

GENERAL AGREEMENT ON

TARIFFS AND TRADE

RESTRICTED

DPC/W/108

2 September 1991

Special Distribution

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 September 1991.

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 1990, and the outlook for 1991. The note should be read in conjunction with the statistical information circulated in the following documents:

- | | | |
|--------------|---|---|
| DPC/W/109 | - | Milk Deliveries and Production - Statistical Note by the Secretariat |
| DPC/PTL/W/57 | - | Committee of the Protocol Regarding Milk Fat - Summary Tables |
| DPC/PTL/W/58 | - | Committee of the Protocol Regarding Certain Cheeses - Summary Tables |
| DPC/PTL/W/59 | - | Committee of the Protocol Regarding Certain Milk Powders - Summary Tables |

Delegations wishing to suggest modifications, 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 9 August 1991.

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	1,070	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.

Contents

	<u>Page</u>
Overview of the situation	4
Developments in national dairy policies and milk production	16
The situation for individual dairy products	28
Butter and anhydrous milk fat	28
Cheese	40
Milk powders	46
Other dairy products	58
 <u>GRAPHS</u>	
Dairy Price Indices	15
Butter Production 1980-1990	29
Butter Exports 1980-1990	33
Butter Stocks 1980-1991	37
Butter Prices 1980-1991	38
Anhydrous Milk Fat Production and Exports 1980-1990	39
Anhydrous Milk Fat Prices 1980-1991	40
Cheese Production 1980-1990	41
Cheese Exports 1980-1990	43
Cheese Stocks 1980-1991	44
Cheese Prices 1980-1991	45
Skimmed Milk Powder Production 1980-1990	47
Skimmed Milk Powder Exports 1980-1990	49
Skimmed Milk Powder Stocks 1980-1991	53
Skimmed Milk Powder Prices 1980-1991	54
Whole Milk Powder Production 1980-1990	56
Whole Milk Powder Exports 1980-1990	57
Whole Milk Powder Prices 1980-1991	58

Overview of the Situation

Some points regarding the economic situation in general

1. The value of world merchandise trade in 1990 increased by 13 per cent to a new record level of US\$3.5 trillion and the value of commercial services trade rose 14 per cent to an estimated US\$785 billion, boosted by the inflationary "valuation effects" of the dollar's depreciation last year against major European currencies. The volume growth of world merchandise trade slowed from 7 per cent to under 5 per cent as trade growth in manufactured and mining products declined, a slowdown that was only partly offset by an acceleration in the volume growth of trade in agricultural products.

2. The accelerated growth in the value of merchandise trade last year was particularly evident for Western Europe, whose growth rates for exports and imports were roughly triple those recorded in 1989. Developing economies as a whole maintained their share in world merchandise exports in 1990, as sharply higher earnings for exporters of fuels - prices up 25 per cent - balanced moderately slower growth in exports of the leading Asian exporters of manufactures. The group of fifteen highly indebted countries expanded their exports and imports at about the world average, helped by strong export performances from oil exporters. In contrast, the import and export growth rates of countries in Central and Eastern Europe, and the USSR, were hard hit by the declines in intra-regional trade which accompanied the de-emphasis on traditional trade ties.

3. The slowdown in the volume growth of world merchandise trade in 1990 can be attributed to lower growth in the demand for imports in North America, Japan, Western Europe, Central and Eastern Europe, the USSR and China. As the recession took hold in North America, import demand slackened while Western Europe's import growth was sustained by the unification of Germany. Among major country groups, only developing economies as a group posted export and import volume growth above the world average, with the leading Asian exporters of manufactures again playing a key role in this performance. With a world economic slowdown already evident in 1989, the disruptions and uncertainties caused by the Gulf crisis are unlikely to have played an important role in explaining world trade growth last year.

4. The rate of growth of world output slipped from 3.5 per cent to just under 3 per cent, indicating a continuation of the slowdown that began in 1989. The underlying inflation rate in OECD countries rose again in 1990 to just under 5 per cent. Unemployment rates began to rise in a number of OECD countries, particularly in the second half of the year, as economic activity slackened. The decline in economic and trade growth continued in the first half of 1991. The ongoing Gulf crisis contributed to a higher degree of business and consumer uncertainty in the first quarter, but the cease-fire in March has removed that uncertainty. As of mid-1991, expectations are of a recovery of trade and output growth in the second half of 1991, with a slowdown recorded for the year as a whole.

World dairy situation

Highlights

5. - World milk production increased by 1.6 per cent from 1989 to 1990, as the downward trend was halted in the European Communities and output increased in the USSR, the United States and India. In 1991, world milk production was expected to decrease following predicted decreases in the USSR and the Communities of respectively 8 per cent and 2 per cent.
- Cheese production grew by another 2.7 per cent in 1990, and the trend was likely to continue in 1991. Increased growth in cheese consumption led to a lively import demand and cheese trade expanded further in 1990 and early 1991, with world market prices remaining well above agreed minimum export prices.
 - World butter production grew in 1990 at a rate of 1.4 per cent amounting to 7.70 million tons but was apparently decreasing by some 2 per cent in 1991. A persisting vigorous demand for light products, resulting in substantial surpluses of milk fat and a continued low butter consumption in many countries entailed increased exportable availabilities. Increased retail prices in Central and Eastern Europe discouraged domestic butter demand. Additional quantities of butter were offered on international markets in 1990/91, resulting in pressure on market prices and in increased need for intervention purchases.
 - Depressed market prices for butter also adversely affected sales and prices of other dairy products, notably powders in 1990, as sales of dairy products are often linked or handled by the same operators. In early 1991, market prices for butter, anhydrous milk fat and powders remained at or slightly above the agreed minimum prices.
 - Concerns were expressed at the unsatisfactory situation dominated by a fragile butter market, rebuilding of stocks and strong downward pressure on prices notably for butter and to some extent also for skimmed milk powder for feed. Participants were urged to ensure full observance of the minimum export prices. An appeal was also made to non-participants not to offer or sell dairy products at prices below prevailing market prices and in any case not below the agreed minimum export prices.
 - In light of developments in the international butter market and in particular the situation with respect to imports into the USSR, the Committee of the Protocol Regarding Milk Fat decided in December 1990, that some provisions of the Arrangement should not apply to butter exports to the USSR, provided certain conditions were complied with. However, the USSR was facing payment problems and deliveries to that market were delayed.

Dairy policies

6. Various measures related to milk prices remained important elements in dairy policies in 1990 and 1991. Further efforts were made to contain public expenditure on dairy price support. Support prices, target prices and advance payments were maintained at the previous level or even lowered. 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 and raise the productivity in the dairy industry and to make it more market oriented, mainly in order to reduce costly surpluses. While in some countries the aim was to raise productivity and efficiency in the industry, in others it could be to preserve the current structure, for instance by restricting herd size and thereby facilitating a limitation of total milk deliveries or otherwise adapt the capacity to the market. However, 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 has 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 of any kind have been stepped up to keep dairy products safe for human consumption.

10. Political developments in Central and Eastern Europe had a strong impact on the dairy market. Changes in economic policies resulted in higher retail prices adversely affecting domestic demand. Export availabilities of dairy products increased substantially, notably for butter. 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, had adversely affected dairy trade in 1990/91. The situation was further aggravated by transportation difficulties and increased costs. These markets had taken some 50 thousand tons of powders, 20 thousand tons of cheese and 10 thousand tons of butter and anhydrous milk fat in recent years. However, at the same time, increased purchasing power in other OPEC countries following increased petrol prices stimulated import demand of dairy products by some countries. Import demand in the Near East was expected to recover in 1991, while oil exporters elsewhere would remain important buyers of milk products, i.e. Mexico, Venezuela and Algeria.

12. Concerns persisted that a currently receding consumption notably of butter, and an expansion of production, might result in greater supplies available for exports. 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. The danger was obviously persisting that supplies were again about to increase faster than a relatively steady but nevertheless limited growth existing for import demand and consumption, and it would remain imperative that production should not be unnecessarily stimulated through support and protection. Concerns have also been expressed that quota systems had not always discouraged over-quota production.

13. Production could rise strongly due to genetic improvements, ample feed supplies and technological progress, not least due to extended application of hormones. The authorization to commercialize hormones was still pending in major dairying countries. A strong consumers' opposition to their use indicated a possible adverse reaction on demand following extended use of hormones to dairy cows.

14. The steadily growing demand for certain dairy products, notably cheese and dairy proteins, and the increase in their prices have also 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 fair marketing of traditional dairy products and to the protection of consumers' interests. Imitations are often to a variable degree containing milk components such as casein, whey and skimmed milk powder, extensively used as ingredients in a variety of food products. Furthermore, the modern dairy tree has a number of branches and new products. In a number of milk products such as the range of light products, milk components, mostly fat, may frequently have been replaced by something else, notably ingredients of vegetable origin. Consequently it is difficult to draw a line between what should be designated as a milk product and a non-milk product.

Milk and dairy production

15. In 1990, world milk production amounted to 538 million tons (including sheep, goat and buffalo milk), 1.6 per cent up on 1989 due to improved dairy practices, ample feed supplies, genetic developments and remunerative prices. Community milk deliveries remained unchanged in 1990 compared to 1989. Milk production showed only marginal changes in other European countries and in countries in Africa and Latin-America. Milk production increased also in Oceania. In the United States growth rates increased significantly in 1990 as feed costs decreased while strong domestic demand for cheese and milk proteins resulted in relatively high returns to producers. Output continued to expand in the USSR and India. In the USSR, there was a marginal increase of 0.2 per cent in milk production in 1990. In India, milk production was estimated to have increased by as much as 7 per cent in 1990, and there was substantial increases in some other Asian developing countries.

16. For 1991, a decrease in milk production was expected, but supplies would nevertheless exceed demand. In the USSR, a substantial drop in milk output was expected due to decreasing yields and cow numbers. With demand shrinking and subsidies being removed, profitability in dairying had 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 Africa and Latin America. 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. Despite lower milk prices in recent months, milk production in the United States was likely to expand in 1991. In Oceania, assuming normal weather conditions, milk production might increase slightly or remain stable. India and several other developing countries in Asia were expected to increase milk production once more in 1991.

17. Considerable uncertainty was attached to medium-term. Bovine somatotropin may already be commercially available in several countries and its application might together with scientific progress, improved breeding and production management, boost productivity in milk production over the next five-year period.

18. World butter and butter oil production increased by 1.4 per cent in 1990 amounting to 7.70 million tons. Butter production expanded in the Community, the USSR and Oceania. This was, however, partly offset by a decrease in butter production in North America and a relative stability in the Nordic countries. World butter production in 1991 was forecast to decrease by 2 per cent from the previous year. The shift in consumption towards light dairy products would continue 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.

19. World cheese production continued its upward trend in 1990, totalling 14.87 million tons (all kinds of cheese). The trend was very 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 the expansion continued in 1991.

20. After having declined for three consecutive years, world skimmed milk powder production increased in 1990 by 5 per cent to 4 million tons in relation to 1989, with a further recovery in Western Europe and Australia offsetting declines in North America, New Zealand and Poland. However, world production in 1991 was forecast to decline by 3 per cent following projected declines in the European Communities and North America. World production of whole milk powder might have continued to decrease in 1990 at about the same rate as in the previous year, i.e. by 1.5 per cent.

21. 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.

22. World production of condensed and evaporated milk declined in recent years, being increasingly replaced by whole milk powder in the market. For 1990, declines were reported for the European Communities while production recovered in North America and Australia.

23. World casein production reached a level of 214 thousand tons in 1990, 5 per cent down on 1989. This decline was mainly due to a reduction in Community output which continued to fall in 1990. In spite of high prices obtained for casein, it seemed to be more profitable to produce skimmed milk powder. There were also uncertainties as to the future of the casein market. Steps taken in the Community late in 1990 to stimulate casein production might result in increased supplies in 1991.

Consumption

24. 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 1989 and 1990. There was a lively demand for low-fat milk products in most regions of the world and it might be expected that notably the protein component of milk may be facing increased demand in the near future. For a number of countries, consumption of fresh milk followed variations in supplies of milk.

25. Throughout the 1980's, butter consumption showed very little change on average, and 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. However, in 1990, world consumption declined by 2 per cent, with sharper decreases registered in particular regions. However, consumption in the United States, the USSR and India was reportedly up on 1989. The trend toward blended spreads and low fat spreads had accelerated in 1989 and 1990. This development resulted from a combination of factors such as changes in consumer preferences toward products with less or no 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, 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.

26. The upward trend in cheese consumption continued in 1990, with further advances in most countries. However, in general, increases for speciality cheeses were significantly above the rate of growth for traditional cheeses. The great variety of cheese available, further 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., 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 would be maintained in 1991 although the growth rate might fall slightly.

27. World consumption of skimmed milk powder remained stable in 1990 and this stability was likely to be maintained in 1991. Consumption of whole milk powder decreased in 1990 and this downward trend continued in 1991.

28. In the medium term, world butter consumption might decrease further as the trend towards a diet with less fat will persist and remain irreversible. It is notably the consumption in households that would decline, 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. Also demand for fresh liquid milk could 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

29. After having reached the record level of 1 million tons in 1988, world exports of butter declined in 1989 to some 800 thousand tons. However, all sales were normal commercial transactions in 1989, while in 1988, a large part of exports had consisted of deliveries under derogations. From late 1989 on, import demand weakened, 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 1990 decreased to some 700 thousand tons. Taking into account the emergency situation in the USSR with an urgent requirement for imports of food, including butter, on special terms, a derogation for sales of butter to the USSR was granted in December 1990. Sales contracts concluded by several participants under this derogation amounting to some 311 thousand tons, could make total USSR imports of butter in 1991 close to the levels of 1988 and 1989 possible. However, serious concerns were expressed with respect to delays in shipments mainly due to payment difficulties experienced by the USSR. Uncertainties persisted as to whether the quantities initially contracted would be delivered in their entirety by the end of September 1991.

30. Cheese trade expanded further in 1990, world exports reaching 887 thousand tons. This was due to higher imports into the European Community and the United States and stronger import demand by OPEC countries and other developing countries such as Brazil, which more than outweighed a certain stagnation in the volume of cheese imported into Japan. The general expansionary tendencies continued in 1991.

31. There was a further decline of 5 per cent in world exports of skimmed milk powder in 1990, when they amounted to 900 thousand tons. Sharp decreases registered by the European Communities and the United

States were not offset by increases in New Zealand and Australian exports. However, import demand in some developing countries such as Mexico and Brazil remained strong. The outlook for 1991 was for an increase in international trade due to weaker prices and increased efforts by major producers to reduce growing powder stocks.

32. The upward trend in whole milk powder exports was halted in 1989, when world exports decreased to 880 thousand tons. In 1990, exports decreased again to some 820 thousand tons. The European Communities covered 60 per cent of the world market and New Zealand some 15 per cent. Other major suppliers to the world market were Australia, Argentina and to a lesser extent Finland and Austria.

33. The international whey powder market continued to be supply-driven in 1990. 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. World exports of casein recovered in 1990, notably as exports by New Zealand recovered and as East European countries succeeded particularly in raising their sales of casein to the OECD countries.

Food aid

34. 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 1989 and 1990. 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 1989 and 1990. The increase in prices would at the same time aggravate expenses and make 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. In this context, views have been expressed that it might be appropriate to get away from the idea of surplus stocks being acceptable sources for food aid, and that more realistic international dairy prices might provide an incentive to expand production in developing countries. However, the volume of dairy products provided as food aid might increase in 1991 compared to 1990.

Stocks

35. Butter stocks in the European Communities, North America and Oceania on 1 January 1990, at 383 thousand tons were 8 per cent lower than their level of one year earlier, and skimmed milk powder stocks, were at the same time, very low at 164 thousand tons. Public intervention stocks remained low, except for some accumulation of CCC butter stocks in the United States. Community intervention stocks of butter started to build up in 1990 as a result of strongly reduced domestic demand and inability of Community exporters to compete in international markets. Aggregate butter stocks in the European Communities, North America and Oceania on 1 January 1991, estimated at 653 thousand tons, were 70 per cent higher

than a year earlier. On the same date, skimmed milk powder stocks at 475 thousand tons, had almost trebled in relation to their level on 1 January 1990, mainly due to the increase in Community and United States stocks. Concerns were expressed that stocks of both products would be increasing as a result of the fall in demand. However, it was hoped that the sales of butter to the USSR under the derogation adopted in December 1990, would alleviate the situation. Stocks at the end of 1991 were forecast at around 1 million tons for each product, the Community and the United States being the principal holders.

International prices

36. Prices for milk fats began to weaken towards the end of 1989, ranging between US\$1,650 and US\$2,000 per ton f.o.b. for butter and between US\$2,050 and US\$2,200 per ton f.o.b. for anhydrous milk fat. Butter prices in international markets continued to weaken in 1990 and certain offers and sales had reportedly been made at prices below the minimum prices. During the fourth quarter of 1990, prices were in the range of US\$1,350 to US\$1,500 per ton f.o.b. for butter and US\$1,625 to US\$1,880 per ton f.o.b. for anhydrous milk fat; only little trade was effected at these prices.

37. At meetings of the Protocol Committees in 1990, participants reaffirmed their determination to defend the existing level of minimum export prices and to abide by their obligations under the Protocols. Participants were urged to take the necessary steps to ensure full observance of all the provisions of the International Dairy Arrangement, notably those related to the minimum export prices. An appeal was also made to non-participants not to offer or sell dairy products at prices below prevailing market prices and in particular not below the agreed minimum export prices. At the annual review of the level of the minimum prices in September 1990, the minimum export prices of butter and butter oil were maintained at their present levels and participants were again urged to respect them. In December 1990, a derogation was granted permitting sales of butter to the USSR at prices below the minimum export price, upon certain conditions. Sales under that derogation should help to stabilize the world butter market but delays in shipments mainly due to payment difficulties experienced by the USSR were causing serious concern. In the first half of 1991, the market situation 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. Consequently, uncertainties persisted as to the price situation for the remainder of 1991.

38. Cheese prices which had remained fairly high in 1989 eased in the first nine months of 1990, ranging between US\$1,500 and US\$1,950 per ton f.o.b. in the third quarter. At the September 1990 review, the minimum export price was maintained unchanged. Prices firmed slightly in the

fourth quarter of 1990 and fluctuated between US\$1,550 and US\$2,000 per ton f.o.b. 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. However, for most of the cheeses covered by the Protocol, the market situation was steady and prices were expected to firm up in the coming months.

39. Powder prices weakened slightly in the fourth quarter of 1989, ranging between US\$1,700 and US\$1,900 per ton f.o.b. for skimmed milk powder and between US\$1,750 and US\$1,950 per ton f.o.b. for whole milk powder. Prices of milk powders fell further in the first three quarters of 1990, as international demand weakened and as additional supplies became available from some Central and Eastern European countries at very low prices. Consequently, in the third quarter of 1990, prices of skimmed milk powder decreased to US\$1,300-US\$1,450 per ton f.o.b. and those of whole milk powder to US\$1,250-US\$1,400 per ton f.o.b. Some milk powder had reportedly been offered and traded at prices below the minimum export price. At the September 1990 review, the minimum export prices of milk powders covered by the Protocols were maintained unchanged. The market situation for milk powders improved in the fourth quarter of 1990 and prices firmed slightly, with prices of skimmed milk powder ranging between US\$1,300 and US\$1,540 per ton f.o.b., and those of whole milk powder between US\$1,350 and US\$1,475 per ton f.o.b. Prices continued to improve early in 1991 and in the first quarter prices of skimmed milk powder were between US\$1,400 and US\$1,500 per ton f.o.b. and those of whole milk powder in the range of US\$1,400 to US\$1,550 per ton f.o.b. In the second quarter of 1991, requirements of milk powder markets remained basically unchanged. However, international prices were eroded due mainly to the continued 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.

40. Prices for condensed milk were raised in early 1990, but remained stable throughout that year. However, they were again raised in early 1991. A persisting tight supply situation for casein entailed a continuous price hike throughout 1988 and in the first half of 1989. However, prices of casein for technical use and of edible casein eased from the end of 1989 and were in December 1990 down to US\$3,735 per ton, probably because of users' reaction to high prices. Early in 1991, there was still some downward pressure on prices of casein in the United States and prices declined to US\$3,500 a ton in May 1991. Whey prices were under pressure of affluent supplies in mid-1989, amounting to half their levels in 1988 but they recovered towards the end of 1989. However, they declined again in the first nine months of 1990 both in Europe and in the United States. Towards the end of 1990, the decline continued in the United States but a recovery was registered in Europe. In early 1991, prices continued to recover in Europe and remained stable in the United States.

41. The market outlook for 1991 indicated that the prices for some dairy products notably cheeses and milk powders might remain at current levels or even increase somewhat. In 1991, international prices for milk powders

were eroded following a strengthening of the United States dollar, and the stability of the world market for dairy products might be adversely affected. Considerable uncertainty persisted as to the situation for butter and anhydrous milk fat notably as there were serious delays in deliveries under the contracts established for sales of butter to the USSR.

42. The Arrangement has been in operation for nearly twelve years and is considered to be a valuable means of imposing a concerted measure of discipline on export price fixing thus effectively limiting the application of export subsidies, contributing to the maintenance of a certain stability of markets and returns and alleviating 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. From 1982 followed a period with increased world milk production not being accompanied by increased demand and the accumulation of surplus stocks notably of butter and skimmed milk powder, which remained high and continued to have a depressive impact on the prices of all dairy products more or less until 1986-87. Thereafter a general recovery came about, first for powders and cheese and later for butter and anhydrous milk fat. The prices for powder and cheese reached new record levels in 1988, while those for butter and anhydrous milk fat although improving appreciably, did not reach their levels of the early 1980's. Early in 1990, prices weakened in the case of milk fats and to some extent also for powders and cheeses. However, late in 1990 and early in 1991, the market situation for milk powders improved and prices firmed but in the second quarter of 1991, milk powder prices were eroded due to the strengthening of the United States dollar. The cheese market was characterized by balanced supplies and slightly firming prices. As to the market situation for milk fats, prices 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 hopefully help to restore the balance in the butter market although uncertainties persisted as to the price situation in the coming months.

43. Milk proteins have few substitutes and are still, even at the higher price level, in a strong competitive position price-wise, compared to, for instance, vegetable proteins. That is not the situation for milk fat, which is facing a stiff competition from vegetable fat. Furthermore, demand for fats in general is being contained through prevailing dietary philosophy and advice which on the other side favour demand for milk protein illustrated by recent developments in powder prices, with skimmed milk powder for recombination catching 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)

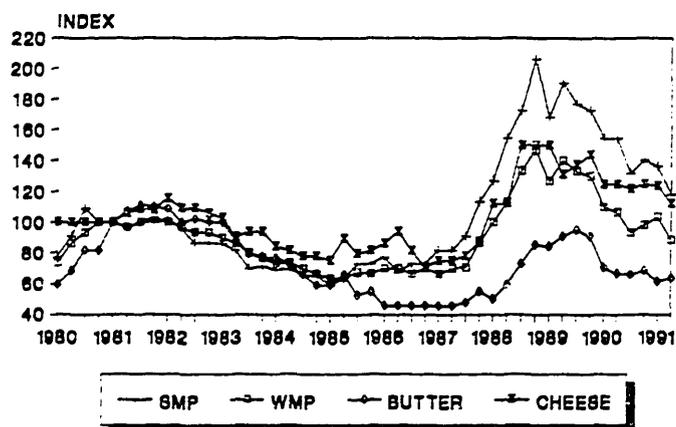


TABLE 2

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
Skimmed milk powder ^a	1,700-2,100	1,500-1,700	1,300-1,540	1,400-1,500	1,250-1,300
Whole milk powder	1,750-2,100	1,400-1,650	1,250-1,475	1,400-1,550	1,250-1,330
Anhydrous milk fat ^b	2,050-2,500	1,625-1,950	1,625-1,880	1,625-1,800	1,625-1,800
Butter ^b	1,650-2,100	1,350-1,550	1,350-1,500	1,350	1,350-1,400
Cheddar cheese ^c	1,900-2,400	1,700-2,000	1,550-2,000	1,600-1,980	1,550-1,800

^aIn 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.

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

^cIn 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 National Dairy Policies
and Milk Production

44. World milk production (including buffalo, sheep and goat milk) at 538 million tons in 1990 showed an increase of 1.6 per cent over the previous year. In most Western European countries and Canada, production remained subject to quotas. Among the four biggest producers, which together accounted for two thirds of the world total, the downward trend was halted in the European Communities, while production increased to record levels in the United States, the USSR and India. Production rose also in Oceania. Milk output decreased in Eastern Europe as a result of insufficient feed supplies and general economic difficulties.

45. World milk production was likely to decrease somewhat in 1991 although supply continued to exceed effective demand. The decline was mainly due to reduced output in Europe, particularly Central and Eastern Europe and the USSR. However, milk production was likely to again expand further in Asia thanks to rapid expansion in India and several other countries of South and East Asia. Production could stagnate in Africa and Latin America. United States output was expected to experience further significant growth. In Oceania, milk output would probably increase modestly if not decline following persisted drought in New Zealand early in 1991.

46. Milk deliveries in the European Communities, reached 98.87 million tons in 1990, the same level as in the previous year. Cow numbers fell by 1.9 per cent but productivity per cow increased by 1.4 per cent in 1990. For 1991, milk deliveries were expected to decrease by 1.9 per cent to 97 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.

47. The Community quota system has been prolonged until March 1992. 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 shall remain in place, with compensations to be paid to producers. In order to accommodate the needs of the so-called "SLOM" producers, provisional allocations of about 580,000 tons out of a total of 600,000 tons that were eligible for re-assignment were granted.

48. In December 1989, the Community quota reserve was increased for the 1989/90 dairy year by a little more than 1 million tons to be allocated by member States to "priority" cases in each country. Certain measures were adopted to counteract the effects of increase in quota reserve such as a 2.5 per cent cut in the intervention price for butter, a 0.75 per cent cut in the intervention price for skimmed milk powder as of 1 March 1990 and an increase in the amount of the super levy from 100 per cent to 115 per cent of the target price as from 1 April 1990. It was also decided to suspend

permanently 1 per cent of the 5.5 per cent of quota which had been temporarily suspended. The amount of the compensation paid to producers per percentage point suspended would be adjusted upwards allowing the net amount of compensation to remain unchanged.

49. 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 global milk quotas would be reduced by 2 per cent. 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. 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. According to a Eurostat study on the effect of the quota, the financial situation of the dairy sector had improved considerably since the introduction of milk quotas in April 1984. Moreover, the main factors depressing deliveries in 1991 would be the 2 per cent linear reduction in quotas and the additional quota buy-out period agreed by the EC Council.

50. In Finland, milk deliveries in 1990 at 2.68 million tons were 2.1 per cent higher than in 1989, due mainly to higher yields per cow as a result of an exceptionally good harvest year. In 1991, milk deliveries were expected to decrease by 9 per cent to 2.44 million tons because of the measures taken to reduce production under the milk bonus scheme. 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.

51. In Norway, total milk deliveries remained stable at 1.92 million tons in 1990. Reductions in milk quotas and a tightening of the two-price system were expected to squeeze supplies so that milk deliveries in 1991 would be reduced by 4 per cent.

52. Milk deliveries in Sweden at 3.42 million tons in 1989, were reckoned to have increased to 3.43 million tons or by 0.3 per cent in 1990. The two-price scheme, introduced on a three-year trial basis for the period July 1985 to June 1988, was intended to discourage surplus production. Its effects in practice had, however, been stronger than was initially expected. Thus, milk production had decreased, reducing costs of surplus disposal and producers were paid a higher price for their milk. The scheme was abolished on 1 July 1989 and subsequently milk deliveries increased. They were, however, expected to decrease to 3.20 million tons in 1991 as the dairy market was deregulated and subsidies were removed so that returns to producers had declined. Thus, a new food policy based on the principle that agriculture should be subject to the same conditions as other sectors had been laid down in June 1990. The Parliament agreed that consumer subsidies for milk and dairy products will end as of 1 January 1991. In the case of dairy producers, there will be a transitional period of five

years during which time internal price controls (including export subsidies) will be abolished. 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.

53. In Switzerland, milk deliveries in 1990 at 3.02 million tons were 3.1 per cent down on the previous year. 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 prices of table butter remained unchanged and prices of cooking butter were reduced. Import charges for cheese remained unchanged.

54. In New Zealand, climatic variations continued to have a major impact on milk production. In the 1989/90 season, production totalled 329 million kgs. of milk fat, or 7 million tons of milk. This was 5.8 per cent higher than in 1988/89 but 6 per cent lower than the peak year 1985/86 and close to the average level of production in the past five years. Good pasture conditions resulted in an increase of 3.1 per cent in milk production in the 1990/91 season to 339 million kgs. of milk fat, or 7.22 million tons of milk. 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. The New Zealand Dairy Board's price for manufacturing milk produced during the 1989/90 season was finalized at NZ\$5.80 per kg. milk fat. 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. Producer prices for milk continued to be determined directly by export market realizations.

55. The level of milk production in New Zealand was determined by the export performance of the dairy industry relative to other alternative uses of the land, with short-term variations resulting from changing climatic conditions. Although there were no subsidies or other regulations which could be manipulated to control production, a number of steps had been taken to influence it by special measures, such as a "butter realization differential" scheme introduced in 1987/88, which was later provided for on a continuing basis. Under this scheme, payments to dairy companies by the New Zealand Dairy Board for export butter and butter oil beyond a base production level would be made on the basis of marginal rather than average market realizations.

56. In Australia, milk production in 1989/90 was down marginally by 0.4 per cent to 6.45 million tons. It was expected to remain at about the current level for 1990/91. 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 introduced for 1986/87 aimed at the development of a more efficient market-oriented dairy industry responsive to market conditions.

57. Japanese milk production in 1990 at 8.22 million tons was 2 per cent higher than in 1989. The increase was mainly due to a further improvement in yields, while dairy cow numbers continued to fall. The forecast for 1991 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. The guaranteed price for milk for manufacturing had been reduced from 79.83 to 77.75 yen per kg. for the 1990/91 fiscal year, because of lower feed prices and better calf prices. The quantity of raw milk to which the guaranteed price was applied had been increased by 50 thousand tons to 2.35 million tons for fiscal year 1991. 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) could reach 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.

58. 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. In this country, 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 which resulted in the building-up of surpluses of skimmed milk powder and butter. Economic factors were mainly responsible for the build-up of stocks. In view of this, South Africa was encountering difficulties regarding the disposal of the surplus product.

59. In Argentina, milk deliveries in 1989 at 7.01 million tons were 8 per cent higher than in 1988. However, deliveries declined by 18 per cent in 1990 to 5.76 thousand tons. 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. Exports of Argentina increased in 1989 when they doubled in volume in relation to 1988 with a record value close to US\$139 million. The value of exports increased by 3 per cent to US\$143.3 million in 1990. 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. In Uruguay, milk deliveries continued to increase in 1989 at the rate of 5.2 per cent, reaching a level of 642 thousand tons, entailing a further significant increase in the output of dairy products. For 1990, a further increase of 5 per cent was

estimated. Uruguay had in recent years been the largest net exporter of dairy products among the developing countries. Thus, in 1989, exports of dairy products were estimated to have increased by as much as 50 per cent in volume and by almost 75 per cent in value due mainly to the improved situation in the international dairy market. However, exports had reportedly decreased sharply in 1990.

60. In Egypt, certain changes had been made to the import regime of certain dairy products. Total production of milk (including buffalo milk) in 1990 at 2.53 million tons, was 2.4 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.

61. 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. From February 1991, a comprehensive price reform which eliminated almost all restrictions on producer and consumer prices had been implemented. For essential foodstuffs, including milk and dairy products, the government had assessed new market prices, involving an average five-fold increase from the previous administered 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. New fiscal and tax policies had been implemented. A comprehensive reform of the exchange system based on an interbank foreign exchange market has also been introduced. 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. Under the same Ordinance, an export tax on cheese amounting to 30 per cent of the export price has been introduced. These restrictions would gradually be eliminated during the year.

62. 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 anticipated for 1991 due to the same reasons. The Hungarian dairy sector went through a lot of difficulties during 1990. The summer drought drove up feed prices, but the substantial fall in domestic demand caused most difficulties. In 1990, as part of the market-oriented policies, the previously large-scale consumer subsidies were phased out which resulted in major price increases for dairy products and in a substantial decrease in domestic consumption. These difficulties continued in the first half of 1991, with domestic consumption persisting to decline. The export possibilities had 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.

63. 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. A further decrease in milk production was forecast for 1991. Since early 1990, Romania embarked upon a wide process of reform in order to move to a market economy. Significant changes took place as regards production, consumption and prices of dairy products. On 10 November 1990, the first stage of the price liberalization process, accompanied by adequate social protection measures, was launched through the adoption of a number of measures to that effect. During this stage of price reform, for a limited number of products of special importance for the consumption of population (including milk), the prices remained practically unchanged on State markets, while on free markets the prices of dairy products raised consistently. The second stage of this process of price liberalization was launched on 1 April 1991. Prices provisionally maintained at fixed levels after 10 November 1990, had also been liberalized; in order to contain strong inflationary pressures, maximum ceilings or increase indexes had provisionally been established. In 1990, exports of dairy products were forbidden due to the domestic market shortage and substantial quantities of butter, milk powder and cheese were imported. In 1991, the export ban of dairy products was eliminated. No surcharges and no quantitative restrictions for imports of dairy products had been introduced so far. A number of tariff liberalization measures were promoted. Temporary reductions of customs duties were granted on imports of certain dairy products which were in short supply on the domestic market. Such reductions would remain in effect until a new customs tariff would be introduced.

64. In Poland, a system of market-oriented prices was introduced on 1 August 1989 and subsidies to the dairy industry were abolished. A new law was passed on 7 February 1990, according to which all central unions of co-operatives had been dissolved and the Central Union of Dairy Co-operatives was liquidated. The deregulation of prices after forty years of State control had resulted in a substantial rise in retail prices which affected adversely the consumption of dairy products. Milk production decreased by 4 per cent in 1990 to 15.76 million tons. However, deliveries declined by as much as 17 per cent in that year to 9.7 million tons. They decreased by a further 20 per cent in the first five months of 1991 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. Poland, which had exported butter in 1990, would have to import certain quantities of butter in 1991, following these developments.

65. In Yugoslavia, milk production increased by 0.8 per cent to 4.50 million tons in 1990, due principally to increasing yields, cow numbers having remained relatively stable.

66. Milk production in Czechoslovakia has remained around 7 million tons in recent years, with an average yield per cow of 3,710 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 as well as the effect of dry weather and poor fodder crops. 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 the consumption notably of butter and increased quantities became available for export. During the past 2-3 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.

67. The generally unfavourable situation in the livestock sector touched also dairy production in the USSR during the year 1990. After the regular upward trend which was registered in the past years, milk production in 1990 remained almost stagnant at 108.7 million tons. Up to 1989, the increases in milk output were achieved with reduced cow numbers thus indicating a constant increase in milk yields. These increases averaged about 2 per cent. In 1990, poor feeding conditions and shortage of other feedingstuffs affected the milk yields, which were still rising but did not fully compensate the reduction in cow numbers. Milk output decreased by as much as 10 per cent in the first quarter of 1991 compared to the first quarter of 1990. 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 could drop by 8 per cent to 100 million tons. According to legislation adopted in March 1991, a customs code and a customs tariff have been applied to imports from 1 July 1991. Some taxes on imports and exports had been applied on a temporary basis since June 1990, in order to keep prices on imported or exported goods in line with domestic price levels. Barter operations were restricted from 1991 on.

68. In the United States, milk production in 1990 increased by 3 per cent to 67.26 million tons as a result of higher milk prices and falling feed costs. 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 expected to be eroded as the year progressed. For all of 1991, milk output was projected to increase by 1 to 2 per cent. Commercial consumption of dairy products increased by 3 per cent in 1990. Extraordinary cheese demand, lower milk fat prices and fairly heavy use of skimmed milk powder helped to boost commercial consumption in 1990. Shifts in consumption from higher-fat products toward lower-fat products persisted entailing an increased surplus of butter available for export. Commercial disappearance was expected to increase by 1 per cent in 1991. The Commodity Credit Corporation (CCC) effected significant purchases of butter and skimmed milk powder in 1990. In 1991, the CCC was projected to buy more skimmed milk powder and butter.

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	1989	(b) 98.90	- 1.2	+ 1.3	- 1.2
	1990	(b) 98.87	0.0	+ 1.4	- 1.9
	Forecast 1991	(b) 97.00	- 1.9	+ 1.5	- 2.0
USSR	1989	(a) 108.50	+ 1.6	+ 2.0	- 0.0
	1990	(a) 108.70	+ 0.2	+ 1.0	- 0.2
	Forecast 1991	(a) 100.00	- 8.0		
United States	1989	(a) 65.43	- 0.6	+ 1.0	- 1.0
	1990	(a) 67.26	+ 3.0	+ 3.0	- 0.0
	Forecast 1991	(a) 68.27	+ 1.5	+ 1.0	- 0.2
Poland	1989	(a) 16.40	+ 4.0	+ 1.6	+ 3.8
	1990	(a) 15.76	- 4.0	- 0.4	- 6.0
	Forecast 1991	(a) 14.64	- 7.0		- 4.0
New Zealand	1989	(a) 7.35	- 1.5	- 3.6	+ 3.2
	1990	(a) 7.72	+ 5.0	+ 0.3	+ 4.9
	Forecast 1991	(a) 7.75	+ 0.4	+ 0.3	+ 1.0
Canada	1989	(a) 8.05	- 4.4	+ 1.3	- 1.2
	1990	(a) 8.05	0.0	+ 3.0	- 3.0
	Forecast 1991	(a) 7.86	- 2.4	+ 0.5	- 2.0
Japan	1989	(a) 8.06	+ 5.9	+ 4.4	+ 1.0
	1990	(a) 8.22	+ 2.0	+ 3.0	- 1.0
	Forecast 1991	(a) 8.30	+ 1.0	+ 1.8	- 0.8
Australia	1989	(b) 6.53	+ 3.7	+ 2.4	- 1.0
	1990	(b) 6.41	- 1.8	+ 1.0	- 1.5
	Forecast 1991	(b) 6.41	0.0	+ 2.6	- 2.6

69. The support price for manufacturing milk was lowered by 50 cents to US\$10.10 per cwt. as of 1 January 1990. The reduction in milk support price was not passed on equally to support prices for butter and skimmed milk powder, taking account of the different trends in demand for these products. The US Farm Bill 1985 expired in 1990. The Food, Agriculture, Conservation and Trade Act of 1990 ensures that the support price will not decline from the current level. The minimum support price will stay at US\$10.10 per cwt. through 1995. This is the strongest guarantee against support price declines given to dairy farmers since the early eighties. However, assessments will be collected slightly lowering effective milk prices. The 1990 Farm Bill re-authorized the Dairy Export Incentive Program extending it until 31 December 1995. The programme included butter, butter oil, skimmed milk powder, whole milk powder and Cheddar cheese. Bonuses were available to 70 countries for some 140 thousand tons of milk powders and to 59 countries for some 41 thousand tons of butterfat. However, only limited sales had been made under the programme.

70. Domestic milk prices were generating 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 have been introduced in Congress. To date, legislative efforts had 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, dairy prices had reportedly increased since May 1991 when the Department of Agriculture took several administrative actions to boost consumption of dairy products under government programmes.

71. Canadian milk production in 1990 at 8.05 million tons was almost identical to that for 1989, as the reduction in cow numbers was offset by increased productivity. Effective 1 August 1990, the target return for industrial milk was raised to Can\$48.69 per hectolitre, an increase of 2.6 per cent. Effective 1 August 1991, the target return was again raised by 2.5 per cent to Can\$49.92 per hectolitre of milk. Effective in the 1990/91 dairy year, the Market Sharing Quota (MSQ) was reduced by 3 per cent. This was the second reduction in MSQ to take place in 1990. This 3 per cent cut in quota was necessary because of a decrease in the estimated domestic requirements of industrial milk which was due to a reduction in domestic requirements for butterfat and increased low-fat fluid milk sales. Total MSQ was forecast to be reduced once again by approximately another 3 per cent in the dairy year beginning 1 August 1991, due to declining butter consumption in domestic market and increased "skim-off" of butterfat from fluid milk and cheese markets. A task force with representatives from the Federal Government, farmers, the dairy industry and consumers identified options for a long-term dairy policy.

72. In Israel, milk production had increased continuously over a number of years. 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 and in 1989 production declined to 952 thousand tons. Subsidies were cut and retail prices increased by 9 per cent in real

terms. Furthermore, the Milk Marketing Board encouraged the exports of dairy cows, aiming at a reduction of the dairy herd by 5 to 7 per cent. Production declined further in 1990 by 3.4 per cent to 920 thousand tons. In 1990, Israel had an average yield of 8,520 kgs. per cow, the highest in the world.

73. 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 4 per cent to 151 million tons in 1990 and the degree of self-sufficiency was expected to increase in the next few years. Several importing developing countries had embarked on very ambitious development programmes.

74. 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, while milk procurement under the "Operation Flood" project doubled and the number of farmers covered by the project more than doubled to about 8 million. The 1991/92 milk production target was 57.5 million tons compared with a production of 55 million tons in 1990/91. While demand was still rising and government policy remained conducive to dairy development, meteorologists expected a below normal monsoon in 1991/92. If such predictions materialized and growth in milk production slowed, this could bring supply and effective demand back into balance, following the accumulation of some surpluses and their sale abroad in most recent years. India, the largest recipient of food aid in the past, had ceased to receive such assistance for its dairy development programme more recently. Milk output was projected to rise by about 20 per cent to 61 million tons by 1995. Per caput consumption could be increasing 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 total consumption equal to production. However, as milk production was concentrated in Western parts of the country, some of the increased production could be offered for exports to the Middle East, rather than sold in Eastern parts of India.

75. 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 rapid expansion during most of the 1980's, the Chinese dairy industry had recently been adversely affected by weaker demand and feed shortages. Moreover, profits to milk producers and processors had been squeezed by inadequate adjustment of retail prices to costs. As a result of these developments, China which was like India, traditionally among the main recipients of food aid in dairy products, had recently also offered some milk products in international markets. China's target for production of milk from cows and goats in 1991 was somewhat over 5 million tons, 6 per cent more than actual output 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.

76. Milk production continued to expand rapidly in the Republic of Korea in 1989, amounting to 1.5 million tons. Nearly three quarters of the supply was consumed as fresh liquid milk or products. In 1989/90, a slowdown in economic growth and particularly a sharp increase in producer and consumer prices for milk reversed the upward trend in demand for liquid milk and fresh dairy products, leading to increased manufacture of milk powder and accumulation of stocks. However, demand for milk products and production of milk rose again at a fast pace in 1990/91 when milk prices were left unchanged. Most recently, output appeared to have lagged behind demand, leading to some purchases of milk powder and relaxation of a previously restrictive import policy.

77. Strong efforts to step up milk production were also being made in several countries of South-East Asia, with a view to substituting imports and stimulating rural development. Thailand, one of the biggest importers of dairy products in Asia, had in recent years expanded milk production significantly. In Indonesia also, milk production showed a rapid increase, but from a very low base. In Africa, on the other hand, Kenya, Zimbabwe and Madagascar benefited from good weather and obtained significant increases in 1990.

78. 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 4 per cent for 1990 to 9.3 million tons. A further increase by 6 per cent was projected for 1991. In Mexico, assuming normal weather, 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 recovered in 1989 to its 1987 level and increased by 6 per cent in 1990 to 14.2 million tons. A further increase of 6 per cent was projected for 1991. 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. Favourable milk prices in Chile stimulated further increase in production in 1990 when production increased to 1.42 million tons. Production was projected to increase by as much as 10 per cent in 1991. 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 10 per cent in 1990 to 1 million tons.

Consumption

79. 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 1990, worldwide fluid per capita milk consumption was expected to have reached the 1984 record level of 47.2 kgs. For obvious reasons, glaring variations existed between countries and regions in the 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 were showing preference for semi-skimmed types of milk, so-called "light" products. The switch from whole milk to partially skimmed milk continued in 1990 and 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 prices had adverse effects on the consumption of milk and fresh milk products. World consumption of liquid milk in 1991 was expected to increase by 1 per cent compared to 1990. Significant gains in consumption were anticipated in the Community, the United States, Japan, Mexico, Brazil, India and Chile. Little change in consumption should occur in Eastern Europe.

80. The principal area of growth in consumption was Asia, both developed and developing countries where rising incomes and changing food consumption habits had provided a strong boost to demand for milk and dairy products. In Asia, many countries were subsidizing campaigns to promote milk consumption and had introduced a school milk subsidy. As a result, per capita milk consumption had steadily increased, principally in Japan, the Republic of Korea, Thailand, Indonesia, China and India. In 1990, the biggest gains in total consumption of liquid milk came from Japan and China, whose milk consumption increased 5 per cent from 1989 levels. This was largely due to changes in the eating habits and in turn, an increased demand for milk by consumers. In Latin America also, consumption increased to some extent as a consequence of milk distribution programmes.

81. The consumption of other fresh milk products such as yoghurt and other fermented or flavoured milks was steadily increasing in a number of countries and was expected to continue its upward trend. Also the consumption of flavoured milks was developing rapidly. In the Community, more fresh products were manufactured. Increases of 2.4 per cent in 1988, 1.5 per cent in 1989 and 0.8 per cent in 1990 showed output was continuing to expand. 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 the consumption continued to be hampered by relatively high prices.

82. 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 was still small in quantitative terms. The appearance of dairy substitutes and imitations had given rise to some concern as to the effect this would have on the dairy market in the future and which might necessitate 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 so that consumers could be properly warned.

The Situation for Individual Dairy Products

Butter and Anhydrous Milk Fat

Butter

Production

83. World production of butter and butter oil which had increased by 1.4 per cent in 1989 continued to increase at a similar rate in 1990, then amounting to 7.70 million tons. Production tended to increase as a result of increased milk production and the shift to lower fat content of other dairy products. At the same time, the demand for butter decreased and the result was an accumulation of butter stocks, notably public intervention stocks, and increased quantities offered for exports. World production during 1991 was projected to total 7.55 million tons, down 2 per cent from the previous year. The accumulation of stocks and weakening prices were the principal reasons for the dampened outlook.

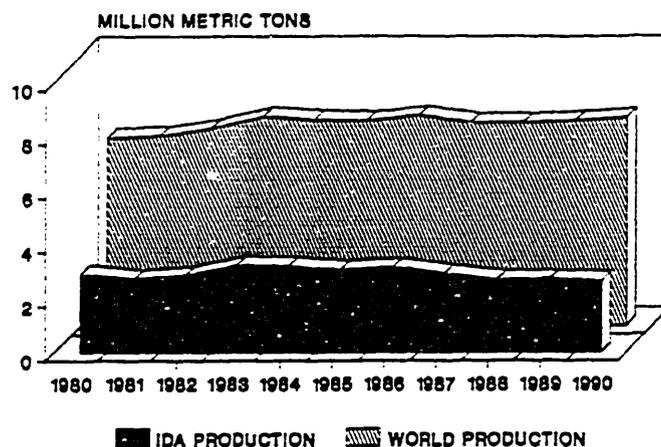
84. In the Community, the tendency towards lower fat products on the liquid milk market generally continued. This in conjunction with the higher fat content of the milk delivered to dairies and reduced production of whole milk powder, resulted in an increase by 2.4 per cent in butter production to 1.60 million tons in 1990. However, the outlook for 1991 was for a decrease in butter output of the same order, production returning to its 1989 level.

85. In New Zealand, production of butter/butter oil in 1988/89 was 246 thousand tons, 12 per cent less than in the previous season. In 1989/90, however, it recovered by 11.8 per cent to 275 thousand tons, but still remaining lower than the output of 280.7 thousand tons in 1987/88. For 1990/91, production continued to recover in line with 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. Australian butter/butter oil production was forecast to rise by 2.1 per cent during 1990/91 to 113.5 thousand tons. In 1990, butter production increased further in Sweden, but declined in Norway and remained stable in Finland and Poland.

86. The United States butter production increased by 1 per cent in 1990, reaching 583 thousand tons. The shift in consumption of milk and dairy products toward lower-fat milk products has been an incentive to increase the output of the latter group of products, resulting in an increased quantity of milk fat being diverted to the residual butter production. However, the outlook for 1991 was for a decline in butter output by 2.3 per cent to 570 thousand tons. Canadian butter production decreased by 1.6 per cent to 99 thousand tons in 1990/91, due to quota cuts caused by declining consumer demand and increased production of cheese.

87. USSR production rose by 3 per cent, reaching a level of 1.8 million tons in 1988 and continued to increase in 1989 but at a modest rate, i.e. only 0.4 per cent totalling 1.81 million tons. However, butter production which went up by only 0.2 per cent during 1990 was forecast to decline in 1991. Moreover, the USSR was planning to increase its production of margarine from the beginning of 1991. In developing countries, butter/butter oil production increased by 3.6 per cent in 1990 to some 1.92 million tons.

BUTTER PRODUCTION 1980-1990



Consumption

88. Butter consumption for 1990 was estimated to have further declined by about 2 per cent in relation to 1989. Usage in the EC and other Western European countries dropped further in 1990 but consumption in the United States, the USSR and India was reportedly up over 1989. World per capita consumption which averaged 2.7-2.8 kgs. over the last ten years stagnated or declined slightly through 1990. In 1990, increased retail prices in 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 1989 and 1990. In the short and medium term it was likely that the downward trend in butter demand would continue or even accentuate.

89. 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 1989 and 1990, providing funds for subsidized butter to be used in pastry products, ice-cream and sugar confectionery. The Community subsidized the disposal of 368 thousand tons of butter in 1990, 15 thousand tons more than in 1989. This quantity represented around 25 per cent of total butter consumption and went mostly for pastry and ice-cream manufacture. Disposals of butter might increase to 400 thousand tons in 1991. However, total Community consumption of butter declined by 3.2 per cent for 1990 and might continue to decline in 1991 at an even higher rate causing concern. The decline was due partly to higher prices, partly to the 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 in 1997. The human consumption of margarine, which may be considered as a substitute for butter, seemed to be very stable at a level of about 4.7 kgs. per head, whereas consumption of spreads appeared to increase.

90. 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 1989 and 1990, as it did in the Nordic countries.

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

92. In Australia, domestic sales of butter, butter blends and butter oil were expected to increase marginally (by 0.5 per cent) to 57 thousand tons in 1990/91. However, the rapid growth of the butter blend market had seen butter increase its share in the domestic table spread market at the expense of margarine at a time when total retail demand for spreads had been gradually declining. The repeal of the Margarine Act from 1 January 1990, meant that the manufacture and sale of saturated fat margarines on the New Zealand market became legal. These products are cheaper than both polyunsaturated margarines and butter. The repeal of the Margarine Act also allowed for sale on the New Zealand market of manufacture of blended spreads: 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 currently accounts for an estimated 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 7 per cent in 1989/90 and by a further 2.2 per cent in 1990/91. Greater expenditure on general and branded promotions reduced the decline in butter consumption to some extent.

93. In the United States butter consumption increased in 1990 by 2 per cent to 490 thousand tons and was expected to rise an additional 3 per cent in 1991. This increase was largely due to lower butter prices. In Canada, butter consumption continued to decrease in 1989/90 and was expected to drop by 3 per cent in 1990/91. 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 were likely to affect domestic prices and per capita consumption of dairy products.

Trade

94. 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 facing a slack import demand. In 1988, a large part of world exports at 1 million tons consisted of deliveries under derogations agreed previously. World exports declined in 1989 to 800 thousand tons. Sales by the European Communities and Oceania declined while those of the United States showed a substantial increase. As a result of a further deterioration of the market for butter, world exports in 1990 decreased to some 700 thousand tons. This was accounted for by the decline in EC and United States exports.

95. 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 should be concluded before 15 January 1991 and deliveries should be completed by 30 September 1991. Sales of 311 thousand tons were contracted under that derogation. However, serious concerns had been expressed with respect to delays in shipments mainly due to payment difficulties experienced by the USSR. Uncertainties persisted as to whether the quantities initially contracted would be delivered in their entirety by the end of September 1991.

96. The Community exports of butter to third countries (including butter oil) registered a substantial decline of 38.5 per cent amounting to only 394 thousand tons in 1989. A large quantity again went to the USSR at prevailing world market prices. In 1990, exports of butter/butter oil estimated at 235 thousand tons registered a further substantial decline of 40 per cent in relation to 1989. 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, the fulfilment of this contract by the end of September 1991 was posing difficult problems to exporters. Due to payment difficulties experienced by the USSR, only a small quantity had been shipped by the end of June. In order to finalize the deal, certain questions still had to be dealt with or were in the process of being solved. The question of guarantees for payment and the question of prices were not yet solved.

97. In 1989, exports by New Zealand amounted to only 138 thousand tons compared to 184 thousand tons in 1988. The European Communities remained the main outlet. In September 1989, special arrangements were made for imports of New Zealand butter into the Community between 1989 and 1992 under which the global volume of butter which New Zealand could export to the European Community was fixed at 64,500 tons and 61,340 tons for 1989 and 1990 respectively. The arrangements provided for a reduction in the special import levy from 25 per cent ad valorem to 15 per cent. For subsequent years, Community imports of butter from New Zealand under the special arrangement will be progressively further reduced to the following quantities: 58,170 tons in 1991 and 55,000 tons in 1992. Other important outlets for New Zealand butter were Iran and the USSR. In 1990, exports increased to 163 thousand tons as compared to 138 thousand tons in 1989; the main outlets being the USSR and the European Communities. 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 had been delayed due to payment difficulties experienced by the USSR. However, some progress had been made regarding these problems and shipments were expected to be completed by the end of September 1991. New Zealand sold a further 32,400 metric tons to Iran at the minimum export price of US\$1,350 per metric ton f.o.b.

98. Australian exports of butter/butter oil fell by 3.6 per cent to 50.5 thousand tons in 1989/90 in spite of some sales of bulk butter to the New Zealand Dairy Board for re-export. The decline was more marked for butter oil following a weakening in demand from traditional Asian markets. However, exports of butter/butter oil in the first ten months of 1990/91 were 49 thousand tons or 14 per cent above the corresponding level in 1989/90; the main outlets being the USSR, Japan and traditional Asian markets. 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. The contracted product was delivered in the first half of 1991.

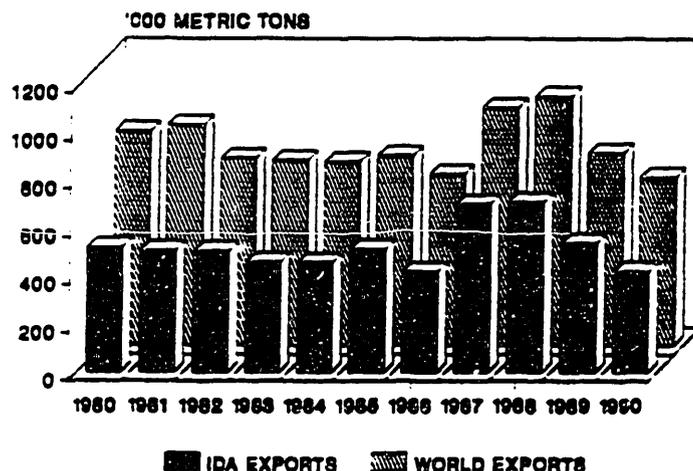
99. Exports of butter by the Nordic Countries increased in 1990. However, they were likely to decrease in 1991 due to weak demand. In accordance with the Decision adopted on 12 December 1990, Finland concluded a contract

to deliver 7,000 tons of butter to the USSR, at a price of US\$1,200 per metric ton. The deliveries were completed in the first half of 1991.

100. Exports of butter by Argentina registered a substantial increase in 1989 when they reached 6.2 thousand tons in relation to 0.8 thousand tons in 1988. In 1990, exports at 7.4 thousand tons, increased by some 20 per cent compared to the previous year. These increases were mainly due to reduced domestic consumption.

101. As a consequence of increased production and decreased consumption, Poland resumed its exports of butter in early 1990. In March, a sale of 10 thousand tons of butter to the USSR had been concluded at a price of US\$1,350 per ton f.o.b., i.e. the agreed minimum export price. For the first nine months of 1990, exports amounted to 18 thousand tons. However, as a result of the significant decline in milk output in the autumn and winter, Poland had to import some 5 thousand tons during the first half of 1991. Romanian exports of butter and butter oil were around 19 thousand tons in 1988 and in 1989, the main destinations being the USSR and Egypt. 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 within the food-aid programme; the main suppliers being the EC and the United States.

BUTTER EXPORTS 1980-1990



102. After having declined for the three consecutive years to a level of some 9 thousand tons, in 1989 United States butter exports increased substantially. In early 1989, larger milk production resulted in an increase of output of butter and skimmed milk powder, the demand for the latter product being strong. However, commercial use of butter fell and public stocks increased. In September, sales of 50 thousand tons of butter to the USSR had been concluded at a price of US\$1,618 per ton f.o.b. and the butter was shipped during December 1989-March 1990. The 1985 Farm Bill mandated the sale of 150,000 tons of dairy products (of which 100,000 tons of butter) annually through fiscal year 1990. This target for butter exports had not been attained in any year. United States exports in 1990 were estimated at 52 thousand tons. Projections for 1991 indicated an increase in exports to 60 thousand tons mainly by the implementation of the Dairy Export Incentive Program.

103. The Community imports of butter, which decreased to some 71 thousand tons in 1989, recovered in 1990, then amounting to 116 thousand tons. New Zealand remained the main source of the Community imports. Imports into Switzerland decreased substantially in 1989 and 1990. Polish butter imports decreased by almost 66 per cent to 11.5 thousand tons in 1989 and there were no imports in 1990, mainly due to increased domestic production. However, imports resumed in 1991.

104. Japan, whose imports of butter averaged only 2 thousand tons a year between 1981 and 1987, made supplementary purchases in 1988 amounting to as much as 21 thousand tons. Total imports reached 23.3 thousand tons in 1988, the main supplier being New Zealand. In 1989 imports at 10 thousand tons were substantially lower than in the previous year and decreased further in 1990 to 7 thousand tons. However, in the first six months of 1991 some 5,000 tons of butter were imported as the butter market situation continued to show signs of firming.

105. The USSR, where consumption of milk and dairy products rose faster than production, remained the world's biggest importer of dairy products which totalled approximately 3 million tons of milk equivalent in 1990. Imports of butter in 1989 were 247.1 thousand tons, down by 44 per cent from the record level of 440.5 thousand tons reached in 1988 (Table 4). In the first half of 1990 imports of butter increased by 22 per cent in relation to the corresponding period of 1989. Moreover, the USSR obtained a grant from the Federal Republic of Germany to buy dairy products and meat in EC markets. Butter imports for the whole year of 1990, estimated at approximately 300,000 tons, increased by 20 per cent accounting for about half of world trade in this commodity.

106. The derogation adopted in December 1990, would permit 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 uncertainties persisted as to whether the quantities initially contracted would be delivered in their entirety by the end of September 1991. Moreover, consumption could start decreasing in the USSR if this country embarked on a move towards a market economy and cut food subsidies. In April 1991, the USSR increased

TABLE 4
Imports of Butter into USSR by Origin
('000 metric tons)

	1981-83 average	1987	1988	1989	1990
<u>Total</u> of which from:	<u>189.46</u>	<u>403.11</u>	<u>440.47</u>	<u>247.05</u>	<u>[300.00]</u>
Belgium	16.67	9.99	5.75	4.37	
Denmark	-	5.00	-	-	
Ireland	15.75	-	12.06	29.40	
Netherlands	14.71	113.14	121.05	30.31	
France	25.08	49.97	19.08	3.88	
Germany, F.R.	-	133.00	183.00	27.00	
<u>Total EC countries</u> <u>mentioned</u>	<u>72.22</u>	<u>311.10</u>	<u>340.94</u>	<u>94.96</u>	
Hungary	3.48	1.06	1.00	5.38	
Norway	1.67	-	-	-	
Finland	9.34	6.10	8.79	7.85	
Sweden	5.46	-	-	8.60	
Canada	0.67	-	-	-	
Uruguay	3.37	-	2.50	4.00	
New Zealand	48.71	11.38	38.29	30.70	
Others (unspecified origins)	44.38	73.47	48.95	95.56	

Source: Foreign Trade Yearbooks of the USSR 1981 to 1989.

significantly retail prices for food commodities, including butter. The government announced at the same time accompanying income compensations. It was difficult at this stage to determine the impact of all these new developments 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, as also the need for the USSR to import other agricultural products. For these reasons, under normal conditions annual imports of butter might not exceed 200 thousand tons while imports averaged some 350 thousand tons between 1987 and 1990. However, if butter was to be offered at exceptionally low prices, substantial quantities could again be imported.

Stocks

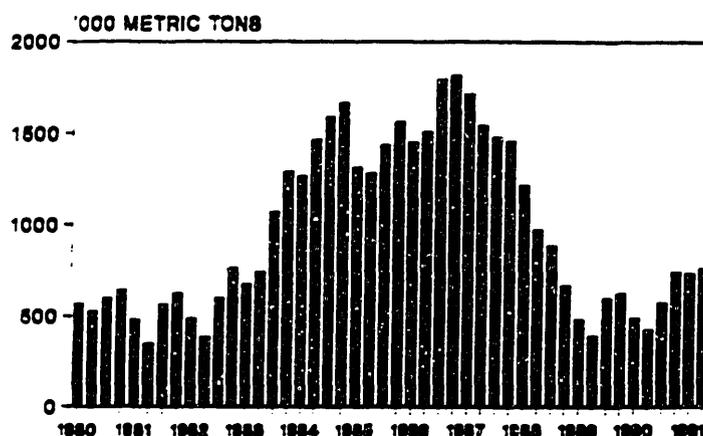
107. Total stocks of butter in the European Communities, North America and Oceania on 1 January 1990, at 383 thousand tons were 8 per cent lower than a year earlier, while stocks on 1 January 1991, estimated at 653 thousand tons, had registered an increase of 70 per cent as compared to 1 January 1990. Concerns had been expressed that stocks of butter would be on the rebound as a result of the fall in demand. However, it was expected that the sales to the USSR under the derogation granted on 12 December 1990 would allow the disposal of a substantial quantity of butter and that by the end of 1991 the market would be better balanced. Stocks of butter in Central and Eastern Europe on 1 January 1990 were higher than a year earlier and they continued to increase early in 1990 but later decreased and returned to normal levels at the end of that year. World ending stocks for 1991 were forecast to reach 1.08 million tons, with the EC and the United States being the principal holders.

108. The Community stocks of butter were estimated at 330 thousand tons (public and private) at the end of 1990 as compared to 124 thousand tons one year earlier. There were no intervention purchases whatsoever in 1989. Following a decrease in prices, it was decided in January 1990 to buy some 12 thousand tons of butter, the first intervention purchase in two years. Intervention purchases continued throughout the year of 1990 and in early 1991. Despite decreased production, public stocks continued to grow and were at 400 thousand tons at the end of June 1991 compared to 108 thousand tons a year earlier. At the end of 1991, stocks of butter might amount to some 500 thousand tons.

109. In Oceania, stocks of butter at 101 thousand tons on 1 January 1991 were lower by 6 per cent in relation to their level on 1 January 1990. They were expected to decrease during the first three quarters of 1991 as a result of deliveries of butter by New Zealand mainly to the USSR and Iran. In Poland, stocks of butter at 36.6 thousand tons on 1 January 1990 had more than doubled from a year earlier, this substantial increase being due to declining consumption in reaction to higher retail prices. However, following the significant decline in output of milk in the second half of 1990, butter stocks had been completely wiped out and Poland had to resume its imports of butter in early 1991.

110. In the United States, government purchases of butter rose substantially, reflecting a jump in the surplus of high-fat products with public stocks continuing to swell in 1989 and early 1990 and were at 160 thousand tons on 1 January 1991, up by 28 per cent on their level a year earlier. Government support purchases of butter in 1990 at 181 thousand tons were large but nevertheless 3 per cent down from a year earlier, reflecting smaller production and larger commercial use. Public stocks were forecast to increase to 270 thousand tons at the end of September 1991 compared to 170 thousand tons a year earlier. Canadian stocks reached 28 thousand tons at the end of December 1990, the double of their level a year earlier. However, they were expected to decline substantially by the end of 1991.

BUTTER STOCKS 1980-1991 IDA PARTICIPANTS *



* Includes Austria, Canada and the US

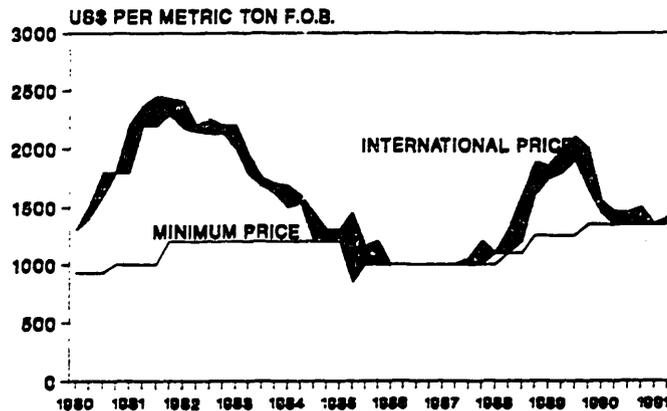
International prices

111. Reduced supplies and lower carry-over stocks resulted in a further improvement of prices in 1989 with prices for fresh butter fluctuating between US\$1,750 and US\$2,100 per ton f.o.b. in the first nine months of the year. However, prices started to weaken in the fourth quarter, ranging between US\$1,650 and US\$2,000 per ton f.o.b., and the decline continued in 1990, following a decline in butter consumption in many countries. International prices declined to the range of US\$1,450-US\$1,550 per ton f.o.b. in the first quarter of 1990 and then dropped to US\$1,350-US\$1,500 per ton f.o.b. in the last three quarters of 1990. In the fourth quarter, only little trade was effected. In the first two quarters of 1991, the market situation continued to worsen with the accumulation of stocks,

following a persisting decline in butter consumption in many countries and an extremely weak international demand leading 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 had been made at the minimum price. Moreover, certain offers and sales had reportedly been made at prices below the minimum export price of US\$1,350 per ton f.o.b. and uncertainties persisted as to the price situation for the remainder of 1991.

112. Concern was expressed as to the unsatisfactory situation dominated by a fragile butter market, and the Committee of the Protocol Regarding Milk Fat urged participants to take the necessary steps to ensure full observance of the provisions of the Arrangement related to minimum export prices. An appeal was also made to non-participating countries not to undercut prices and not to sell below the agreed minimum export prices. In its review of September 1990, the Committee decided to maintain the minimum price unchanged at US\$1,350 per metric ton f.o.b.

BUTTER PRICES 1980-1991

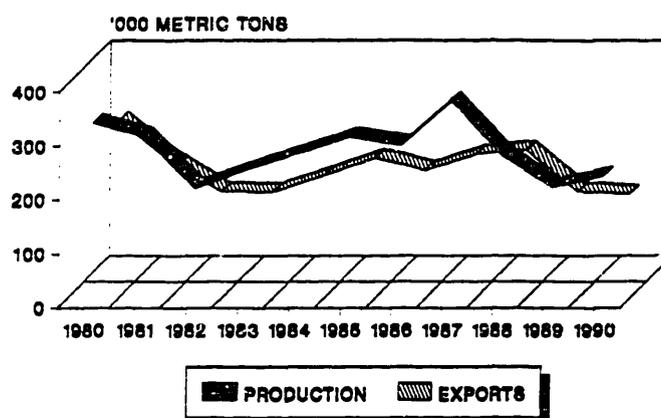


Anhydrous Milk Fat

Production and trade

113. Output of anhydrous milk fat of the European Communities and Australia was higher in 1990 than in the previous year, while production in New Zealand registered a decrease in 1990. Exports by New Zealand increased substantially in 1990, while exports by Australia and the European Communities declined.

ANHYDROUS MILK FAT PRODUCTION AND EXPORTS 1980-1990 *



* IDA participants only

Food aid

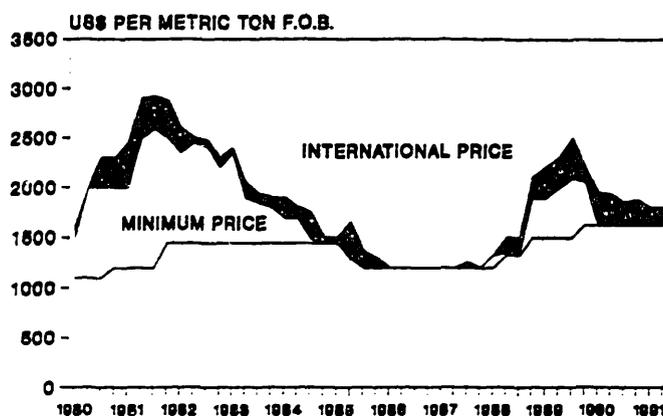
114. The 1989 Community food-aid programme provided for a maximum of 25 thousand tons of butter oil, the same as in 1988. However, for 1990, this programme provided for 18 thousand tons of butter oil. Actual food-aid deliveries in 1990, amounted to 9 thousand tons in relation to 15 thousand tons delivered in 1989. In February 1990, the Community took emergency action to supply Romania with certain agricultural products including 2.5 thousand tons of butter. In March 1991, the Community decided to supply Bulgaria with 2,000 tons of butter. In March 1990, the United States and Romania signed an agricultural aid package under which Romania would receive feed grains and 7.5 thousand tons of butter.

International prices

115. International prices of anhydrous milk fat which had improved throughout 1988 strengthened further in 1989 with prices fluctuating between US\$1,900 and US\$2,500 per ton f.o.b. in the first nine months of the year. However, prices started to weaken in the fourth quarter ranging between US\$2,050 and US\$2,200 per ton f.o.b., and continued to decrease ranging between US\$1,625 and US\$1,950 per ton f.o.b. during the first half of the year. A further decrease was registered in the second half of 1990 when prices ranged between US\$1,625 and US\$1,880 per ton f.o.b. 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.

116. As regards the future outlook, prices and sales of anhydrous milk fat would remain sensitive to competition from vegetable oils and uncertainties would persist in the market. In its review of September 1990, the Committee nevertheless decided to maintain the minimum export price at its present level of US\$1,625 per ton f.o.b.

ANHYDROUS MILK FAT PRICES 1980-1991



Cheese

Production

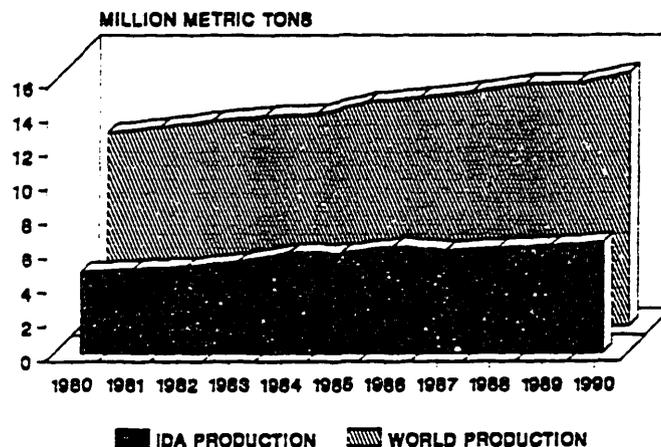
117. World output of cheese (all kinds including curd) at 14.87 million tons in 1990 was 2.7 per cent more than in 1989. The trend was very similar in all regions, but with some variations from one country to another. In the European Communities, cheese production in 1990 reached 4.65 million tons, an increase by 3 per cent over 1989. This partially reflected the increase in internal demand and also the application of a modified intervention system for skimmed milk powder and butter. Larger quantities of milk had been diverted into the production of cheeses. For 1991, a further increase was expected, with cheese production at 5.04 million tons being almost 8 per cent higher than in 1990.

118. In Australia, production of cheese decreased by 8 per cent to 175 thousand tons in 1989/90. This fall reflected reduced import demand in Japan and generally unfavourable price relativities for cheese in the first half of the year. Despite more milk being available for manufacturing, cheese production remained at 150 thousand tons during the nine months ending March 1991, virtually the same as in the corresponding period of the previous year. New Zealand cheese production totalled 122 thousand tons in the 1989/90 season. Production was adjusted down

during the season as export sales did not achieve expected levels. With cheese stocks at the beginning of the new season being higher than desirable, production in 1990/91 would be held below the 1989/90 level. Appreciable gains were recorded in 1990 in most other participating countries and further increases were forecast for 1991.

119. Following continued growth in commercial demand, United States cheese production reached 2.75 million tons, increasing 8 per cent in 1990. Much of the increase in the milk supply was absorbed by cheese manufacture. This increase would have been greater if skimmed milk powder demand had been less strong. The outlook for 1991 was for a further increase by 5 per cent to 2.88 million tons. Production in Canada was projected to grow in 1990/91 by 2 per cent to some 252 thousand tons, in response to rising domestic demand. In the USSR, production of cheese (excluding curd and fresh cheese) in 1990 at 915 thousand tons, was around 2 per cent higher than in 1988. A further increase was projected for 1991. USSR production of curd and fresh cheese was estimated to have exceeded 1 million tons in 1990. Production of cheese in developing countries which was around 12 per cent of total world output, hardly changed in 1990.

CHEESE PRODUCTION 1980-1990



Consumption

120. World per capita cheese consumption was moving up steadily, showing an average annual increase of over 2 per cent since the early 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 1989 and 1990, cheese consumption developed appreciably in North Africa and the Middle East.

121. Cheese consumption for the major producing countries continued to expand, up 3 per cent in 1990. In the European Communities, a gain of 2 per cent was registered in 1990. The outlook for 1991 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. In other European countries, cheese consumption continued to grow. The United States market continued to show strong growth in cheese use with annual gains at 2 per cent in 1989 and around 5 per cent in 1990. Favourable economic conditions and strong import demand led to a substantial increase in consumption in 1990, despite higher prices. 1990 appeared as a year when unidentified factors, perhaps intensive brand advertising, triggered an extraordinary expansion. A further 6 per cent gain was projected for 1991.

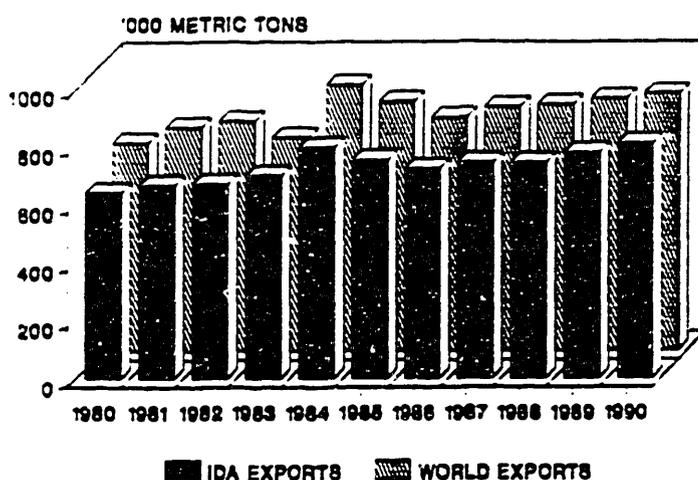
122. The expansion in demand and consumption of cheese has entailed the development and production of imitation cheeses, but such products still had captured only a marginal market share in 1990. However, cheese analogues, filled cheese and imitation cheese were, with some success, being marketed as ingredients for making pizzas and for other cooking applications, notably in the United States.

Trade

123. World exports of cheese were up 2 per cent for 1990 and reached some 887 thousand tons. The outlook for 1991 was for a further growth of the same order. The general expansionary tendencies observed in the market for 1989 continued into 1990 and 1991. The international cheese market was dominated by exports from Western Europe and New Zealand, which together accounted for over 75 per cent of exports.

124. The Community cheese exports expanded by 4.2 per cent in 1990 to 464 thousand tons, and might continue to grow in 1991 at about the same rate. New Zealand exports reached 95.8 thousand tons in 1990, being 13.3 per cent above their level in 1989, the main outlet remaining Japan. Exports might continue to increase in 1991 although at a slower rate. Sales of cheese below normal export quality under derogation dropped sharply in 1988 and stopped completely in 1989 reflecting improved market conditions. However, as prices eased in early 1990, New Zealand again sold 1,350 tons of low quality cheese under derogation. Australian exports of cheese declined in 1989/90 by 17 per cent to 51.7 thousand tons mainly reflecting reduced sales to Japan. The main destinations of Australia's exports continued to be Japan and South East Asia. Total exports of cheese in the ten months to April 1991 recovered compared to the ten months to April 1990, the main contributing factor being increased sales to Japan. In 1990, Australia notified its intention to sell about 1 thousand tons of low quality cheese under derogation to different countries in Europe.

CHEESE EXPORTS 1980-1990



125. Exports by Switzerland decreased by 5.4 per cent in 1990 and amounted to 61.4 thousand tons. Exports of Finland increased from 27.3 thousand tons in 1989 to 29 thousand tons in 1990. Exports by Argentina registered a substantial increase in 1990 (by as much as 60 per cent) totalling 22.5 thousand tons. The main destinations were Brazil and the United States. Sales by Bulgaria, dropped by as much as 18 per cent in 1990 to 17.2 thousand tons.

126. Cheese exports from the United States fell substantially in 1990 to only 9 thousand tons and were projected to decline in 1991 to a five-year low of only 5 thousand tons. This was due in part to high domestic prices for cheese. Canadian exports of cheese dropped in 1990, while exports from Austria remained relatively stable.

127. 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 cheese in 1989 at about 112 thousand tons were 2 per cent lower than in 1988, the main suppliers being the European Communities, New Zealand and Australia. Domestic demand for cheese, which had nearly doubled in ten years, was likely to continue to increase. In the same period, imports registered also substantial increases. However, in 1990, imports of natural cheeses registered a further decrease to 106 thousand tons. Early in 1991, imports were recovering due to an increase in demand. In Switzerland, imports of cheese increased by 5.3 per cent in 1990 to 25.9 thousand tons.

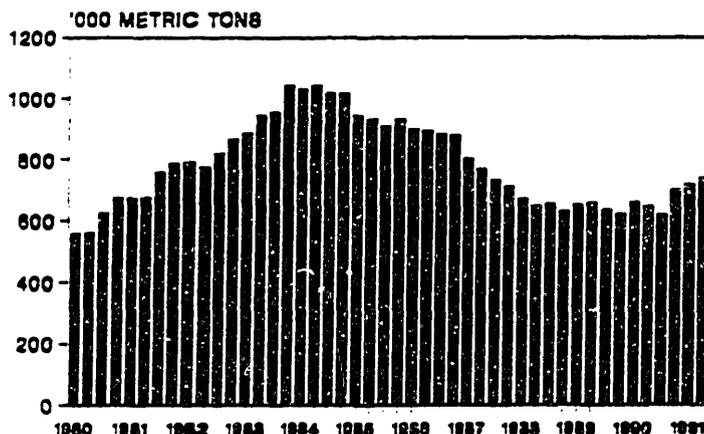
128. United States purchases totalled 125 thousand tons in 1989, up by 9 per cent on 1988. The bulk of the imports was from the European Communities, New Zealand and Finland. Imports in 1990 were up 9 per cent to a five-year high of about 136 thousand tons. However, little change was expected in imports in 1991.

129. Import demand for cheese in North Africa and the Middle East was again strong and increasing in 1989, with imports of Feta cheese into Egypt and Iran increasing by more than one third compared to 1988, and import demand in these areas 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.

Stocks

130. Cheese stocks, on 1 January 1991, were higher than one year earlier in the Community, while they were low in Australia, New Zealand and the Nordic countries. United States stocks which on 1 January 1991, were higher than one year earlier, but still amounting to only about half of their average levels in 1981 to 1983. For all countries for which statistics on cheese stocks were available there seemed to be an increase in stocks of 2.5 per cent in 1990 compared to 1989. However, world ending stocks for cheese in 1991 were forecast to be 3 per cent lower than a year earlier. With the exception of the United States, 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 recent announcement that cheese would be included in the Dairy Export Incentive Program might dampen the growth in United States cheese stocks in the future.

CHEESE STOCKS 1980-1991 IDA PARTICIPANTS *



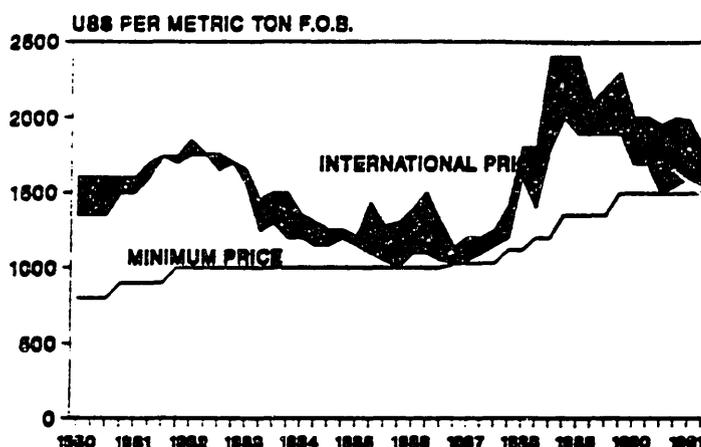
* Includes Austria, Canada and the US

International prices

131. Cheddar cheese prices levelled off in 1989 with quotations for Cheddar being in the range of US\$1,900 to US\$2,400 per ton f.o.b. in the first half of the year, slightly down from the peak reached towards the end of 1988. During the fourth quarter of 1989 they fluctuated between US\$1,900 and US\$2,300 per ton f.o.b. In the first half of 1990 they tended to ease further ranging between US\$1,700 and US\$2,000 per ton f.o.b. A further weakening was registered for Cheddar cheese prices in the second half of the year when quotations fluctuated between US\$1,500 and US\$1,950 per ton f.o.b. in the third quarter and between US\$1,550 and US\$2,000 per ton f.o.b. in the fourth quarter. 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. 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 and were expected to firm in coming months, as import demand was sufficient to absorb the increased supplies, notably in the case of speciality cheeses. Cheddar cheese quotations were showing weakening tendencies by mid-year 1990, probably a reaction to plentiful supplies offered for export and high stocks of produce for ripening.

132. In its review of September 1990, 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

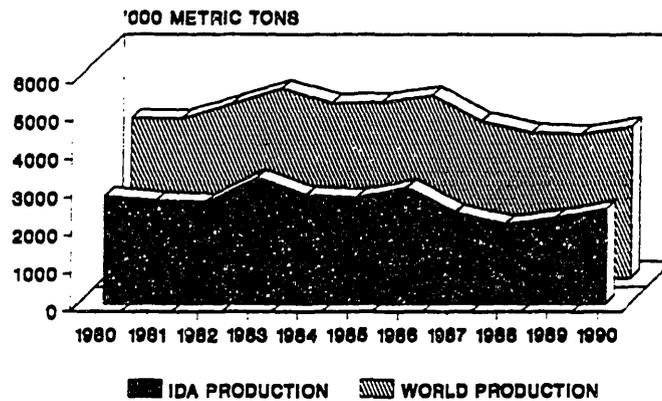
Production

133. World production of skimmed milk powder in 1990 at 4 million tons was 5 per cent higher than in 1989 with a recovery in Western Europe and Australia offsetting declines in North America, New Zealand and Poland. However, world production in 1991 was forecast to decline by about 3 per cent as decreases were projected in the European Communities and in North America.

134. After having decreased sharply for two consecutive years, output of skimmed milk powder in the European Communities recovered in 1989 and totalled 1.40 million tons, up by 6.6 per cent on 1988. Despite the increased allocations to drinking milk and cheese, production of skimmed milk powder increased mainly due to the cutback in the production of casein and in the use of liquid skimmed milk for animal feeding. For 1990, Community production of skimmed milk powder showed a strong increase, of 12.4 per cent to 1.60 million tons due largely to the increasing quantities of liquid skimmed milk resulting from the substantial cutback (by 20 per cent) in casein production. It was, however, forecast that production in 1991 would decrease by 3 per cent.

135. In New Zealand, production of skimmed milk powder declined by 10 per cent to 152 thousand tons in 1990 compared to 1989. Buttermilk powder production increased by 6 per cent in 1990 to 27.6 thousand tons. In Australia, production of skimmed milk powder/buttermilk powder increased substantially in 1989/90 to 139.7 thousand tons, up 10 per cent on 1988/89 in line with international market relativities. Shifts in domestic utilization by food processors from skimmed milk powder to skimmed milk concentrates have been offset by a producer shift to skimmed milk powder production in light of continuing market uncertainties. With the international casein market remaining depressed in 1990/91, skimmed milk powder production moved in line with butter/butter oil production. Skimmed milk powder production in the first three quarters of 1990/91 of 130.7 thousand tons was 8 per cent above the corresponding level in 1989/90. 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. In Poland, production increased by 10 per cent in 1989 to 175 thousand tons but decreased by 8 per cent in 1990. Production of skimmed milk powder by other participants followed varying trends in 1990.

SKIMMED MILK POWDER PRODUCTION 1980-1990



136. In the United States, output decreased by 11 per cent in 1989, reaching 397 thousand tons. Production declined further in 1990 by 0.5 per cent to 395 thousand tons despite the expansion in milk production as milk was being diverted away from butter-skimmed milk powder into cheese production. As sales of lower fat products continued to increase, demand for liquid skimmed milk trimmed skimmed milk powder output. The outlook for 1991 was for a decrease in skimmed milk powder production. Canadian production in 1989/90, declined by 10 per cent to a level of 93 thousand tons, due to a reduction in industrial milk quotas. For 1990/91, a further decline by 8 per cent to 86 thousand tons was projected. Production in the USSR continued to increase in 1989, reaching 543 thousand tons and registered a slight gain also in 1990. Output in India increased by as much as 13 per cent in 1989 to 90 thousand tons and by another 6 per cent to 95 thousand tons in 1990. The outlook for 1991 was for a further increase to 100 thousand tons. Brazilian production also showed a steady increase from 50 thousand tons in 1989 to 60 thousand tons in 1990 and was expected to expand to 70 thousand tons in 1991.

Consumption

137. World consumption of skimmed milk powder remained stable in 1990 and this stability was likely to continue into 1991. In the European Communities, total domestic consumption declined in 1989 and 1990. However, this was due to reduced use of powder by the compound feed industry; while powder used for human consumption increased strongly in 1989, exceeding 300 thousand tons. Domestic consumption of skimmed milk powder for calf feed declined over recent years and fell further in 1989

and in 1990 to some 750 thousand tons. This declining use in feeding could partly be attributed to a reduced raising of calves in line with reduced cow numbers. There was also an increasing substitution for skimmed milk powder by whey powder and possibly also soya bean meal. However, it was forecast that disposals of skimmed milk powder as livestock feed in domestic markets would increase to 1 million tons in 1991, i.e. some 60 per cent of production. Taking into account the evolution of the market situation, the aids granted to skimmed milk powder and liquid skimmed milk used in animal feed were increased in June and in October 1990. Thus an aid level of ECU 70 per 100 kgs. (+ ECU 10) and a minimum incorporation level of 50 per cent were decided in October 1990. However, the aid level was reduced from ECU 70 per 100 kgs. to ECU 65 per 100 kgs. as of 1 May 1991.

138. In Japan, where total consumption declined by 4.5 per cent in 1990 about one fourth of the consumption was used for animal feed. In the United States a substantial increase by as much as 20 per cent was registered in 1990 in domestic consumption. However, the outlook for 1991 was for a sharp decrease of the same order, consumption regaining its level of 1989. The use in animal feed dropped to negligible levels. In Canada, total domestic consumption rose in 1989/90 by 9 per cent and one fifth of the consumption was used for animal feed. For 1990/91, however, domestic consumption was expected to decline by 7 per cent.

Trade

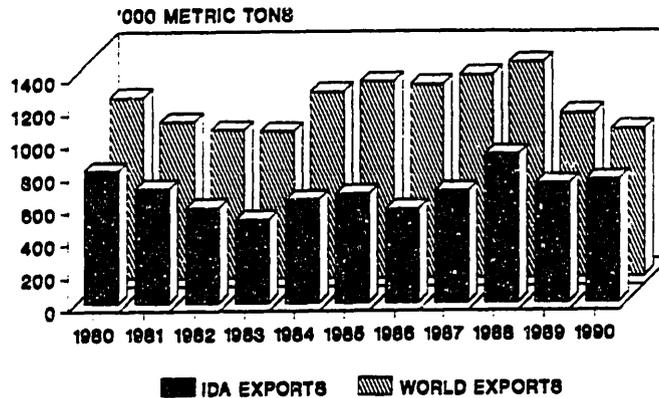
139. Due to the continued tightness in world supplies with the decline in production and the negligible level of stocks, world exports of skimmed milk powder in 1989 declined by as much as 250 thousand tons to 950 thousand tons. International trade in skimmed milk powder declined further in 1990 to some 900 thousand tons due mostly to lower exports by the European Community and the United States. However, international trade might increase in 1991 due to weaker prices and increased efforts by major producers to reduce growing powder stocks.

140. With reduced supplies and negligible intervention stocks, Community exports in 1989 reached only about 408 thousand tons, i.e. a decline by 34 per cent compared to 1988. The market share of the European Communities decreased to 40 per cent in 1989 from 50 per cent in 1988. At around 350 thousand tons in 1990, Community sales registered a further decline by 14 per cent.

141. Skimmed milk powder exports by New Zealand increased by 3.8 per cent in 1989 and reached 146 thousand tons. The main destinations were countries in South East and Eastern Asia and Mexico. Exports continued to increase at a lower rate (by some 2.5 per cent) in 1990 to 150 thousand tons. Buttermilk powder exports registered a sharp drop in 1989 but recovered in 1990. In July 1990, New Zealand gave advance notification of its intention to conclude a sale to Japan of skimmed milk powder for purposes of animal feed under derogation. The quantity involved was 3 thousand tons with delivery scheduled in August or September 1990. In addition, a small quantity of buttermilk powder (94.5 tons) was sold under derogation to Japan and delivered in May 1991.

142. Australian exports of skimmed milk powder/buttermilk powder for the 1989/90 season were up by 30 per cent on 1988/89 to reach 96.7 thousand tons. The emergence of Mexico as a major buyer saw skimmed milk powder exports increase by 28 per cent to 87.7 thousand tons. Exports of buttermilk powder increased by 84 per cent to 9 thousand tons during 1989/90. Exports of skimmed milk powder in the ten months to April 1991, rose by 37 per cent to 97.2 thousand tons compared to the preceding period in 1989/90, the major reason being increased exports to Asian destinations. However, buttermilk powder exports in that period were down by 11.8 per cent to 6.5 thousand tons.

SKIMMED MILK POWDER EXPORTS 1980-1990



143. Skimmed milk powder exports by Poland increased by 28 per cent in 1989 to some 60 thousand tons and remained relatively stable in 1990. 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 July 1991, Poland gave advance notification of its intention to conclude sales of a total of 15,447 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.

144. Exports of skimmed milk powder by South Africa amounted to 7 thousand tons in 1990, while they were nil in 1989. Since the beginning of 1990, South Africa had experienced a situation of moderate over-supply of milk

together with a decline in the total consumption of dairy products which resulted in the building-up of surpluses of skimmed milk powder and butter. Therefore, South Africa would have to export certain quantities of skimmed milk powder and butter in 1991. In April and June 1991, South Africa gave advance notification of its intention to conclude sales to Japan of skimmed milk powder for animal feed under derogation. The quantities involved totalled 5,870 tons with deliveries scheduled from April to December 1991.

145. In 1989, all United States skimmed milk powder exports were through commercial channels. At 170 thousand tons, they were 22 per cent down on 1988 and well below those of 1985-87, when the Commodity Credit Corporation had exported large quantities of surplus skimmed milk powder through donations and direct export sales. A further substantial drop in United States skimmed milk powder exports was registered in 1990 when sales amounted to only 10 thousand tons. Commercial use of cheese and liquid milk kept domestic supplies of skimmed solids fairly tight, and powder manufacturers did not over-commit to the export market for a second year. Moreover, domestic demand for protein-rich products increased. The forecast for skimmed milk powder exports in 1991 was for a substantial increase from 10 thousand tons in 1990 to 100 thousand tons due to the implementation of the Dairy Export Incentive Program. These exports would come from public stocks. In Canada, a sharp decline was registered and exports of skimmed milk powder amounted to only 32 thousand tons for 1989. In 1990, exports remained relatively stable but in the 1990/91 dairy year, exports might decline again because of reduced supply.

146. On the import side, purchases by Japan in 1989 at 99 thousand tons were 24 per cent lower than in 1988. This decrease was mainly due to a decline in imports for animal feed purposes which was caused by higher international market prices. Imports declined further in 1990 to 81 thousand tons as domestic production increased. However, imports might recover in 1991.

147. Import demand, mainly for recombination purposes in some developing countries, remained strong. Mexico had 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. The United States remained the main commercial supplier in 1989. It was also reported that Mexican plans to achieve self-sufficiency in fluid milk production would not be reached soon, and it was estimated that skimmed milk powder imports had increased to 288 thousand tons in 1990. However, the outlook for 1991 was for a 35 per cent decline in imports to some 190 thousand tons, Mexico still remaining the largest importer of skimmed milk powder. Brazilian imports recovered in 1989, amounting to 48 thousand tons. For 1990, imports declined to 20 thousand tons due to a general decline in demand for dairy products in conjunction with the government's new economic programme. Imports were expected to remain stable in 1991.

Food aid

148. Food-aid deliveries of dairy products consisted mainly of skimmed milk powder and anhydrous milk fat. The decline in surpluses was affecting 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 1989 and 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 1989 and 1990. Two aspects were contributing to this situation; shorter supplies and increased market prices; so, 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 had been the result of lower supply. As uncommitted stocks had remained at minimal levels since August 1988, no foreign donations could be made in 1989 nor in 1990. However, foreign donations might resume in 1991 due to increased public stocks.

149. 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 in relation to 84 thousand tons delivered 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 respectively 3,300 tons and 2,000 tons of skimmed milk powder.

Stocks

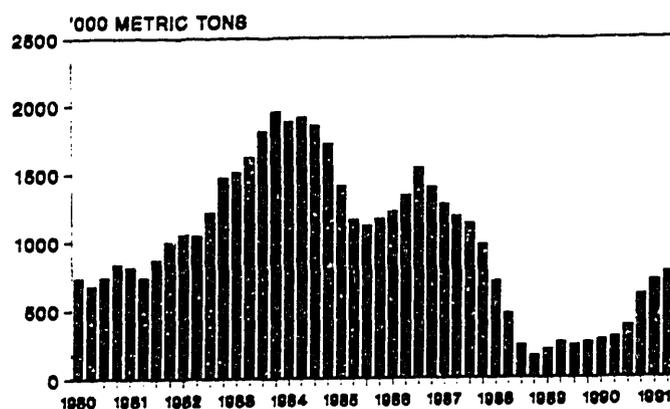
150. Total stocks of skimmed milk powder in the European Communities, North America and Oceania of approximately 164 thousand tons on 1 January 1990, were up by 29 per cent from one year earlier, but compared to the 1981-1983 average level still very low. Throughout 1990, stocks increased notably in the European Communities, and aggregate skimmed milk powder stocks for the three major producing areas on 1 January 1991 amounted to 475 thousand tons, which was nevertheless only half the average level in 1981-83. Despite efforts by major producers to slow accumulation and dispose of surplus stocks, world ending stocks in 1991 were expected to increase by 6 per cent to 955 thousand tons.

TABLE 5

Share of Food Aid in Total Exports for Selected Countries

	Total exports			Food aid			Food aid/ Total exports		
	1988	1989	1990	1988	1989	1990	1988	1989	1990
	Metric tons						Per cent		
				<u>Skimmed Milk Powder</u>					
Australia	62,100	69,900	93,700	-	2,200	500	-		
EC	614,000	425,000	356,000	113,000	84,000	68,000	18.4	19.8	19.1
Switzerland	2,100	1,100	7,300	1,300	1,100	1,200	61.9	100.0	16.4
United States	218,600	170,000	10,000	74,100	-	-	33.9	-	-
TOTAL	897,800	635,000	467,000	188,400	87,300	69,700	21.3	13.9	14.9
				<u>Whole Milk Powder</u>					
Australia	47,000	47,000	42,900	66	-	-	0.1	-	-
Switzerland	1,900	2,200	2,500	1,500	1,600	1,500	78.9	72.7	60.0
TOTAL	48,900	49,200	45,400	1,566	1,600	1,500	3.2	3.3	3.3
				<u>Anhydrous Milk Fat</u>					
EC	170,000	98,000	81,000	33,000	15,000	9,000	19.4	14.6	11.1

SMP STOCKS 1980-1991 IDA PARTICIPANTS *



* Includes Austria, Canada and the US

151. Community public stocks of skimmed milk powder which had remained negligible throughout 1989, increased to 347 thousand tons at the end of 1990, as 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. In the absence of permanent intervention purchases, the Commission was required to initiate private storage aid. The Commission 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, public stocks of skimmed milk powder continued to grow and were, end June 1991, at 480 thousand tons compared to some 100 thousand tons a year earlier.

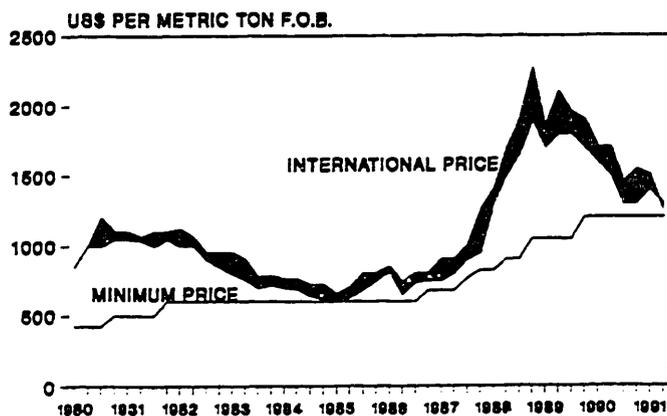
152. In Oceania, stocks remained at normal levels throughout 1990 and in early 1991. Surplus skimmed milk powder stocks in the United States had been totally eliminated in 1989. However, during September 1990, government purchases of skimmed milk powder amounted to some 8 thousand tons, marking the first 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 in relation to 22 thousand tons in 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. Stocks might continue to swell throughout the year of 1991.

International prices

153. Progressive reduction of subsidized use schemes for skimmed milk powder and lower casein production, resulted a further weakening of skimmed milk powder prices in 1990, with fluctuations between US\$1,500 and US\$1,700 per ton f.o.b. during the first half of the year, and between US\$1,300 and US\$1,450 per ton f.o.b. in the third quarter with certain sales reportedly having been made at prices below the range indicated. At its September 1990 review, the Committee of the Protocol Regarding Certain Milk Powders maintained the minimum export prices at US\$1,200 per ton f.o.b. for both skimmed milk powder and buttermilk powder. The market situation improved in the fourth quarter and prices increased to the range of US\$1,300-US\$1,540 per ton f.o.b. Prices of milk powders on the international markets continued to increase in the first quarter of 1991 to the range of US\$1,400-US\$1,500 per ton f.o.b. as many oil producing countries (which have enjoyed considerable increases in available income recently) and large dairy importers, such as Algeria and Venezuela, increased their purchases. Moreover, the strengthening of skimmed milk powder prices was also due to the almost complete disappearance of cheap East European product from the market. In the second quarter of 1991, requirements of milk powder markets remained basically unchanged although some increase in stocks of skimmed milk powder could be observed. International prices of skimmed milk powder were eroded due mainly to the 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.

SKIMMED MILK POWDER PRICES 1980-1991



Whole Milk Powder

Production

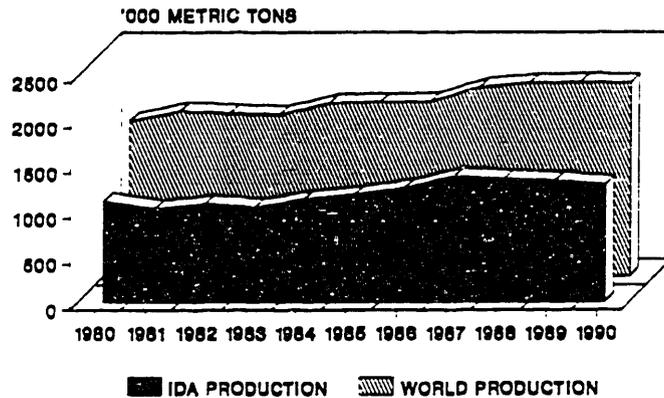
154. Production of whole milk powder was directly linked to developments on the international market. In 1990, production of whole milk powder again declined by 1.5 per cent to 2.13 million tons, due to strong declines in Community and Australian production not being offset by a recovery in New Zealand's output.

155. Community output declined in 1990 by 8.7 per cent to 804 thousand tons. In New Zealand, production for export decreased to 170 thousand tons in 1989/90 compared to 195 thousand tons in the previous season. This substantial reduction in production reflected the lack of business in key markets, notably the USSR, Venezuela and Sri Lanka. In 1990/91, production recovered from the low level of the previous season. In the calendar year 1990, production increased by 37.5 per cent to 208 thousand tons. In Australia, output declined by 18 per cent to 56 thousand tons in 1989/90. In the calendar year 1990, production declined by 26.5 per cent to 49.4 thousand tons. However, production for 1990/91 was forecast to remain stable. The reduced output reflected the lower return for whole milk powder relative to butter/skimmed milk powder on international markets and producers shift to butter/skimmed milk powder because of increased storage potential. However, since January 1991, the larger than anticipated export demand had stimulated production.

156. In Argentina, output decreased by 12.5 per cent to 86 thousand tons in 1990. Production in Finland, at only 11 thousand tons in 1989, declined for the second consecutive year but recovered in 1990 and amounted to 22 thousand tons. However, in 1991, production was estimated to decline to 13 thousand tons, all of which would be exported. In Poland, manufacture of whole milk powder remained relatively stable in 1989 at around 50 thousand tons and registered a decline in 1990 in line with the decrease in milk output.

157. United States production increased by 5 per cent to 81 thousand tons in 1989 and remained stable in 1990. In Austria, output remained unchanged at 11 thousand tons in 1989 and 1990.

WHOLE MILK POWDER PRODUCTION 1980-1990



Trade

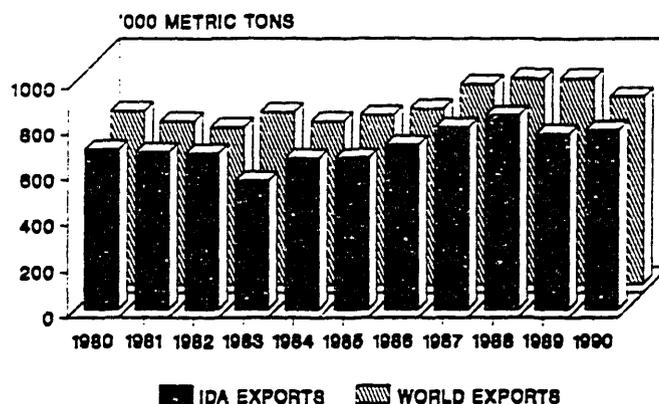
158. Whole milk powder exports which had continued their upward trend in 1988, declined to 880 thousand tons in 1989 and again in 1990 to some 820 thousand tons.

159. Community exports decreased by 4 per cent to 568 thousand tons, accounting for some 65 per cent of the world exports in 1989. A further decrease was registered for 1990 when exports amounted to some 502 thousand tons, representing 60 per cent of world exports. The Community intended to provide 50 thousand tons of whole milk powder to the USSR as part of an urgent action to supply that country with agricultural products in conformity with a decision taken in March 1991.

160. Exports from New Zealand, the world's second largest exporter, declined in 1989 and were close to 133 thousand tons. The main outlets were in South and East Asia and in South America. Exports recovered in 1990 and amounted to 191 thousand tons. Australian exports in 1988/89 at 48.4 thousand tons were marginally down as compared to the previous season and fell by 11.8 per cent to 42.7 thousand tons in 1989/90. However, exports in the ten months to end April 1991 rose by 8 per cent to 35.8 thousand tons due to strong demand. Exports from Finland, exclusively to the USSR, declined again substantially by 66 per cent to 5.5 thousand in 1989 but a substantial recovery was registered in 1990 when they increased to 24 thousand tons. Exports by Argentina almost doubled in 1989 and reached 25 thousand tons, the main destinations being the USSR and Chile. However, sales by Argentina declined in 1990 to 15 thousand tons, the main destinations being Brazil and Peru.

161. Whole milk powder purchases by developing countries reached 650 thousand tons in 1989, decreasing by 1 per cent from 1988. Rising prices and growing foreign exchange difficulties of many importing countries discouraged a continued increase in purchases. Much of the powder imported into developing countries was for welfare programmes and budgetary restraints prevented increases in purchases to be made. Import demand remained stable in 1990, and did not show signs of becoming more active in spite of lower prices. However, towards the end of the year the market situation improved and continued to improve in 1991. As an example can be mentioned that the Republic of Korea raised import quotas for milk powder from 8,000 tons to 14,000 tons in 1991, in order to stabilize retail prices.

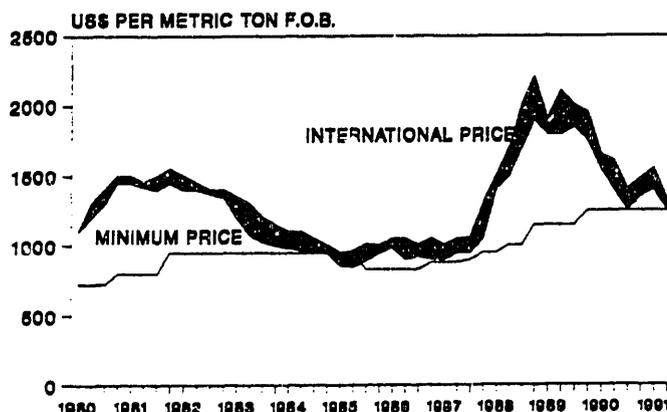
WHOLE MILK POWDER EXPORTS 1980-1990



International prices

162. In early 1989, the rise in international prices of whole milk powder levelled off and settled at around the same level as for skimmed milk powder of about US\$1,800 to US\$2,100 per ton f.o.b. for the period January-June. Later in the year prices started to fall, fluctuating between US\$1,750 and US\$1,950 per ton f.o.b., and fell further in 1990, ranging between US\$1,400 and US\$1,650 per ton f.o.b. in the first half of the year and between US\$1,250 and US\$1,400 per ton f.o.b. in the third quarter. 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 mainly to the continued strengthening of the United States dollar, fluctuating between US\$1,250 and US\$1,330 per ton f.o.b. At its September 1990 review, 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

163. 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. However, towards the end of 1989, demand was weaker as a result of the strong increases in prices. World production of whey powder was estimated to have 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.

164. Community production of whey powder increased by about 4.7 per cent in 1989 compared to 1988, and reached 894 thousand tons accounting for 60 per cent of world production. A further increase of some 10 per cent was estimated for 1990. 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 quarter of 1991, production was lower than in previous years both in Western Europe and North America.

165. In 1990, the European Communities imported 55 thousand tons and exported 37 thousand tons of whey, mainly in connection with forward processing. However, the EC decided to discontinue the forward processing arrangements for most dairy products, including whey powder, effective 28 February 1991. As a result of this measure, imports and exports might decline in 1991.

166. The market for whey powder showed fluctuations in 1989 and 1990 and appeared to be market driven. In November 1989, prices in the United States rose close to US\$600 per ton, i.e. the same as in the peak of July 1988. However, prices in Europe at the end of 1989 were at around US\$500 per ton. 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 in early 1991 there was a tendency for prices to strengthen. In May 1991, prices remained at around US\$320 per ton in the United States. However, prices in Europe in May 1991 were as much as 80 per cent higher than a year earlier but expressed in dollar terms they were at only US\$500 per ton due to the continued strengthening of the United States dollar.

Concentrated milk

167. 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 4.79 thousand tons in 1990, remained almost unchanged 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 slight recovery of 1 per cent was observed for the first quarter of 1991. In 1990, production recovered in the United States to 264 thousand tons, an increase by 15 per cent over 1989. Output continued to fall in Canada amounting to 60 thousand tons compared to 74 thousand tons in 1989. Australian production of condensed milk showed a substantial increase in 1989/90. 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.

168. After having reached a peak of nearly 1 million tons in 1985, world trade in condensed milk declined rapidly to half of that level in 1990, or some 500 thousand tons, and the decline continued. Community exports fell in 1990 by 22 per cent to 349 thousand tons. Canadian exports declined in 1989 and a further decrease was registered in 1990.

169. From January to March 1990, wholesale prices in the Netherlands were raised to f. 3,400 per ton, 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. From January to May 1991, wholesale prices in the Netherlands were raised to f. 3,460 per ton. In dollar terms, however, the price decreased to US\$1,700 per ton in May 1991.

Casein

170. 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. World casein production declined further in 1991 probably reaching only 210 thousand tons. In the

first quarter of 1991, Community casein production fell by 20 per cent and that of Australia by more than 40 per cent compared to the corresponding period in 1990.

171. Community casein production was only possible thanks to aid. Encouraged by world prices, it rose steadily between 1984 and 1988 from 123 thousand tons to 181 thousand tons. However, following a drop in the amount of aid and greater end-use control, it fell back by 15 per cent in 1989 to 154 thousand tons and 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. These steps taken in the Community resulted in increased supplies for the whole year in 1991, with a production forecast at about 106 thousand tons, an increase by 2 per cent over 1990.

172. New Zealand production of casein registered a significant reduction in 1988/89 by 17 per cent to 55 thousand tons but recovered by 16.4 per cent in 1989/90, to 64 thousand tons as more milk was available for casein production. For 1990/91, little change was expected in casein production. Polish production of casein increased by 10 per cent to 22 thousand tons in 1989 and continued to develop in 1990.

173. 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 1991, 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 70 per cent to 27 thousand tons in 1990. United States casein imports declined by 12 per cent to 72 thousand tons reflecting continued strength in casein import prices. However, the United States, the world's leading casein importer, was expected to experience significant gains in imports in 1991, which could reach 90 thousand tons, a 25 per cent gain from the previous year.

174. In 1990, casein markets were undergoing major adjustments, not least due to a certain reordering of the Community market for skimmed milk and powder. Persisting uncertainties as to the availability of low priced casein of variable grade in the near future was also a problem. Moreover, East European sales of casein affected the market in 1990 but towards the end of the year excess stocks of casein tended to disappear. The casein 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, edible casein prices in the United States were around US\$3,735 a ton, down by 25 per cent from December 1989. Early in 1991, there was still some downward pressure on prices of casein in the United States, and at around US\$3,500 a ton in May 1991, prices were again 20 per cent lower than in May 1990.