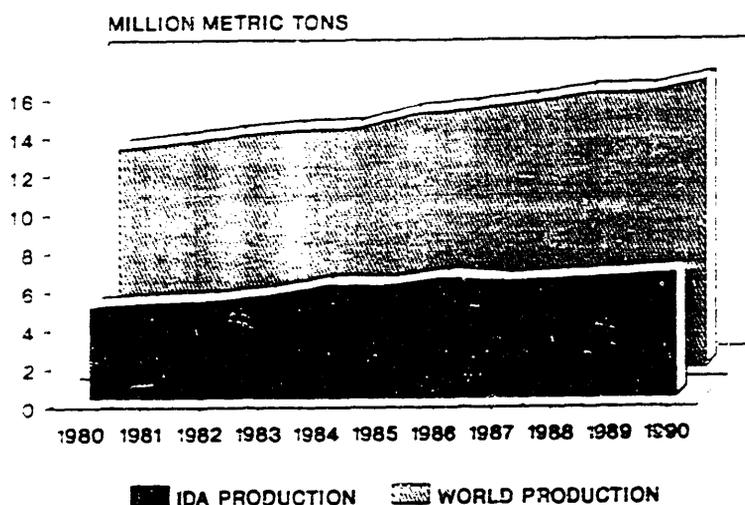
## Cheese

### Production

132. World output of cheese (all kinds, including curd) at 14.80 million tons in 1991 was 1 per cent more than in 1990. The trend was very similar in all regions, but with some variations from one country to another. A further growth of the same order was projected for 1992. In the European Communities, cheese production in 1990 reached 4.65 million tons, an increase by 3 per cent over 1989. For 1991, a further increase of 3.2 per cent was reported, with cheese production reaching 4.80 million tons.

133. In Australia, cheese production remained at 176 thousand tons in 1990/91, virtually the same as in the previous year, despite more milk being available for manufacturing. New Zealand cheese production in 1990/91 was held at levels similar to that in the previous season, i.e. around 125 thousand tons. In line with the trends of recent seasons, and industry goals to reduce the proportion of milk used for butter manufacture, a further marginal increase was expected in 1991/92, when the cheese output might reach 130 thousand tons. Appreciable gains were recorded in 1991 in most other participating countries and further increases were forecast for 1992.

## CHEESE PRODUCTION 1980-1990



134. United States cheese production reached 2.70 million tons, decreasing 2 per cent in 1991. However, the outlook for 1992 was for an increase by 7 per cent to 2.88 million tons following an expected growth in commercial demand. Production in Canada was projected to grow in 1991/92 by 2.8 per cent to some 261 thousand tons, in response to rising domestic demand. In the USSR, production of cheese (including curd and fresh cheese) in 1991 at

1.75 thousand tons, decreased by as much as 17 per cent over 1990, as a result of the shrinking supply of milk. Production of cheese in developing countries which was around 12 per cent of total world output, hardly changed in 1991.

#### Consumption

135. World per capita cheese consumption showed regular growth with an average annual increase of over 2 per cent during the eighties. Per capita consumption was particularly high in Western Europe (around 13 kgs.) and in North America (around 11 kgs.). The increase in consumption seemed to be the strongest in these high level consumption countries. The increasing trend in Western Europe and North America was expected to continue at an average annual rate of 2 to 3 per cent in the nineties. In 1990 and 1991, cheese consumption developed appreciably in North Africa and the Middle East.

136. Cheese consumption for the major producing countries continued to expand, up 2 per cent in 1991, with a similar growth expected for 1992. Higher incomes linked to economic recovery from 1991 and increasing numbers of consumers in non-traditional cheese markets were the main factors fuelling growth. In the European Communities, a gain of 2.7 per cent was registered in 1991. The outlook for 1992 was for continued growth in total cheese consumption of more than 2 per cent. The great variety of cheese available and further active product diversification (i.e. low-fat cheeses) were the main reasons for these positive developments. Cheese consumption continued to increase in other European countries as well.

137. The United States market continued to show strong growth in cheese use with annual gains at 4 per cent in 1990 and around 1 per cent in 1991. A further 5 per cent gain was projected for 1992, assuming economic recovery and growing consumer incomes.

138. 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. However, cheese analogues, filled cheese and imitation cheese were, with some success, being marketed as ingredients for making pizzas and for other cooking applications, notably in the United States.

#### Trade

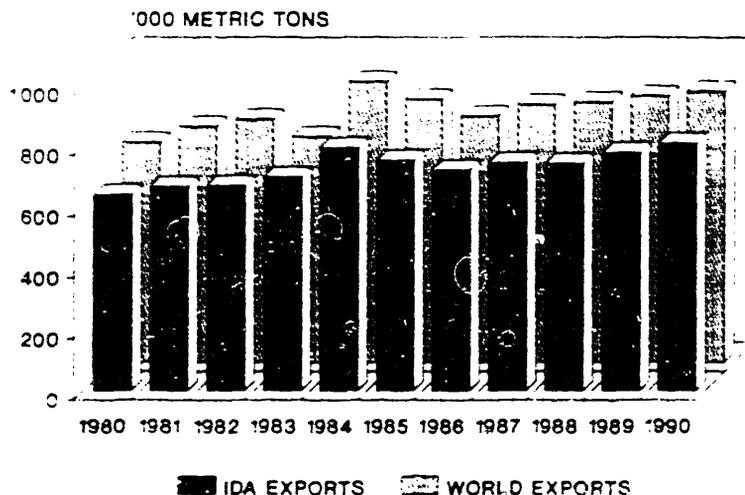
139. World exports of cheese were up 2 per cent for 1991 and reached some 905 thousand tons. The outlook for 1992 was for a further growth of the same order. The international cheese market was dominated by exports from Western Europe and Oceania, which together accounted for over 80 per cent of world cheese exports.

140. The Community cheese exports expanded by 4.2 per cent in 1990 to 464 thousand tons. In the first nine months of 1991, Community cheese exports reached 325 thousand tons, 2.3 per cent more than in the corresponding period of 1990.

141. New Zealand exports reached 95.8 thousand tons in 1990, being 13.3 per cent above their level in 1989 and continued to increase in 1991, with the main outlet remaining Japan. In the first three quarters of 1991, exports increased to 80 thousand tons compared with 75 thousand tons exported in the corresponding period of 1990. Sales of cheese below normal export quality under derogation stopped completely in 1989 reflecting improved market conditions. However, as prices eased in early 1990, New Zealand again sold 2,450 tons of low-quality cheese under derogation in 1990 and in the first half of 1991.

142. There was an appreciable recovery in Australian cheese exports in 1990/91. For the first three quarters of 1991, exports amounted to 84 thousand tons, up 25 per cent on the corresponding period of 1990. Exports to Japan have increased rapidly lately, reflecting increases in sales of bulk Cheddar-shred cheese, and progress in the development of cream cheese and other speciality cheese lines. There were promising signs of further growth in the Japanese market and several new Australian and Japanese brands were launched by the Australian Dairy Corporation in that market in 1990/91. During the period October 1990 to September 1991, a total of 744 tons of low-quality cheese were shipped by Australia to different destinations in Europe. The sales were made under derogation and Australia had made an advance notification of its intention to make such sales in 1990.

## CHEESE EXPORTS 1980-1990



143. Exports by Switzerland decreased by 5.4 per cent in 1990 and amounted to 61.4 thousand tons and the decrease continued in 1991. Exports of Finland increased to 29 thousand tons in 1990 but fell to 27 thousand tons in 1991, down by 7 per cent. Bulgarian cheese exports which in 1990 were down to 18 thousand tons, recovered appreciably in 1991, when they, in the first three quarters of the year, amounted to 21 thousand tons.

144. Exports by Argentina registered a substantial increase in 1990 (by as much as 60 per cent), totalling 22.5 thousand tons, four times average exports in 1981-83. The main destinations were Brazil and the United States. However, as a result of a new economic policy, exports declined in 1991 and for the first eight months of the year they amounted to only 6.3 thousand tons.

145. Cheese exports from the United States declined in 1990 to a five-year low of only 6 thousand tons. However, they recovered in 1991 and were projected to increase to 12 thousand tons in 1992. Canadian exports of cheese dropped slightly in 1990 and 1991.

146. On the import side, Community imports at 117 thousand tons in 1990, mostly from Switzerland, were little changed in relation to the previous year. Japanese imports of natural cheeses decreased by 5.4 per cent to 106 thousand tons in 1990. The main suppliers were the European Communities, New Zealand and Australia. Domestic demand for cheese, which had nearly doubled in ten years, was likely to continue to increase, and apart from the set-back in 1990-91 imports had increased substantially. In the first half of 1991, imports recovered due to an increase in demand and, for the whole year 1991, imports could reach a new record level. In Switzerland, imports of cheese increased by 5.3 per cent in 1990 to 25.9 thousand tons and continued to increase in 1991.

147. United States cheese purchases totalled 136 thousand tons in 1990, up by 9 per cent on 1989. The bulk of the imports was from the European Communities, New Zealand and Finland. However, although total imports remained stable in 1991, imports under quota were lower. Little change was expected in 1992.

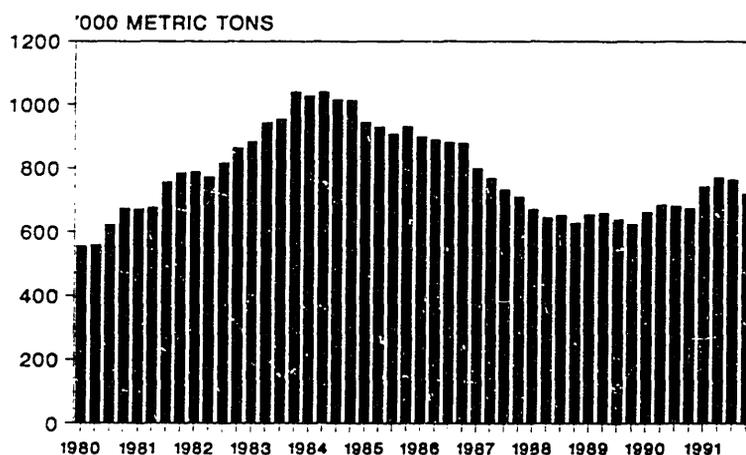
148. Import demand in the Middle East remained lively in 1990, although the trade blockade of Iraq and Kuwait and transportation problems caused by the military conflict in the Gulf had adverse effects on cheese imports into countries in the area in 1990/91. In 1991, Iranian cheese imports recovered slightly, but import into other countries in the area failed to expand.

### Stocks

149. Cheese stocks, on 1 January 1992, were low in the Community, the United States, Australia, New Zealand and the Nordic countries. World ending stocks for cheese in 1991 were estimated to be 3 per cent lower than a year earlier. World ending stocks for cheese in 1992 were forecast to decline by a further 4 per cent from the previous year. With the exception of the United States and Canada, most large dairy producers should see

declines in cheese carry-over as more production was channelled into either domestic consumption or export trade. However, the inclusion of Cheddar cheese in the Dairy Export Incentive Program might dampen the growth also in United States cheese stocks in the future.

## CHEESE STOCKS 1980-1991 IDA PARTICIPANTS \*



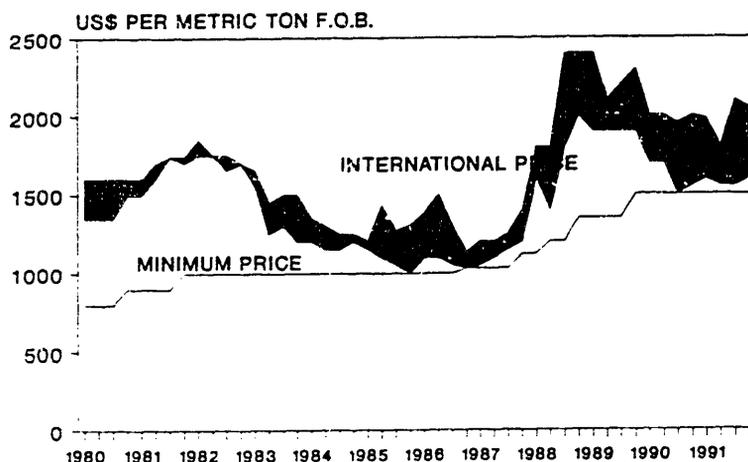
\* Includes Austria, Canada and the US

### International prices

150. International Cheddar cheese prices had been fairly stable since the beginning of 1991. In the first half of 1991, Cheddar cheese prices fluctuated between US\$1,600 and US\$1,980 per ton f.o.b. in the first quarter and in the lower range of US\$1,550 to US\$1,800 in the second quarter. In the second half of 1991, prices ranged between US\$1,550 and US\$2,100 per ton f.o.b. However, for most of the cheeses covered by the Protocol, the market situation was steady and prices remained well above the agreed minimum export price. Prices were expected to firm in coming months, as import demand was sufficient to absorb the increased supplies, notably in the case of speciality cheeses.

151. In its reviews of September 1990 and September 1991, the Committee of the Protocol Regarding Certain Cheeses decided to maintain the minimum export price unchanged at US\$1,500 per ton f.o.b.

## CHEESE PRICES 1980-1991



### Milk Powders

#### Skimmed Milk Powder and Buttermilk Powder

##### Production

152. World production of skimmed milk powder in 1991 reached 3.85 million tons, a 3.5 per cent decline from 1990 with decreases registered in the European Communities and Poland. World production in 1992 was forecast to decline by a further 6 per cent from the previous year due mainly to reduced milk supplies in major producers. Substantial declines in output were expected in the United States and the European Communities. Non-EC Western Europe, Poland and Oceania should also see production drops.

153. After having decreased sharply in previous years, output of skimmed milk powder in the European Communities started to recover in 1989 and showed a further strong increase of 12.4 per cent to 1.60 million tons in 1990. This was largely due to the substantial cutback (by 20 per cent) in casein production and in the use of liquid skimmed milk for animal feeding. In the first eight months of 1991, however, production fell by more than 9 per cent compared to the corresponding period of 1990. For the year as a whole, a sharp decline was estimated with a further substantial drop projected for 1992.

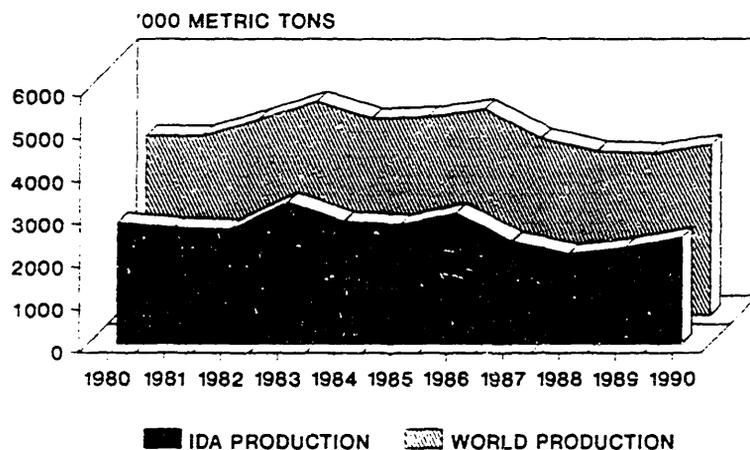
154. In New Zealand, production of skimmed milk powder was expected to drop below 140 thousand tons in 1991/92. In Australia, production of skimmed milk powder/buttermilk powder for 1991/92, was forecast to fall by 3 per cent from 1990/91 levels to 151 thousand tons.

155. In Japan, production increased by some 10 per cent in 1989 to 178 thousand tons as a result of the growth in milk production and remained at that level in 1990. However, production again started to increase in 1991. In Poland, production increased by 10 per cent in 1989 to 175 thousand tons but decreased by 8 per cent in 1990. A further decrease was estimated for 1991. Production of skimmed milk powder by other participants followed varying trends in 1991.

156. In the United States, non-fat dry milk production recovered in 1991 to 410 thousand tons compared to 395 thousand tons produced in 1990. However, a sharp decline to 350 thousand tons was projected for 1992. Less milk would be used for butter-skimmed milk powder and more for cheese production. Canadian production was projected to decline by 7 per cent in 1991/92 to 75 thousand tons due to a reduction in industrial milk quotas.

157. Production in the USSR continued to increase in 1990, reaching 730 thousand tons but registered a substantial decline (by 10 per cent) to 657 thousand tons in 1991 as a result of lower supplies of milk. Output in India decreased by 10 per cent in 1991 to 65 thousand tons. However, the outlook for 1992 was for a recovery to 75 thousand tons. Brazilian production also showed a steady increase from 50 thousand tons in 1989 to 60 thousand tons in 1990 but decreased to 55 thousand tons in 1991. However, the outlook for 1992 was for a sharp increase of the same order, output regaining its level of 1990.

## SKIMMED MILK POWDER PRODUCTION 1980-1990



### Consumption

158. World consumption of skimmed milk powder declined in 1991. With smaller supplies and firming world prices, consumption was expected to drop further in 1992. In the European Communities total domestic consumption declined in 1990 due to reduced use of powder by the compound feed industry. In 1991, the use of skimmed milk powder for animal feed increased by 12 per cent to some 840 thousand tons due to the lower internal prices throughout the year. However, as skimmed milk powder prices firmed the uptake for animal feed increased at a slower rate. Taking into account the evolution of the market situation, the aid granted to skimmed milk powder used in animal feed was reduced from ECU 70 per 100 kgs. to ECU 65 per 100 kgs. as of 1 May 1991.

159. In Japan, where total consumption increased in 1991, about one fourth of the consumption was used for animal feed. In the United States a substantial decrease by as much as 20 per cent was registered in 1991 in domestic consumption. The outlook for 1992 was for a further drop in consumption. The use in animal feed dropped to negligible levels.

160. In Canada, total domestic consumption declined by 12 per cent in 1990/91 and a further decline by 5 per cent was projected for 1991/92. Consumption for animal feed declined also in 1990/91.

### Trade

161. Following continued tightness in world supplies with the decline in production and the negligible level of stocks, world exports of skimmed milk powder declined in 1990 to 900 thousand tons. In 1991 they declined further to some 800 thousand tons. This was mostly due to lower exports by the European Community. However, world exports of skimmed milk powder were projected to recover in 1992. Strong growth in exports were expected from the United States and the European Community as traders reacted to the recent rebound in world skimmed milk powder prices and renewed interest from traditional customers (Mexico and South American markets).

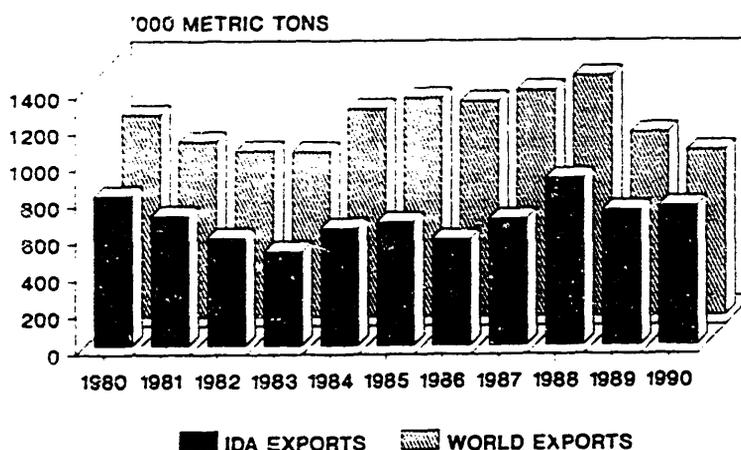
162. At around 350 thousand tons in 1990, Community sales registered a decline by 14 per cent and exports fell by another 36 per cent in the first nine months of 1991. However, the outlook for 1992 was for a recovery in exports of the Community.

163. Skimmed milk powder exports by New Zealand continued to increase at a rate of 2.5 per cent in 1990 reaching 150 thousand tons. The main destinations were countries in South East and Eastern Asia and Mexico. Buttermilk powder exports recovered in 1990. However, in the first three quarters of 1991, exports of skimmed milk powder and buttermilk powder decreased respectively by 11 per cent and 18 per cent compared to the corresponding period of 1990. A small quantity of buttermilk powder, 94.5 metric tons, was sold under derogation to Japan and delivered in May 1991.

164. Australian exports of skimmed milk powder/buttermilk powder for 1990/91 registered an increase, the major reason being increased exports to Asian destinations. However, buttermilk powder exports in 1990/91 were down compared to the previous season. Aggregate export sales of skimmed milk powder/buttermilk powder for the first nine months of 1991 were 30 per cent above 1990 shipments.

165. Skimmed milk powder exports by Poland increased by 17 per cent in 1990 to some 70 thousand tons but decreased in 1991 to 60 thousand tons, regaining their level of 1989. A further decline in exports to 50 thousand tons was projected for 1992, due to lower milk production. Skimmed milk powder exports in 1990 have occasionally been made at very low prices which have caused concern among traditional exporters. However, since November 1990, skimmed milk powder and other products covered by the Protocols had been subject to the export licensing system. Thus, the Administration was now able to supervise exporters in their adherence to the agreed minimum export prices. Between December 1990 and December 1991, Poland gave advance notification of its intention to conclude sales of a total of 18,155 tons of skimmed milk powder for animal feed under derogation. The destinations were Japan, France, Denmark and the Netherlands with deliveries scheduled from December 1990 to December 1991.

## SKIMMED MILK POWDER EXPORTS 1980-1990



166. Exports of skimmed milk powder by South Africa amounted to 6.6 thousand tons in 1990. Since the beginning of 1990, South Africa experienced a situation of moderate over-supply of milk together with a decline in the total consumption of dairy products. This resulted in the build-up of surpluses of butter and in exports of certain quantities of skimmed milk powder in 1991. In April, June and September 1991, South Africa notified its intention to sell skimmed milk powder for animal feed under derogation to Japan. The quantities involved totalled 7,310 tons with deliveries scheduled from April 1991 to January 1992.

167. A further substantial drop in United States skimmed milk powder exports was registered in 1990 when sales amounted to only 7.7 thousand tons. Increased commercial use of cheese and liquid milk kept greater domestic supplies of skimmed solids fairly tight. Skimmed milk powder exports increased in 1991 to 30 thousand tons as a result of the implementation of the the Dairy Export Incentive Program. United States exports in 1992 were forecast to be 120 thousand tons, four times greater than 1992 levels. Such exports would come from public stocks. In Canada, exports of skimmed milk powder recovered slightly in 1990, but declined again to 35 thousand tons because of reduced supply in the 1990/91 dairy year. Exports were forecast to average around 35 thousand tons in 1991/92 and next dairy years.

168. Imports of skimmed milk powder into Japan declined further in 1990 to 81 thousand tons. However, in 1991, imports recovered appreciably and might reach a new record as imports in the first three quarters of 1991 at 86 thousand tons were higher than total imports in 1990.

169. Import demand, mainly for recombination purposes in some developing countries, remained strong. Mexico maintained imports of dairy products at a high level, in spite of a sharp fall in foreign exchange earnings and larger domestic output. Mexico imported 240 thousand tons in 1989 thus becoming the world's largest importer of skimmed milk powder, and imports continued to increase in 1990, to some 288 thousand tons. However, in 1991, imports declined sharply to 30 thousand tons. The outlook for 1992 was for a substantial increase in imports to some 120 thousand tons, and Mexico would still remain the largest importer of skimmed milk powder. It was reported that Mexican plans to achieve self-sufficiency in fluid milk production would not be reached soon, and that the country would continue to depend on heavy imports of powder for recombination.

170. Brazilian imports declined to 35 thousand tons in 1990 due to a general decline in demand for dairy products in conjunction with the government's new economic programme. Imports remained at that low level in 1991. The outlook for 1992 was for a decrease to 30 thousand tons.

#### Food aid

171. Food-aid deliveries of dairy products consisted mainly of skimmed milk powder and anhydrous milk fat. The decline in surpluses affected the availability of milk products that could be provided under food-aid programmes. In recent years, food aid had accounted for about 20 per cent of total exports of dairy products, most of it coming from the United States and the European Communities. However, for 1990, shipments under food-aid programmes contracted even more than total exports. 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. Two aspects were contributing to this situation; shorter supplies and increased market prices. It was difficult to find the powder needed and if it was found, there were budgetary problems concerning how the supplies should be paid for. The reduction in food-aid shipments by the United States was due to lower supplies being

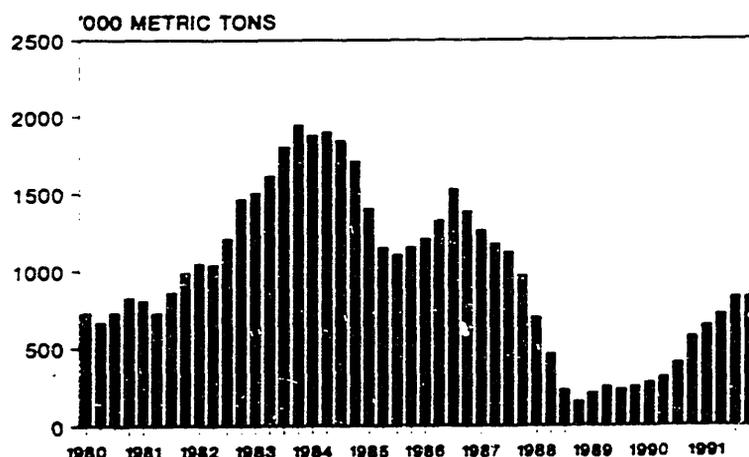
available. Uncommitted stocks remained at minimal levels and no foreign donations could be made in 1990. However, increased public stocks allowed foreign donations to be resumed in 1991. The availability of skimmed milk powder for fiscal year 1992 was 22 thousand tons under PL 480, Title II, and 75 thousand tons under Section 416(b).

172. Since the early 1980's, the European Communities had 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 were reduced from 150 thousand tons at the beginning of the decade to 94 thousand tons in 1990, and those of butter oil from 45 thousand tons to 18 thousand tons. In 1990, actual Community food-aid deliveries amounted to 68 thousand tons of skimmed milk powder compared to 84 thousand tons in 1989. In September 1990, the European Community announced an increase of 10 thousand tons in the annual allocation of skimmed milk powder. In March 1991, the Community took urgent action to supply Bulgaria and Romania with certain agricultural products, including 4,200 tons and 2,000 tons of skimmed milk powder, respectively. In the first three quarters of 1991, actual deliveries of skimmed milk powder amounted to 47 thousand tons compared to 46 thousand tons in the corresponding period of 1990.

#### Stocks

173. Total stocks of skimmed milk powder in the European Communities, North America and Oceania on 1 January 1991 amounted to 475 thousand tons, compared to 164 thousand tons one year earlier, this was nevertheless only half the average level in 1981-83. Aggregate skimmed milk powder stocks in the same producing areas on 1 January 1992, estimated at 575 thousand tons, were 21 per cent higher than a year earlier. Despite efforts by major producers to slow accumulation and dispose of surplus stocks, world ending stocks in 1991 were estimated at around 1 million tons. However, world ending stocks in 1992 were expected to decrease by 10 per cent to 900 thousand tons, reflecting successful efforts to slow accumulation and dispose of surpluses.

### SMP STOCKS 1980-1991 IDA PARTICIPANTS \*



\* Includes Austria, Canada and the US

TABLE 4

Share of Food Aid in Total Exports for Selected Countries

	Total exports			Food aid			Food aid/ Total exports		
	1989	1990	1991	1989	1990	1991	1989	1990	1991
	Metric tons						Per cent		
	<u>Skimmed Milk Powder</u>								
Australia	69,900	93,700		2,200	500		3.1	0.5	
EC	425,000	356,000		84,000	68,000		19.8	19.1	
Switzerland	1,100	7,300		1,100	1,200		100.0	16.4	
United States	170,000	10,000		-	-		-	-	
TOTAL	635,000	467,000		87,300	69,700		13.9	14.9	
	<u>Whole Milk Powder</u>								
Australia	47,000	42,900		-	-		-	-	
Switzerland	2,200	2,500		1,600	1,500		72.7	60.0	
TOTAL	49,200	45,400		1,600	1,500		3.3	3.3	
	<u>Anhydrous Milk Fat</u>								
EC	98,000	81,000		15,000	9,000		14.6	11.1	

174. Community public stocks of skimmed milk powder, which had remained negligible throughout 1989, increased to 347 thousand tons at the end of 1990, as domestic demand and internal prices weakened. Poor demand for calf fattening in the early part of the year and limited exports meant the market could be kept in balance only by large-scale intervention purchases which became necessary for the first time since mid-1987. Intervention buying of skimmed milk powder had been suspended as foreseen on 31 August 1990 and re-opened on 1 March 1991. However, due to recent heavy intervention buying of powder, the ceiling on stocks of skimmed milk powder was reached on 30 April, resulting in the suspension of permanent intervention purchases of powder in early May 1991. In the absence of permanent intervention purchases, the Commission was required to initiate private storage aid and also introduced intervention buying by tender. Unlike the tendering arrangement for butter, there was no price floor for tender of skimmed milk powder. As a result of the fall in demand and despite the decrease in production, total stocks of skimmed milk powder (public and private) continued to grow and were at 405 thousand tons at the end of December 1991, compared to 333 thousand tons a year earlier. However, stocks were expected to decline throughout 1992.

175. In Oceania, stocks remained at normal levels throughout 1991. Surplus skimmed milk powder stocks in the United States had been totally eliminated in 1989. However, during September 1990, government purchases of skimmed milk powder amounted to some 8 thousand tons, marking the first major purchase in two years. Significant purchases continued during the rest of the year as commercial use was not able to absorb the supplies. Year-end stocks were up to 73 thousand tons from 22 thousand tons at the beginning of 1990. Public stocks of skimmed milk powder skyrocketed to 129 thousand tons in early May 1991, up from 1 thousand tons in March 1990. Public stocks at the end of December 1991 were at 100 thousand tons compared to 21 thousand tons one year earlier. However, stocks were projected to drop throughout 1992.

#### International prices

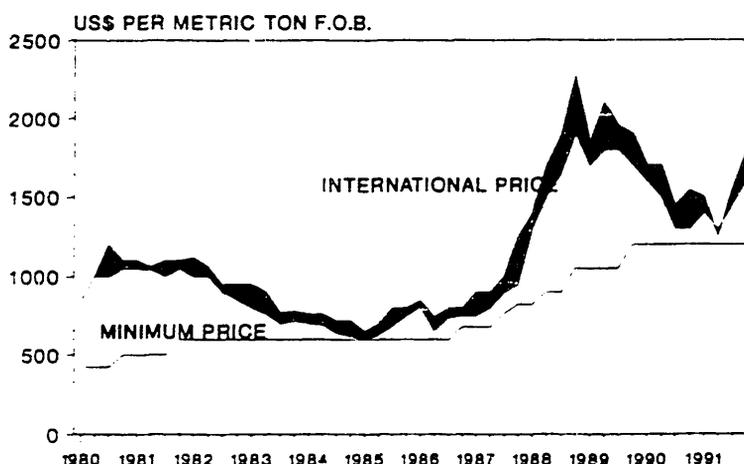
176. Progressive reduction of subsidized use schemes for skimmed milk powder and lower casein production, resulted in a further weakening of skimmed milk powder prices in 1990. However, the market situation improved in the fourth quarter of 1990 and prices increased slightly to the range of US\$1,300-US\$1,540 per ton f.o.b. Prices of skimmed milk powder continued to strengthen in the first quarter of 1991 to the range of US\$1,400-US\$1,500 per ton f.o.b. Some oil-producing countries and large dairy importers, such as Algeria and Venezuela, increased their purchases. Moreover, the strengthening of prices was also due to the absence of offers of cheap East European product in the market.

177. In the second quarter of 1991, requirements of milk powder markets remained basically unchanged although some increase in stocks of skimmed milk powder were reported. International prices of skimmed milk powder were eroded due mainly to a continued strengthening of the United States dollar. Thus for the second quarter of 1991, prices of skimmed milk powder decreased to the range of US\$1,250 to US\$1,300 per ton f.o.b. In the third

quarter of 1991, the market situation for milk powders improved somewhat in part due to the weakening of the United States dollar. Prices firmed and ranged between US\$1,450 and US\$1,550 per ton f.o.b. In the fourth quarter of 1991, the market situation improved partly due to a further weakening of the United States dollar and to tight supply conditions for milk powders. Prices continued to firm and ranged between US\$1,600 and US\$1,800 per ton f.o.b. Prices were expected to remain firm in the coming months.

178. At its September 1990 and 1991 reviews, the Committee maintained the minimum export prices unchanged at US\$1,200 per ton f.o.b. for both skimmed milk powder and buttermilk powder.

## SKIMMED MILK POWDER PRICES 1980-1991



### Whole Milk Powder

#### Production

179. Production of whole milk powder continued to be closely related to international market developments. In 1990, production of whole milk powder again declined by 1.5 per cent to 2.13 million tons. Strong declines in Community and Australian production were not offset by a recovery in New Zealand. World whole milk powder production recovered appreciably in the first half of 1991, following further increase in New Zealand production and a strong recovery in the Community, Poland and Australia. For calendar year 1991, world whole milk powder production was estimated to have increased by 3 to 5 per cent compared to 1990.

180. Community output declined in 1990 by 8.7 per cent to 804 thousand tons. However, in the first three quarters of 1991, production amounted to 707 thousand tons, an increase by 16 per cent compared to the corresponding period of 1991.

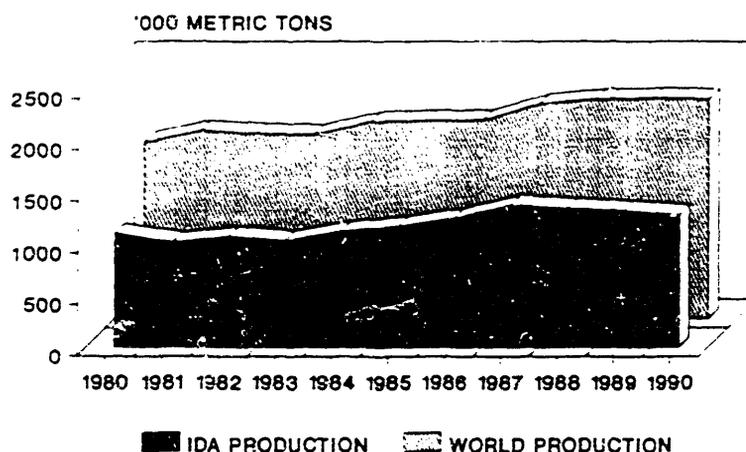
181. In New Zealand, production resumed its upward trend in 1990/91 after having declined in 1989/90. For calendar year 1990, production increased by 37 per cent to 208 thousand tons, a new record level, and continued to increase strongly also in 1991 with an output of 160 thousand tons in the first three quarters of 1991, an increase by 27 per cent compared to the corresponding period of 1990.

182. In Australia, larger than anticipated export demand stimulated production which increased by 5.5 per cent in 1990/91 to 59.6 thousand tons. Production of whole milk powder for 1991/92 was forecast to be slightly less than the previous season.

183. In Argentina, output decreased by 12.5 per cent to 86 thousand tons in 1990 and continued to fall in 1991. Production in Finland, which was entirely for exports, recovered somewhat in 1990 to 22 thousand tons, but declined in 1991 to 8 thousand tons, a level corresponding to two thirds of its level early in the eighties. A further sharp decline to 5 thousand tons was projected for 1992. In Poland, manufacture of whole milk powder, which in earlier years had remained relatively stable around 50 thousand tons, declined in 1990 to 40 thousand tons in line with the decrease in milk output. In the first half of 1991, production was higher than in any earlier half year period and the annual output might be record high.

184. United States production which had reached a peak of 81 thousand tons in 1989 started to fall in 1990 and fell further in 1991 by 25 per cent to some 55 thousand tons. In Austria, output remained around 12 thousand tons in 1990, but fell by 15 per cent in the first half of 1991.

## WHOLE MILK POWDER PRODUCTION 1980-1990



### Trade

185. Whole milk powder exports, which had been trending upward until 1988, declined in 1989 and again in 1990 to 820 thousand tons. In 1991, however, total exports recovered and were more or less back on the earlier trend with strong increases registered by the major exporters, i.e. the Community and New Zealand.

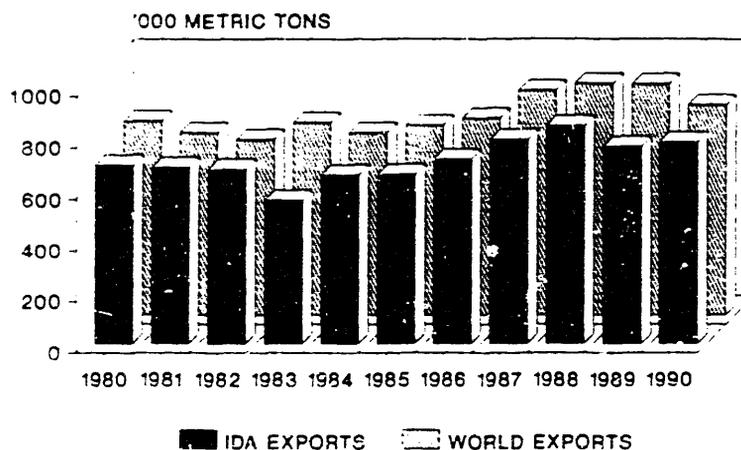
186. Community exports decreased by 11 per cent to 502 thousand tons, accounting for 60 per cent of the world exports in 1990. However, exports recovered in 1991 and during the first three quarters, increased by 13 per cent to 450 thousand tons, compared to the corresponding period of 1990. For calendar year 1991, the increase in exports might have been of the same order. Following a decision taken in March 1991, the Community provided 50 thousand tons of whole milk powder to the USSR as part of an urgent action to supply that country with agricultural products.

187. Exports from New Zealand, the world's second largest exporter, recovered in 1990 and amounted to 191 thousand tons. They continued to increase in 1991, amounting to 177 thousand tons in the first nine months of the year, an increase of 33 per cent compared to the corresponding period of 1990. The main outlets remained in South and East Asia and in South America. Australian exports rose by 4.5 per cent in 1990/91 to 44.7 thousand tons, due to strong demand. Exports sales for the first nine months of 1991 were 15 per cent above 1990 levels. This increase could be attributed to increased demand from buyers in the major Asian markets. However, in the year 1991/92, export sales of whole milk powder were expected to be similar to those of the previous season.

188. Exports from Finland, exclusively to the USSR, recovered appreciably to 24 thousand tons in 1990, but were again low in 1991 and reached only 10 thousand tons. The outlook for 1992 was for a further sharp decline in exports to only 5 thousand tons. Exports by Argentina declined in 1990 to 15 thousand tons, the main destinations being Brazil and Peru. This downward trend continued in 1991.

189. Whole milk powder imports by developing countries, had in 1990 been discouraged by rising prices and growing foreign exchange difficulties. Much of the powder imported into developing countries was for welfare programmes adversely affected by budgetary restraints. However, towards the end of 1990 the market situation improved, and continued to improve in 1991. Korea raised import quotas for milk powder from 8,000 tons to 14,000 tons in 1991, in order to stabilize retail prices.

## WHOLE MILK POWDER EXPORTS 1980-1990

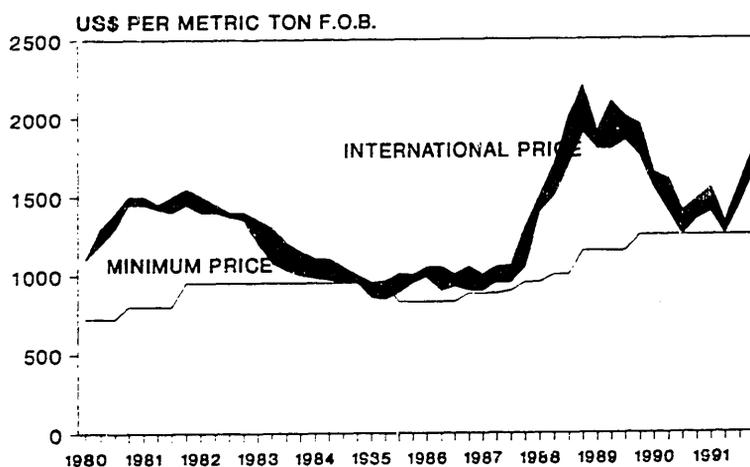


### International prices

190. International prices of whole milk powder continued to decline in the first three quarters of 1990. However, prices firmed in the fourth quarter and ranged between US\$1,350 and US\$1,475 per ton f.o.b. They continued to increase early in 1991 when it was reported that Venezuela bought substantial quantities of whole milk powder. In the first quarter of 1991, prices ranged between US\$1,400 and US\$1,550 per ton f.o.b. However, they were eroded in the second quarter due to a strengthening of the United States dollar and fluctuated between US\$1,250 and US\$1,330 per ton f.o.b. As the United States dollar weakened again in the third quarter of 1991, prices firmed somewhat and ranged between US\$1,440 and US\$1,575 per ton f.o.b. Prices continued to firm in the fourth quarter of 1991, ranging between US\$1,650 and US\$1,800 per ton f.o.b.

191. At its September reviews in 1990 and 1991, the Committee of the Protocol Regarding Certain Milk Powders maintained the minimum export price at US\$1,250 per ton f.o.b.

## WHOLE MILK POWDER PRICES 1980-1991



### Other Dairy Products

#### Whey in powder or block or concentrate

192. The demand for whey and whey products for use as food and feed ingredients and in pharmaceutical applications has remained strong providing incentives to expand production in several countries. World production of whey powder increased in 1990 by about 4 per cent to 1.60 million tons following developments in 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 remained difficult to evaluate in the absence of statistical information. These products are mainly by-products of cheese production. The increase in output of whey powder and lactose has, however, in recent years been larger than the increase in cheese production. In the past, much of the whey went into sewage systems as waste. More lately, this was forbidden and the whey had to be recuperated and disposed of otherwise, mainly for environmental reasons. Liquid whey and concentrated whey are extensively fed to animals, notably calves.

193. Community production of whey powder, which in recent years had expanded at a rate of 5 per cent, stagnated at 880 thousand tons in 1990, accounting for 60 per cent of world production. Community production remained at the same level in 1991. United States production increased by 4.5 per cent in 1990, to 508 thousand tons while Canadian production decreased by 14 per cent to 58.5 thousand tons. In the first three quarters of 1991, production was slightly lower than in previous years in North America, while there was a slight increase in Western Europe.

194. In 1990, the European Communities imported only 9 thousand tons of whey powder and exported 37.6 thousand tons of whey powder, mainly in connection with forward processing. It furthermore exported 62 thousand tons of lactose, corresponding to the average of recent years. However, the EC decided to discontinue the forward processing arrangements for most dairy products, including whey powder, effective 28 February 1991. As a result imports and exports declined in 1991.

195. The market for whey powder continued to fluctuate in 1990 and 1991 and appeared to be market driven. Prices continued to weaken in 1990 when they fell in December to US\$320 per ton in the United States or a decrease by 40 per cent in relation to December 1989. However, prices in Europe in December 1990 were about 20 per cent higher than a year earlier and expressed in dollar terms they were at around US\$600 per ton. There was still some uncertainty as to the size of the supplies coming on to the market in the near future, but late in 1991 there was a tendency for prices to strengthen with at times very strange price fluctuations in the United States market. In July 1991, prices remained at around US\$330 per ton in the United States but then increased to US\$565 per ton in November 1991. However, prices in Europe in July 1991 were as much as 80 per cent higher than a year earlier but expressed in dollar terms they were at only US\$575 per ton due to the strengthening of the United States dollar. In November 1991, prices in Europe 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 subsequent weakening of the United States dollar in the second half of 1991.

#### Concentrated milk

196. Concentrated milk production, like that of whole milk powder, was guided by the international market which itself depended on a few large fragile markets. World production of condensed milk, at 4.70 million tons in 1990, decreased by 1.5 per cent compared to 1989. In the European Communities, output decreased by 4 per cent to 1.20 million tons from 1989 to 1990, mirroring the decline in international outlets. A substantial recovery of 11 per cent was observed for the first quarter of 1991 and output continued to increase in the second quarter of 1991.

197. For the year as a whole, production was estimated at 1.22 million tons, an increase by some 2 per cent over 1990. In 1990, production recovered in the United States to 264 thousand tons, an increase by 15 per cent over 1989. However, production declined by 4 per cent to 192 thousand tons in the first nine months of 1991 compared to the corresponding period of 1990. Output continued to fall in Canada amounting to 60 thousand tons compared to 74 thousand tons in 1989. However, production recovered during the first eight months of 1991 and increased by 26 per cent to 41 thousand tons compared to the corresponding period of 1990. Australian production of condensed milk showed increases in 1989/90 and in 1990/91. Also USSR production continued to expand, reaching 620 thousand tons in 1990, 1.6 per cent up on the previous year. Condensed milk production increased in Asia and Latin America in 1990.

198. From a peak of nearly 1 million tons in 1985, world trade in condensed milk declined rapidly to half of that level in 1990, and the decline continued. Community exports fell in 1990 by 22 per cent to 349 thousand tons. Canadian exports continued to decline and amounted in 1990/91 to some 7 thousand tons. Exports were expected to remain low in 1991/92 and in the next dairy years.

199. From January to March 1990, wholesale prices in the Netherlands were raised to Hfl. 3,400 per ton or close to US\$1,800 per ton, and remained at that level throughout the year. In dollar terms, however, the price increased to US\$2,000 per ton in December 1990. Dutch quotations for condensed milk continued to go up throughout 1991, and in November reached Hfl. 3,500 per ton, which in dollar terms corresponded to US\$1,940.

#### Casein

200. World casein production decreased in 1990 by 5 per cent to 214 thousand tons. The European Community accounted for nearly all of the reduction, which was related to a reduced milk output and lower supplies of milk being available for casein production. Recoveries in production in New Zealand and Poland were more than outweighed by decreases in Australia and the Community. World casein production declined further in 1991, reaching some 200 thousand tons.

201. Community casein production was only possible thanks to aid. Following a drop in the amount of aid and greater end-use control, it fell by as much as 33 per cent in 1990 to 104 thousand tons. As from 10 October 1990, the casein aid scheme was altered to reduce end-use control difficulties. Moreover, the production subsidy on casein was increased in October 1990. However, uptake of skimmed milk for casein manufacture would decrease by 3 per cent in 1991 compared to 1990.

202. New Zealand production of casein which recovered in 1989/90 to 64 thousand tons remained at that level in 1990/91. For 1991/92, output was expected to be lower than in the previous season. Polish production of casein increased by 10 per cent to 22 thousand tons in 1989 and continued to develop in 1990 but was estimated to have decreased in 1991.

203. World exports recovered in 1990 compared to the previous year. New Zealand's exports of casein increased by 43 per cent to 63.3 thousand tons in 1990, while Community exports remained relatively stable at around 75 thousand tons. In 1990, Central and Eastern European countries succeeded particularly in raising their sales of casein to OECD countries, taking advantage of the relatively free access to these markets. Polish shipments of casein increased by as much as 24 per cent to 20 thousand tons in 1990. United States casein imports increased by 4 per cent to 85.2 thousand tons reflecting continued weakness in casein import prices. However, for the first ten months of 1991 imports fell by 2 per cent, and were expected to drop further in 1992.

204. In 1990, casein markets were undergoing major adjustments, not least due to a certain reordering of the Community market for skimmed milk and powder. The market was characterized by further reduction in production and supplies with prices varying widely with the quality. In the United States, prices were nearly 17 per cent lower in August 1990 than what they had been a year earlier, with acid casein prices ranging from US\$3,740 to US\$4,620 a ton and rennet casein prices ranging from US\$4,620 to US\$4,840 a ton. In December 1990, the prices for edible casein in the United States were around US\$3,735 a ton, down by 25 per cent from December 1989.

205. 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 were firming later in 1991, following strong import demand, less than expected increase in 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.