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INTERNATIONAL DAIRY PRODUCTS COUNCIL

Status Report on the World Market for Dairy Products

Note by the Secretariat

Explanatory note

The present note has been prepared by the secretariat in accordance with Article IV:1 of the Arrangement and Rule 29 of the Rules of Procedure, and with the aim of facilitating the work of the Council and the Committees at their meetings in March 1989.

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 (world totals), the IDF, the UN/Economic Commission for Europe, the OECD, the Commonwealth Secretariat, 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 up to and including 1988, and the outlook for 1989. The note should be read in conjunction with the statistical information circulated in the following documents:

- DPC/W/85 - Milk Deliveries and Production - Statistical Note by the Secretariat
- DPC/PTL/W/1 - Committee of the Protocol Regarding Milk Fat - Summary Tables
- DPC/PTL/W/2 - Committee of the Protocol Regarding Certain Cheeses - Summary Tables
- DPC/PTL/W/3 - 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 10 February 1989.

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
Skimmed milk powder	425	500	600	600	680	765	825	900	1,050
Whole milk powder	725	800	950	830	880	900	950	1,000	1,150
Buttermilk powder	425	500	600	600	680	765	825	900	1,050
Anhydrous milk fat	1,100	1,200	1,440	1,200	1,200	1,200	1,200	1,325	1,500
Butter	925	1,000	1,200	1,000	1,000	1,000	1,000	1,100	1,250
Certain cheeses	800	900	1,000	1,000	1,030	1,030	1,120	1,200	1,350

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 21 September 1988. Minimum export prices must not be considered as market prices, but merely the floor price levels which the participants have agreed to observe.

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Overview of the Situation

Some points regarding the economic situation in general

1. The volume of world merchandise trade continued to grow in 1988 at an annual rate of 8.5 per cent, marking the fourth consecutive year of accelerating trade growth. An estimated 14 per cent increase over the preceding year brought the value of world merchandise exports to a new record high of US\$2,840 billion in 1988. The most important factor behind the increase was the estimated 8.5 per cent growth in world merchandise trade noted above. Inflation throughout the world economy, though moderate on average in 1988, also contributed to the value increase, as did the automatic increase in trade value due to the valuation effects of a further small depreciation of the dollar. Two outstanding features characterized world merchandise trade in 1988. One was its dynamism, which exceeded even the most optimistic forecasts. The other was the broadly based nature of the trade expansion. Strong business investment, particularly in the industrial countries, was a driving force behind the acceleration of output and trade growth in 1988.

2. While the developed countries as well as the developing economies and the Eastern trading area participated in the expansion of the dollar value of world merchandise imports and exports in 1988, imports into developing economies showed the fastest growth. With regard to the growth in the volume, a strong element in the current expansion was the balanced pattern of world trade growth among countries, the 1988 expansion being boosted by accelerated import demand in a broad cross section of countries, including both developed and developing economies.

3. In 1988, the 8.5 per cent increase in the volume of world trade was led by rapidly growing exports of manufactures (+ 10 per cent). Export volumes of agricultural and mining products expanded more slowly than total trade, i.e. by 4 per cent and 7 per cent respectively. The estimated 4 per cent increase in world trade volume of agricultural products in 1988 coincided with a decline by 2 per cent of world output in agricultural products. Last year's decline in output resulted from a variety of factors, including the drought in the United States, floods in Southeast Asia, and unexpectedly low harvests in the USSR. These factors dominated large increases in agricultural output in other countries such as India. World market dollar prices for food increased 20 per cent, with the drought in the United States having been a major factor, particularly for grains. Price of dairy products also strengthened throughout the year. However, not all food items participated in the price increase. For example, a large increase in output resulted in a sharp drop in the dollar price of cocoa, and the dollar prices for robusta coffee and pepper also declined.

4. There was only little change in the employment situation in 1987 and 1988. At present, inflation is a serious problem for a number of developing economies, including some of the most heavily indebted countries. For the OECD area as a whole, the 1988 rate of inflation was estimated to have been 3.75 per cent, up from the 3.25 per cent increase recorded in 1987. In recent months, inflation has continued to pick up in a number of developed countries, and for 1989, expectations were at a rate of 4 per cent for the OECD area as a whole.

World dairy situation

Highlights

5. - World milk production which had declined by 0.8 per cent from 1986 to 1987, recovered in 1988 reaching almost its level of 1986. A further decline in milk deliveries in the Community and other European countries was more than outweighed by an increase in New Zealand milk production and that of the United States and Canada and of a further expansion in the USSR.
- The immediate result of reduced milk deliveries in 1987 was a spectacular reduction in intervention stocks of butter and skimmed milk powder, notably in the European Communities and the United States. At the end of 1988, the surplus stocks of dairy products which had depressed the market for years, had been entirely disposed of.
 - There was an appreciable recovery in international trade in cheese and milk powders in 1987, and the trade, notably of cheese and whole milk powder, grew further in 1988, with prices continuing to firm up. In 1988, whole milk powder became the most important dairy product in international trade, in volume terms.
 - A recovery in butter trade in 1987 and 1988 was largely due to special sales of old butter or butter oil at extremely low prices. Prices for fresh butter were firming and continued to do so in 1988/89. However, international trade in butter was expected to decline in 1989.
 - Reduced butter production entailed a significant reduction in supplies of skimmed milk powder but exports were partly maintained by lowering stocks and reducing the use for feed. Some developing countries nevertheless experienced difficulties in covering their import requirements of skimmed milk powder in 1988 and apparently sought to cover some of their needs through greater imports of whole milk powder. The world market prices for skimmed milk powder nearly doubled over the year 1988, and were at the end of the year more than three times their level in 1985.
 - Cheese production continued its upwards trend in 1987 and 1988, absorbing nearly one quarter of world milk supplies. Developments were favoured by a persisting good demand for cheese. Increased cheese production entailed substantial supplies of whey and the efforts made to develop the market resulted in a good demand for whey as an ingredient in beverages and other foodstuffs.
 - Food aid in terms of dairy products was adversely affected by the decline in available supplies and remained low in 1988.

Dairy policies

6. Although a substantially improved market situation might have led political authorities to be inclined to a relaxation of policies aiming at containing milk production, they have remarkably resisted any temptation to do so. Obviously, the costs and difficulties entailed by the accumulation of surpluses early in the eighties have been a lesson. There did not seem to be any further tightening of measures, but the wide range of measures applied in several countries to control milk production was maintained in 1988 and in the early part of 1989. Various measures applied in order to encourage improvements in product quality and to adapt the product range to prevalent trends, were continued. Concerns related to the quality, notably that dairy products must be safe, have developed rapidly and efforts to prevent contamination accidents have been increasingly stepped up.

7. Various measures related to milk prices remained important elements in dairy policies in 1988. 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 increased moderately, merely compensating for increased costs. 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.

8. Efforts were also continued in many countries to encourage or facilitate structural changes in the dairy industry. The policy objectives concerning the size and structure of the industry might differ from one country to another. 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.

9. It remained, however, the stated aim of dairy policies in some countries to increase the degree of self-sufficiency of milk and dairy products. This was for instance the case of the USSR. In line with general aims of improving nutritional standards and diversifying agriculture in developing countries, high priorities continued to be given to production, marketing and consumption of milk and dairy products in agricultural and development plans. 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.

Milk and dairy production

10. World milk production recovered in 1988 after having been low in the preceding year. It amounted to 522 million tons (including sheep, goat and buffalo milk), 1 per cent up on 1987, and almost regaining its level of 1986. The recovery was in particular significant in New Zealand, some Asian countries and in North America. In the USSR, milk production

continued its upward trend of recent years. Following continued efforts to contain milk production in the European Communities, a further decline was observed for that area. There were only minor changes in milk production in other countries in Europe, and in Africa and Latin America.

11. Early in 1989, the outlook was for a further increase in world milk production at a rate comparable to that of 1988 due to improved dairy practices, genetic developments and increased 1988 prices. There should be a further, but only slight, decrease in Community production in 1989. Milk production was expected to show only minor changes for other European countries and for countries in Africa and Latin-America. Efforts were being made in Chile and Mexico to increase milk production, but any gain might be offset by adverse effects of tight feed supplies and high feed costs in Argentina and Brazil. Also for Oceania, milk supplies were expected to show only little change from 1988 to 1989, as a recovery in Australia might be outweighed by a bad 1988/89 season in New Zealand.

12. In the United States, milk production was expected to be adversely affected by limited feed supplies and higher feed costs. The increase in productivity remained strong and the United States milk output for 1989 would most likely be the same as in 1988. Productivity was again increasing also in Canada, and for North America as a whole, milk production was expected to increase moderately in 1989. Considerable uncertainty was attached to projections beyond 1989, notably for the United States, where the use of bovine somatotropin had been approved by the United States Food and Drugs Administration and would be available in the commerce in 1989. This could together with scientific progress and improved breeding and production management, boost productivity in milk production over the next five-year period.

13. The main reasons for an expected increase in world milk production in 1989, were an expected further increase of 2 per cent in the USSR, 6 per cent increase in India and substantial increases in some other developing countries in Asia.

14. World butter production again decreased in 1988 reaching 7.2 million tons, falling below the average level for 1981-83. A 14 per cent decline in the European Communities was the main reason for this, but there were significant reductions in butter production in other European countries, Japan and Australia as well. Among participants in the International Dairy Arrangement, only New Zealand and Romania increased their butter production from 1987 to 1988. In both cases production had been relatively low in 1987. In North America, India and the USSR, butter production expanded significantly from 1987 to 1988. While little change or a further decline in the butter production of participants in the Arrangement was expected for 1989, further increases were expected in North America, India and the USSR and world butter production might increase slightly in the current year. Uncertainty was linked to how demand for low-fat milk might develop as this might easily lead to increased supplies of milk fat allocated to the production of butter.

15. World cheese production continued its upward trend in 1988, totalling 15 million tons. 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. World cheese production was expected to expand further in 1989.

16. World skimmed milk powder production fell by 8 per cent in 1988, mainly as a result of reduced butter production and consequently less skimmed milk becoming available for drying. At 3.8 million tons, it was in 1988, 18 per cent below the average for 1981-83. It was, however, expected to remain at that level in 1989. Tighter supplies of skimmed milk powder stimulated production of whey powder notably in the European Communities and the United States, in 1988.

17. World production of whole milk powder continued to expand in 1988, reaching 2.18 million tons, about 4 per cent more than in 1987. Production increased in all regions, but most strongly in the European Communities, where the increase was of the order of 10 per cent. World production of whole milk powder expanded further in 1989, not least because import demand for milk powder tended to remain strong, giving a significant incentive to expand production.

18. Condensed and evaporated milk appeared to be increasingly replaced by whole milk powder in the market, and world production had declined over recent years. For 1988, a recovery was reported for the European Communities and North America and there was a further growth in USSR production. A persisting good demand in international markets might constitute an incentive to maintain production in 1989.

19. World casein production reached a level of only 224 thousand tons in 1988, 2 per cent down on 1987, in spite of some recovery in New Zealand production. A strong decline of 8 to 10 per cent was expected for 1989, mainly due to strong reductions in Community and New Zealand output.

Consumption

20. World consumption of milk and fresh milk products increased at an annual rate of about 1 per cent over recent years. For a number of countries, consumption of fresh milk followed variations in supplies of milk. In per capita terms it remained stable at about 46 kgs. with a wide difference between developed and developing countries. While milk consumption in North America, Oceania, Europe and the USSR was 2 to 3 times the average, it was only a fraction of the average in Africa, Asia and South America. In 1988 and early 1989, there were signs that demand for fresh milk products, notably low-fat products, was increasing.

21. World consumption of milk and fresh milk products increased by one half to 1 per cent from 1987 to 1988. Lively demand for these products was reported for several areas, and world consumption might in 1989 increase by more than 1 per cent, with increases in China, India and some North African countries exceeding 5 per cent.

22. Butter consumption showed very little change on average. World per capita consumption of butter has been steady at 2.7-2.8 kgs. over the past ten years. The trend remained unaffected by an increasing substitution of blended spreads of butter and vegetable oil. However, in 1988, world consumption declined by 1.5 per cent and for 1989 the decline was forecast to 2 per cent.

23. The upward trend in cheese consumption continued in 1988, with further advances in all countries for which information was available. However, in most countries the increases in specialty cheeses were significantly above the rate of growth for traditional cheeses. World per capita cheese consumption has been increasing at an average annual rate of 2 per cent since the early eighties, and may continue to increase at that rate. 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, and the increase in consumption seemed to be strongest in these high level consumption countries. The general upward trend was maintained in early 1989.

24. In 1988, world consumption of skimmed milk powder fell, reflecting lower supplies and rising prices. Reduced supplies of skimmed milk powder were progressively replaced by whole milk powder notably for food. Consumption of whole milk powder increased strongly in 1988 and was developing further in 1989.

Trade

25. World exports of butter totalled 1 million tons in 1988, an all time record level. A major part of this consisted however of special transactions at very low prices while the world market for normal commercial transactions will most likely be at a level of 650 thousand tons in 1989.

26. World exports of cheese expanded further in 1988, reaching 850 thousand tons. This was due to higher imports into the United States and Japan and stronger import demand by OPEC countries and other developing countries such as Brazil. The general expansionary tendencies observed in the market for 1988 continued during 1989.

27. World exports of skimmed milk powder fell sharply in 1988 and were almost down to 1 million tons, slightly above their average level in 1981-83. Exports might be further reduced to around 800 thousand tons in 1989, and some developing importing countries would continue to face problems in covering their import requirements.

28. The upward trend in whole milk powder exports was confirmed in 1988, when world exports totalled 975 thousand tons. A further expansion was expected in 1989, with exports forecast to exceed 1 million tons, and whole milk powder would in terms of volume be the most important dairy product in international trade. The European Communities covered more than 60 per cent of the world market and New Zealand some 17 per cent. Other major suppliers to the world market were Australia and Finland. These four exporters covered nearly 86 per cent of the world market in 1988.

29. Reduced skimmed milk powder supplies resulted in a stronger demand for whey in 1988, but statistics were not available allowing an assessment of the situation. It was however anticipated that trade in whey products would expand. A stronger demand for concentrated milk provided an incentive to increase production for export in 1988, and exports recovered, attaining their level of 1986. Casein trade continued to decrease in 1988 and was down to nearly 140 thousand tons, its level five years earlier. World exports were expected to remain at that level in 1989, although imports into the United States might be further reduced.

Food aid

30. 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 1988, and was expected to be low also in 1989. The increase in prices would at the same time aggravate expenses and make the financing of food aid in dairy products more difficult.

Stocks

31. Reduced milk supplies and larger exports of dairy products had rather drastic impact on stocks notably of butter and skimmed milk powder in 1988. Butter stocks in the European Communities, North America and Oceania, were in October 1988, less than half their level one year earlier, and skimmed milk powder stocks, were at the same time, down to one tenth of their level in 1987. While there could be some replenishment of butter stocks in 1989, stocks of skimmed milk powder would most likely remain low.

International prices

32. The market for butter and anhydrous milk fat improved in 1988 and prices for fresh butter in the fourth quarter of 1988 were between US\$1,600 and US\$1,880 per ton f.o.b. and those of anhydrous milk fat ranged between US\$1,900 and US\$2,100 per ton f.o.b. The Committee of the Protocol Regarding Milk Fat raised the minimum export price for butter from US\$1,000 to US\$1,100 per ton f.o.b. with effect from 23 March 1988 and again to US\$1,250 per ton f.o.b. with effect from 21 September 1988. Simultaneously, minimum export prices for anhydrous milk fat were increased first from US\$1,200 to US\$1,350 and later to US\$1,500 per ton f.o.b. Reduced supplies and lower carry-over stocks resulted in a further improvement in prices, notably for fresh butter in 1988/89.

33. Cheese prices increased throughout 1988 and early in 1989. In October-December 1988, quotations for Cheddar were in the range of US\$2,000 to US\$2,400 per ton f.o.b., thus remaining well above the agreed minimum export prices. The Committee of the Protocol Regarding Certain Cheeses raised the minimum export price for certain cheeses from US\$1,120 to US\$1,200 per ton f.o.b. with effect from 23 March 1988 and again to US\$1,350 per ton f.o.b. with effect from 21 September 1988. Quotations for most types of cheese remained firm in 1988 reflecting a persisting strong import demand for cheese.

34. International prices for milk powders showed steady improvement throughout 1988. Quotations remained well above the agreed minima and no sales, even of powder for feed purposes, were reported to have been made at prices below the agreed minima. The Committee of the Protocol Regarding Certain Powders raised the minimum export prices for skimmed milk powder and buttermilk powder from US\$825 to US\$900 per ton f.o.b. with effect from 23 March 1988 and again to US\$1,050 per ton f.o.b. with effect from 21 September 1988. Simultaneously, minimum export prices for whole milk powder were increased first from US\$950 to US\$1,000 and later to US\$1,150 per ton f.o.b. During the fourth quarter of 1988, prices of skimmed milk powder and buttermilk powder, ranged between US\$1,900 and US\$2,270 per ton f.o.b. and those of whole milk powder fluctuated between US\$1,900 and US\$2,200 per ton f.o.b. The market reflected the effects of the tightening supply situation and was expected to remain firm in 1989.

35. The prices for other dairy products were also in general increasing. Prices for condensed milk were raised in 1988. Whey powder prices firmed throughout the year, notably in Europe, but remained subject to seasonal fluctuations. A persisting tight supply situation for casein entailed a continuous price hike throughout 1988, with prices around US\$5,600 per ton in December 1988, almost the double of the price recorded one year earlier.

36. The major factors leading to the improvements in the dairy market were reduced supply pressures, reduced export subsidies, the decline in the value of the US dollar, the general rise in commodity prices and increased demand mainly by the improved economic and trading prospects of many of the developing countries who account for most of the dairy imports. Dairy products were in general selling well in all the major markets at the beginning of 1989.

TABLE 2
International Prices (1986-1987-1988)

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

Product	1986	1987		1988			
	January-December	January-June	July-December	January-March	April-June	July-September	October-December
Skimmed milk powder	650-850	750-900	900-1,250	1,300-1,400	1,500-1,700	1,650-1,900	1,900-2,270
Whole milk powder	900-1,050	900-1,050	950-1,300	1,400-1,500	1,500-1,700	1,700-2,000	1,900-2,200
Anhydrous milk fat ^a	1,200	1,200	1,200-1,250	1,325	1,350-1,500	1,350-1,500	1,900-2,100
Butter ^a	1,000	1,000	1,000-1,200	1,100	1,100-1,300	1,200-1,600	1,600-1,880
Cheddar cheese ^b	1,050-1,380	1,050-1,200	1,150-1,400	1,600-1,800	1,400-1,800	1,800-2,400	2,000-2,400

^a In 1986, 1987 and 1988, a substantial quantity of old butter and anhydrous milk fat was sold at prices lower than the ranges indicated, by derogation under Article 7:1 of the Protocol Regarding Milk Fat.

^b Some sales of cheese below normal export quality made according to Article 7:2 of the Protocol Regarding Certain Cheeses were made at lower prices than the ranges indicate.

Developments in World Milk Production and
National Dairy Policies

37. Following some reduction in 1987, world milk production (including buffalo, sheep and goat milk) rose slightly (by about 1 per cent) to 522 million tons in 1988. A major policy-induced decline in the EC and further decreases in most of the remaining countries of Western Europe only partly offset growth in the United States, the USSR and Oceania. Favourable weather led to a recovery in milk production in India and other countries in Southern Asia. Rapid expansion continued in China but growth slowed in the Near East. Some rise also occurred in Africa and in Latin America. Milk production stagnated in Eastern Europe, largely due to tight feed supplies.

38. Forecasts for 1989 suggested an increase by a further 1 per cent in world production of milk. Milk deliveries were expected to be further reduced in the European Communities and to remain more or less unchanged in other countries of Western Europe and in Japan. Milk production for the United States could be about the same level in 1989 and not increase again due in part to the 1988 summer drought and rising feed prices. Milk production was expected to continue to expand in Oceania, although it was down in New Zealand for the 1988/89 season, the USSR and in a number of developing countries, notably India, which might offset the decline in the Community's milk deliveries.

39. Milk deliveries in the EC (including Spain and Portugal), totalled 98.2 million tons in 1988, some 3.5 per cent below the level of last year, partly a result of a fall of 4.5 per cent in the overall dairy cow numbers. A further reduction of 1 per cent in the overall milk deliveries was forecast for 1989 due to the implementation of policy measures aimed at reducing milk quotas and the projected further fall of 2 to 3 per cent in the overall dairy cow numbers.

40. The European Council, in February 1988, took the following decisions as regards the milk sector. The quota system was prolonged for another three years until March 1992. The limitations to the intervention system for butter and skimmed milk powder were also extended for the same period. The suspension of 5.5 per cent of reference quantities shall remain in place, with the following payments made to producers: ECU 10 per 100 kgs. for 1988/89, ECU 8 for 1989/90, ECU 7 for 1990/91 and ECU 6 for 1991/92.

41. The 1988/89 farm price package, adopted in July 1988, left the target price for milk unchanged at ECU 27.84/100 kgs. No change was made in the intervention prices applicable to butter, skimmed milk powder and cheese. The price ratio between fats and solids non-fat thus remained at 48.2/51.8. The co-responsibility levy was maintained at 2 per cent of the target price. The additional levy payable by producers on purchases of cows' milk on quantities exceeding quotas was set at 100 per cent of the target price for milk.

42. Following the Council decision to retain the milk quota system until 1992, milk deliveries were expected to stabilize at about 97 million tons from 1989 onwards, i.e. a volume to about 14 million tons below the

notional level for 1992 derived from the extrapolation of the trends before the introduction of the quotas in 1984.

43. In Finland, milk deliveries in 1988 were 5.3 per cent lower at 2.61 million tons due to a drop in the average milk yield and to a decrease in the number of dairy farms following the dairy cessation scheme implemented in the spring of 1988. Little or no change was expected in milk deliveries in 1989. No change was contemplated to the basic quota system introduced in 1985, which did not permit transfers between farmers. However, the dairy cessation scheme implemented in 1988 might create a margin for some flexibility.

44. Norwegian deliveries (including goat milk) decreased by 3.1 per cent in 1988 to 1.88 million tons, mainly as a result of the tightening of the quota system. Milk deliveries were expected to remain unchanged in 1989. The forecast for the medium term was for yields to increase further and for dairy cow numbers to decline.

45. Milk deliveries in Sweden were 0.5 per cent lower to 3.37 million tons in 1987 compared to their level in 1986, mainly as a result of the two-price system introduced on a three-year trial basis for the period July 1985 to June 1988. However, milk production was estimated to have increased slightly in 1988. While productivity showed some increase, the number of cows declined by 2.8 per cent from June 1987 to June 1988. With yields further increasing, dairy cow numbers were forecast to decline in the medium term. The two-price system was intended to discourage surplus production and its effects in practice had been stronger than was initially expected. Thus, milk production had decreased, reducing costs for surplus disposal and producers were paid a higher price for their milk. The two-price system would cease to be in force on 1 July 1989.

46. In Switzerland, the strict quota system reduced the deliveries of milk to about 2.98 million tons in 1987, showing a drop of 3.3 per cent over the previous year. Deliveries recovered slightly for the period November/October 1987/88, reaching 2.97 million tons, up 0.33 per cent on the previous twelve-months' period. However, for the calendar year 1988, deliveries were estimated to have decreased slightly. For 1989, little or no change was expected in milk deliveries. Dairy cow numbers were forecast to decline in the coming years with yields further increasing. Premiums were paid for non-marketing of milk and for processing of milk into cheese which had a relatively high price in the domestic and international markets. The basic price for milk was increased as from 1 February 1988 by 5 centimes to SwF 1.02/kg. Cheese and butter prices were consequently raised and import charges for cheese were raised by 50 to 60 centimes/kg. The basic 1977 law fixing the framework of Swiss dairy policy would expire in 1989 and proposals for a new law were being discussed.

47. In New Zealand, climatic variations had continued to have a major impact on milk production. Extremely favourable weather conditions in 1985/86 resulted in a record high production level of 349.4 million kgs. of milk fat, while dry conditions throughout the summer of 1986/87 entailed a reduction of 14 per cent and a production of only 301 million kgs. of milk fat. Milk production was in 1987/88 at around 334 million kgs. milk fat, or 11 per cent higher than in the previous season but 4.1 per cent lower

than the peak production level achieved in 1985/86. Cumulative production in the first six months of the New Zealand season starting on 1 June 1988, amounted to 146.4 million kgs. of milk fat, 3.4 per cent down on last season's comparable total. Consequently, milk production in the whole season 1988/89 would be lower than that of the previous season. For the medium term, it was forecast that cow numbers would remain steady, yields per cow would stabilize at 3,400 kgs. per year and milk production would remain stable averaging 7.5 million tons a year. The advance basic value for manufacturing milk for the 1988/89 season was set at NZ\$3.40 per kg. milk fat in May 1988. This compares with a final value of NZ\$3.60 per kg. in 1987/88, NZ\$3.20 per kg. in 1986/87 and NZ\$4.00 per kg. in 1985/86. Producer prices for milk were determined directly by export market realizations. Fundamentally, therefore 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 sharp variations because of the climatic conditions. Although there were no subsidies or other regulations which could be manipulated to control production, a number of steps had been taken in recent seasons to influence it by special measures including: a supply moratorium and a milk limitation scheme, applied in the 1986/87 season. In the 1987/88 season, a "butter realization differential" scheme had been introduced and was now 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.

48. In Australia, milk production in 1987/88 at 6.30 million tons was 1 per cent down on the 1986/87 level, largely due to dry autumn conditions in the major producing States of Victoria and Tasmania. Dairy cow numbers were expected to continue to decline, but production per cow was projected to increase through genetic and management improvements. Milk production in 1988 was slightly higher and reached the level of 6.47 million tons, an increase by 1.6 per cent on 1987. For the 1988/89 season, milk production was expected to reach 6.39 million tons, slightly above the 1987/88 level with a projected increase of 3 per cent in yield per cow expected to offset any fall in cow or farm numbers. The resumption of the increase, after stable production levels in 1984/85 and 1985/86, reflected improved seasonal conditions as well as increasing world market prices for dairy products and higher farmgate prices for milk. The dairy policy introduced for 1986/87 aimed at the development of a more efficient market-oriented dairy industry. The main provisions of the marketing arrangements introduced from 1 July 1986 were a Market Support Fund financed by a levy on all milk produced and a Supplementary Market Support Fund aimed at smoothing the transition from the previous arrangements to the new one. It was financed by levies on domestic sales of butter/butter oil and Cheddar type cheeses. The levy on cheese was being phased out in five equal six-monthly steps terminating on 1 July 1989. In May 1988, the accelerated phasing out of the levy on butter/butter oil was announced. The supplementary market support would consequently be reduced in 1988/89 and completely phased out from 1 July 1989.

TABLE 3

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

		Milk Production/ Deliveries (million tons)	Percentage change from previous year		
			Production/ Deliveries	Milk yield	Dairy cow numbers
EC-12	1987	(b) 101.4	- 5.1	- 1.1	- 6.0
	Preliminary 1988	(b) 98.2	- 3.5	+ 2.3	- 4.5
	Forecast 1989	(b) 97.2	- 1.0	+ 2.1	- 3.0
USSR	1987	(a) 103.40	+ 1.2	+ 3.0	- 1.2
	Preliminary 1988	(a) 107.50	+ 4.0	+ 3.0	- 0.7
	Forecast 1989	(a) 109.65	+ 2.0		
United States	1987	(a) 64.64	- 1.0	+ 4.0	- 3.0
	Preliminary 1988	(a) 65.93	+ 2.0	+ 2.8	- 1.4
	Forecast 1989	(a) 65.93	0.0	+ 1.3	- 1.1
Poland	1987	(a) 15.42	- 1.8	+ 3.4	- 5.2
	Preliminary 1988	(a) 15.42	0.0	+ 3.0	- 3.0
	Forecast 1989	(a) 15.22	- 1.3		
New Zealand	1987	(b) 7.07	- 11.5	- 12.8	- 0.9
	Preliminary 1988	(b) 7.50	+ 6.0	+ 18.8	0.0
	Forecast 1989	(b) 7.50	0.0	0.0	0.0
Canada	1987	(a) 8.15	+ 0.7	+ 2.5	- 4.3
	Preliminary 1988	(a) 8.33	+ 2.2	+ 3.3	- 1.6
	Forecast 1989	(a) 8.42	+ 1.1	+ 3.1	- 1.2
Japan	1987	(b) 7.33	- 1.7	+ 1.2	- 3.0
	Preliminary 1988	(b) 7.45	+ 1.6	+ 1.6	- 2.0
	Forecast 1989	(b) 7.42	- 0.4		
Australia	1987	(b) 6.37	+ 1.2	0.0	- 2.3
	Preliminary 1988	(b) 6.47	+ 1.6	+ 2.3	- 1.2
	Forecast 1989	(b) 6.58	+ 1.6	+ 2.4	- 0.6

49. Japanese milk production in 1988 at 7.45 million tons was 1.6 per cent higher than in 1987. The increase was mainly due to a further improvement in milk yields as dairy cow numbers continued to fall. For 1989, little or no change in production was expected. The guaranteed price for milk for manufacturing had been reduced from 82.75 to 79.83 yen per kg. for the 1988/89 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 150 thousand tons to 2.25 million tons. Lack of rainfall had adversely affected milk deliveries in South Africa in 1987, but the climatic conditions had improved and production was at a more normal level in 1988.

50. In Argentina, milk deliveries in 1987 at 6.13 million tons were 6 per cent higher than in 1986 despite a smaller milking herd and unfavourable weather conditions. The increase was mainly due to a further improvement in milk yields. Deliveries continued to increase in the first four months of 1988. However, because of the drought which hit later all the dairy producing regions, milk production decreased in the subsequent months. It was consequently estimated that for the year 1988 as a whole, deliveries declined by 3 to 5 per cent compared to 1987. The lack of rains and the dry conditions persisting at the end of 1988 had the consequence of reducing feed reserves. This situation might produce negative consequences for milk production in 1989. With high dairy stocks at the beginning of 1988, a decreasing internal consumption due to falling purchasing power and with increasing international prices, exports increased in 1988 despite the decline in production. The main export items were cheeses, milk powders and casein. In Argentina, milk production costs were among the lowest in the world. In Uruguay the price paid for manufacturing milk was even lower. Milk deliveries had increased in 1987, by 3.5 per cent to 576 thousand tons, entailing a significant increase in the output of dairy products. Production was estimated to have increased by 1.4 per cent to 584 thousand tons in 1988. Uruguay had in recent years been the largest net exporter of dairy products among the developing countries. It had sold mainly milk powders, the destinations being other Latin American countries.

51. In Bulgaria, total production of milk in 1987 at 2,450 million litres was about 3 per cent lower than the 1986 level of 2,527 million litres, mainly due to unfavourable weather conditions. However, output recovered in 1988. Hungarian production of milk increased in 1987 by 2.2 per cent reaching 2.73 million tons due to increased yield per cow. The bulk of dairy production covered the growing home demand, except for some special kinds of cheeses which were exported. In 1988, production of milk was estimated to have remained stable, the growing milk yields having offset a drop in the cow numbers. The Polish milk production declined by 1.8 per cent to 15.42 million tons in 1987. A lack of profitability in dairying had led many private farmers to reduce their herds. Production remained relatively stable in 1988. Milk deliveries had been insufficient to meet domestic demand for dairy products in 1987, substantial quantities of dairy products had had to be imported and further imports were necessary in 1988. The milk producer price was increased by 30 per cent in November 1988 to be applied retroactively from 1 July 1988. The new price should stimulate production of milk. However, milk production was forecast to decline slightly in 1989 due to the continued decline in dairy cow numbers.

52. In Romania, the unitary system of contracting for the purchase of agricultural products from agricultural production co-operatives, their members and private producers was continued. The system defined the tasks and liabilities of the socialist production units concerning delivery of agricultural products from co-operative farmers and private producers, assuring reasonable and stable prices for the products delivered. Production of milk in 1987 at 4.32 million tons was 2 per cent higher than in 1986 due to increasing cow numbers and growing productivity. However, production of milk in 1988 remained relatively stable and for 1989, little or no change was expected. In Egypt, certain changes had been made to the import regime of certain dairy products. Total production of milk in 1987 at 2.37 million tons was 2.5 per cent higher than the 1986 level of 2.31 million tons. Efforts were being made to develop and increase dairy production. Thus, production in 1988 reportedly continued to expand and a further increase was forecast for 1989.

53. In Yugoslavia, milk production increased by 2 per cent to 4.75 million tons in 1987, due principally to growing yields as dairy cow numbers remained steady. Production was estimated to have increased by a modest 1 per cent in 1988. Milk deliveries were reported to be lower in 1987 in the Democratic Republic of Germany, due to a decrease in cow numbers. At around 8 million tons, production continued to decrease in 1988. For 1989, little or no change was forecast. In Czechoslovakia, production of milk declined by 1 per cent in 1987 to 6.91 million tons and remained relatively stable in 1988. This stability was forecast to continue in 1989.

54. In the USSR, milk production reached 107.5 million tons in 1988, 4 per cent higher than in 1987. Cow numbers continued to decline as more emphasis was being placed on increased milk yields. According to the Twelfth Five Year Plan, milk deliveries to the State by collective and State farms should be increased to 106-110 million tons by 1990, which meant annual rates of increase between 1.5 and 2.5 per cent. Production in excess of delivery plans might be sold freely and at higher prices. In 1989, production was expected to increase by another 2 per cent. Milk yield per cow was expected to increase in 1989/90 as a result of better breeding and growth of feed production.

55. The application of the Dairy Termination Programme (DTP) from April 1986 to October 1987 by the United States, and a reduction of the milk support price by 2.3 per cent (from US\$11.35/cwt. to US\$11.10/cwt.) in October 1987 adversely affected milk output. A further cut in the national support price was made effective 1 January 1988, resulting in a price of US\$10.60 per cwt., and CCC purchase prices for butter and non-fat dry milk were also reduced. In 1987, milk production was 1 per cent below the level of a year earlier at 64.64 million tons. Milk production prospects for late 1988 and 1989 had been negatively affected by the summer drought that caused significantly higher feed prices, adding to production costs and putting additional financial pressure on producers. Further reductions in the milking herd and the higher feed prices led to limiting production to less than a 2 per cent increase in 1988. For the same reasons, output was forecast to remain unchanged in 1989 at around 65.90 million tons. Dairy farmers were expected to receive an additional US\$800 million in dairy farm income in 1989 and US\$700 million more in 1990 because of price support provisions in the Disaster Assistance Act of 1988. Under this Act, dairy

producers won a freeze on the proposed 50 cent per cwt. reduction in the support price due on 1 January 1989, and a three-month 50 cent per cwt. price increase from April through June 1989. The willingness of dairy farmers to produce more milk at lower real prices has dominated the eighties. If the trends of the early eighties continued, increases in milk production would probably be larger than rises in commercial use.

56. Canadian milk production in 1988 at 8.33 million tons was 2.2 per cent up on the level of the previous year, despite a reduction in the number of milk producers and cow numbers. Yields improved and milk sales off farms increased. In response to a 2.8 per cent increase in domestic consumption of industrial dairy products for the August-December 1987 period, the Market Sharing Quota was increased by 1.5 per cent for 1987/88 to a level of 47.3 million lbs. A new methodology for setting target returns for industrial milk and support prices for butter and skimmed milk powder was being implemented which would allow changes in costs to milk producers to be more accurately reflected. The target return was raised by 1 per cent, the first increase since August 1986. Effective 1 February 1988, the target return for industrial milk was fixed at Can\$47.06/hl. It remained unchanged on 1 August 1988, partly because of the increasing costs of purchased feed. Milk production was expected to increase by 1 to 2 per cent in calendar year 1989 and increases of the same order were projected for the medium term.

57. Milk production in the developing countries generally remained at low levels due to technical and economic factors. However, the overall output of developing countries increased by 3.8 per cent to 135 million tons in 1988 and the degree of self-sufficiency would probably increase in the next few years. A number of importing developing countries such as India and China have embarked on very ambitious development programmes. Production in India, which accounted for nearly one half of the total Asian milk production and one third of the aggregate for all developing countries, expanded under the "Operation Flood" project sponsored by the European Community. At around 44 million tons in 1986, it showed an increase of nearly 5 per cent over the output of the preceding year. In the 1987/88 dairy year, however, due to a severe drought and a shortage of feedgrains in most areas milk production was reduced by 3.8 per cent. This compared to the average annual growth rate of 6.4 per cent between 1980-86. Favourable weather conditions, after three consecutive droughts, led to a recovery in milk production in the 1988/89 dairy year. China's production of milk rose by 11 per cent in 1986 to a level of 5.5 million tons, as a result of increased cow numbers and more emphasis in national plans on the nutritional value of milk consumption. There was again a sharp increase in 1987 (by 10 per cent to 6 million tons) and in 1988 (by 16 per cent to 7 million tons) and further rapid growth (by some 20 per cent) was anticipated in 1989 as the industry responded to rising demand. Strong efforts to step up milk production were also being made in several countries of West and 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. On the other hand, in Africa, Kenya, Zimbabwe and Madagascar obtained significant increases in 1988. Some rise also occurred in Latin America, where improved returns from exports stimulated

dairying in countries such as Uruguay and Chile. Mexico's milk production continued to rise sharply, up an estimated 4 per cent for 1988 to 9.3 million tons. The sharp increases in milk output since 1985 were partially in response to imports of high yielding breeding stock during the past few years. Production growth during 1988 was moderated by an extended summer dry period which limited forage supplies and caused relatively more milk to be used for feed. Another 4 per cent gain in milk production was being projected for 1989. Mexico was in the process of adjusting its programme designed to increase domestic milk production with the objective of establishing self-sufficiency and to ultimately reduce or eliminate the need to import milk powder. Milk production in Brazil declined slightly in 1988 to 13.2 million tons as higher feed costs and unfavourable prices caused by weak demand for dairy products further tightened profit margins. Favourable milk prices in Chile stimulated further production increases in 1988.

Consumption

58. World consumption of liquid milk over the last ten years increased at an average annual rate of 1 per cent. In per capita terms, however, it remained rather stable at nearly 46 kgs. throughout this period. In 1988, total world usage increased by 0.5 per cent over 1987 levels but consumption in 1989 was projected to climb 1 per cent beyond 1988 totals. Moreover, 1989 worldwide fluid per capita milk consumption was projected to reach 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 the one end of the spectrum were developed countries, with as much as 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 developed countries either on health grounds or due to the availability of a wide variety of substitute drinks.

59. In developed countries, consumers were turning away from whole milk to semi-skimmed types of milk. The switch from whole milk to partially skimmed milk continued in 1988, with sharp increases in consumption registered in many countries in Europe and in North America. Moreover, the confidence in fresh milk as a safe and healthy element of nutrition was again restored from 1987 on.

60. The principal area of growth in consumption was Asia, both developed and developing countries. 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, Thailand, Indonesia, China and India. In comparing 1989 forecasts with 1983 data, it could be stressed that China's total milk consumption will have risen by as much as 165 per cent and India's usage will have increased by 24 per cent over this period of six years. In Latin America also, countries such as Mexico and Brazil had introduced social programmes for milk distribution and consequently consumption had increased.

The Situation for Individual Dairy Products

Butter and Anhydrous Milk Fat

Butter

Production

61. World production of butter and butter oil in 1988 fell for the second consecutive year and amounted to 7.25 million tons, which was 1.3 per cent down on the level of 1987. Production in 1989 was forecast to remain near the 1988 level. Reduced milk supplies, particularly supplies for manufacturing butter, caused another sharp reduction in the EC's output of butter as consumption of liquid milk and fresh milk products rose and manufacture of cheese and whole milk powder continued to expand. Thus, Community's manufacture of butter declined by 9.5 per cent to 1.73 million tons following a decline by 18 per cent in 1987. For 1989, a decline of 3 to 4 per cent was forecast for the EC.

62. In New Zealand, butter/butter oil manufacture increased in 1987/88 by 12.5 per cent to 279 thousand tons. However, production of butter was expected to be reduced in 1988/89. Australian butter/butter oil production in 1987/88 at 94 thousand tons, was down by 9.3 per cent on the 1986/87 season. Output of these products for 1988/89 was estimated at 92 thousand tons, 2.3 per cent below the previous year's production, mainly due to the increased production of Cheddar cheese and whole milk powder. In the Nordic countries, butter output in 1988 was lower in Finland and Sweden and was expected to decrease further in 1989; however, production increased in Norway in 1988. In Poland, production remained almost unchanged at around 265 thousand tons.

63. In the United States, butter production at 545 thousand tons in 1988 was up by 8 per cent due mostly to the declining sales of other cream based products. However, output in 1989 was forecast to decline. Canadian butter production rose by 8 per cent in 1987/88 to 102 thousand tons. However, it was expected to decrease by 5 per cent to 97 thousand tons in 1988/89.

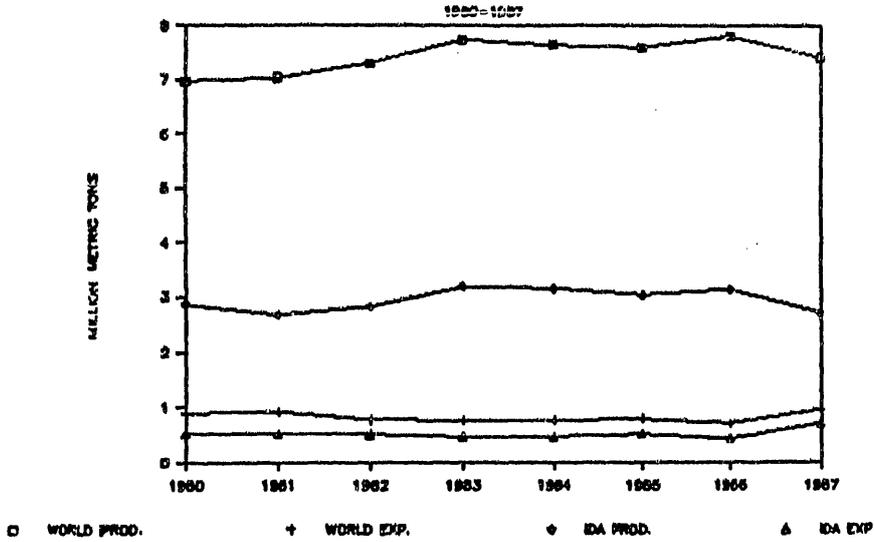
64. Output of the German Democratic Republic was estimated at 310 thousand tons, down by 4 per cent on 1987. Due to high demand, USSR production rose by 4 per cent, reaching a level of 1.82 million tons in 1988 and was expected to continue to increase in 1989. In the developing countries, production was estimated to have increased by 1.5 per cent in 1988. However, the rate of increase in certain countries such as India (+ 7 per cent) and Brazil (+ 15 per cent) was significantly higher than the average for all developing countries.

Consumption

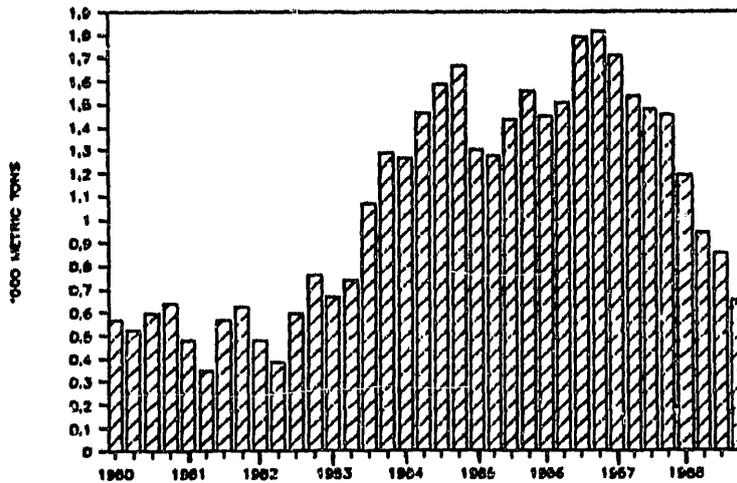
65. World butter consumption for 1988 declined slightly, i.e. by approximately 1.5 per cent, from 1987 levels. A further reduction was foreseen for 1989. World per capita consumption which averaged 2.7-2.8 kgs. over the past ten years was forecast to stagnate or decline slightly through 1989.

GRAPH I - BUTTER^{1/}

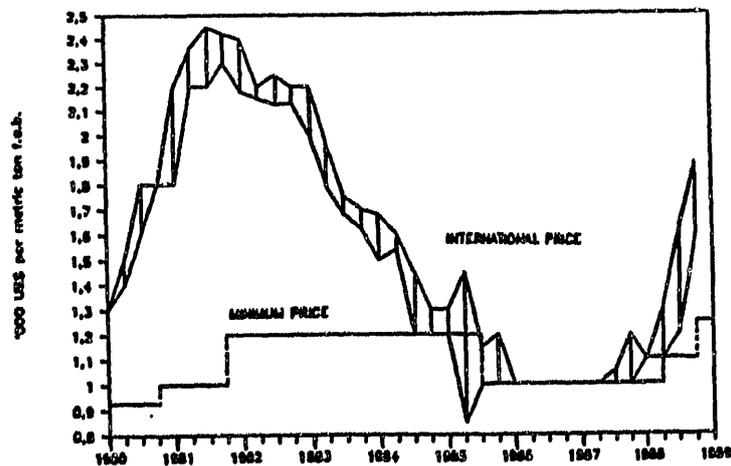
BUTTER PRODUCTION AND EXPORTS



BUTTER STOCKS 1980-88



BUTTER PRICES 1980-88



^{1/} Source: see explanatory notes on page 1

66. In the EC, butter from intervention storage has been available since 1972 at around 50 per cent of the intervention price for non-profit making organizations and for the armed forces. Member States may also subsidize butter for social purposes. Added to this was the scheme for school milk where the Community contributed financially to national schemes. Measures under the milk co-responsibility regime continued in 1987 and 1988, providing funds for subsidized butter to be used in pastry products, ice-cream and sugar confectionery. A scheme for butter sold for cooking, introduced in 1985, was continued in 1988. However, in the autumn of 1988, certain restrictions had been introduced in the granting of the aids, taking into account the evolution of prices and the decline in public stocks. Total Community consumption of butter in 1988 was 4 per cent less than in 1987, and a further reduction was anticipated for 1989.

67. In Switzerland, where a number of measures fairly similar to those of the EC had been taken to promote butter consumption in the domestic market, 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 1988. In the Nordic countries also, butter consumption continued to decline in 1988. In Poland, butter consumption recovered in 1988 while in Hungary, it declined.

68. In New Zealand, domestic consumption of butter remained stable at around 39-40 thousand tons a year; it was expected that it would remain stable. In Australia, domestic sales of butter were expected to decrease marginally in 1988/89.

69. In North America, butter consumption decreased slightly in 1988, but disappearance was forecast to recover slightly in 1989. In the USSR, consumption declined in 1988 and the trend might continue in 1989.

Trade

70. The domestic disposal and the sales under derogation of significant quantities of butter coupled with substantially reduced production in 1987 resulted in an appreciable reduction of stocks providing an improvement in the butter market in 1988. Towards the end of that year and in early 1989 the market strengthened. However, a large part of total world exports in 1988 (estimated at 1 million tons) to a large extent consisted of transactions at specially reduced prices. As regards the future outlook, positive developments in the demand for imports might occur at least in the short term in the major market - the USSR. Other key markets, mainly Iran, Iraq and North Africa, might have substantial import requirements for fresh butter entailing a further improvement in the market in 1989/90.

71. EC exports of butter to third countries which had decreased in 1985 and 1986, showed substantial increases in 1987 and 1988, the main destination being the USSR. The EC sold 500 thousand tons of butter (18 months' old) to the USSR. Deliveries had been completed in early 1988. The EC sold a further amount of 110,000 tons of old butter to the USSR in 1988 and deliveries had been completed by the end of that year.

72. Exports by New Zealand increased in 1987 and 1988. The EC remained the main outlet. Under the preferential regime for butter imports, the EC had imported from New Zealand 76 thousand tons in 1987 and 74 thousand tons in 1988. The Council of the EC having not been able to agree in good time on new import arrangements for a longer term, decided in December 1988, to grant a further temporary authorization for the period 1 January to 31 March 1989. It was agreed that New Zealand deliveries might reach 18,625 tons for that period of three months, i.e. one fourth of the quantity fixed for the year 1988. Before 1 April 1989, the Council shall take a decision of the maintenance of exceptional arrangements. Other important outlets for New Zealand butter were Iran and the USSR. Australian exports of butter/butter oil were expected to decrease to 46 thousand tons in 1988/89 as against exports of 52.3 thousand tons in 1987/88.

73. Romanian exports of butter and butter oil were around 19 thousand tons in 1987 and in 1988, the main destinations being the USSR and Egypt. Little change was expected for 1989. Exports of butter by the German Democratic Republic decreased from 60 thousand tons in 1987 to 55 thousand tons in 1988. A further decrease to 50 thousand tons was projected for 1989.

74. United States exports of butter and milk fat in 1988 declined for the third consecutive year to the level of some 12 thousand tons, i.e. a drop of some 50 per cent on 1987, the main destinations being Iraq and Jamaica. However, for 1989, butter exports were projected to increase from 1988 levels.

75. Imports of butter by the EC, which in 1987 aggregated 79 thousand tons, declined in 1988. New Zealand remained the main source of the Community imports. Imports into Switzerland decreased slightly in 1988. In Poland, butter production had not corresponded with the overall domestic requirements; thus large quantities had to be imported in 1986 (39 thousand tons) and in 1987 (33 thousand tons) while imports in 1985 had been nil. The main source of these imports was the EC. Imports decreased by 10 per cent to 30 thousand tons in 1988. Japan, whose imports of butter averaged only 2 thousand tons a year between 1981 and 1987 experienced in 1988 a temporary shortfall in its domestic production and decided consequently to offset it by supplementary purchases amounting to as much as 21 thousand tons. The main supplier was New Zealand with 19 thousand tons sold at US\$1,600 per ton in the summer of 1988.

76. The USSR, where consumption of milk and dairy products rose faster than production, remained by far the largest net importer. At approximately 3 million tons of milk equivalent, its imports accounted for over a tenth of world imports in 1987. However, most of the USSR's purchases were old butter supplied by the EC at low prices which were nearly equivalent to those of the cheapest vegetable oils available in international markets. In 1987, 500 thousand tons of old butter (over 18 months) was bought from the EC as compared to a total of 125 thousand tons in 1986. In 1988, 110 thousand tons of old butter (over 18 months) was bought from the EC at low prices under derogation. In 1987, the USSR

imported unprecedented quantities of butter (403 thousand tons) of which 311 thousand tons or 77 per cent was cut-price EC butter (Table 4). Since international prices of butter were low, the USSR found it advantageous to buy from outside despite increased production. Nevertheless, although supplies to the market increased in 1987 and 1988, demand was not fully covered and shortages were noted in many areas. It was considered that EC sales to the USSR resulted in the development of that market where demand for fresh butter subsequently increased. Thus, the USSR turned in 1988 to other suppliers for fresh butter at prevailing market prices in addition to the sizable quantities of old butter imported from the EC at very low prices. The USSR, which in recent years had dominated the market, seemed likely to continue to have a substantial import requirement for fresh butter for at least the years 1989 and 1990. However, the quantities imported might diminish as compared to the record level of 1987.

Stocks

77. Total stocks of butter in the EC, North America and Oceania on 1 October 1988, at 677 thousand tons, were about 55 per cent lower than a year earlier and stocks continued to decline in the fourth quarter of 1988. World stocks at the end of 1988 were down nearly half a million tons with a further drop expected for 1989. World stocks will have declined from 2 million tons at the end of 1986 to a projected 700 thousand tons for the end of 1989.

78. The decrease was mainly due to the fall in stocks held by the EC which totalled 247 thousand tons (public and private) at the end of 1988 as compared to 958 thousand tons one year earlier. A special two-year stocks disposal programme designed to dispose of 1 million tons of butter was introduced in 1987. In addition, the Commission exercised its authority to suspend intervention buying of butter once quantities offered exceeded 180 thousand tons as from 1 March 1987. This quantity was reached and permanent intervention was therefore suspended as from 29 June 1987. Thereafter a tender system for buying butter into intervention was operated. The objectives of the disposal programme had been attained, and the results of the new tender system had been very positive. It was expected that stocks would continue to decline throughout 1989.

79. New Zealand stocks decreased to 10 thousand tons on 1 October 1988 as compared to 46 thousand tons on 1 October 1987. Australian butter stocks had on 1 October 1988 decreased to 91 thousand tons as compared to 159 thousand tons on 1 October 1987. Due to improved prospects for sales during 1988/89, stocks of butter were expected to decline to 17.5 thousand tons at the end of the 1988/89 season as compared to 21.2 thousand tons at the end of the previous season. In Poland, stocks of butter at 16 thousand tons on 1 July 1988 and at 18 thousand tons on 1 October 1988, were very low. In Finland, butter stocks at 17 thousand tons on 1 October 1988 were 15 per cent lower than a year earlier.

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

	1981-83 average	1985	1986	1987	1988
Total	<u>189.46</u>	<u>276.04</u>	<u>194.34</u>	<u>403.11</u>	
of which from:					
Belgium	16.67	16.72	-	9.99	
Denmark	-	-	-	5.00	
Ireland	15.75	19.79	-	-	
Netherlands	14.71	34.80	-	113.14	
France	25.08	94.14	15.20	49.97	
Germany, F.R.	-	-	90.00	133.00	
Total EC countries mentioned	<u>72.22</u>	<u>165.45</u>	<u>105.20</u>	<u>311.10</u>	
Hungary	3.48	1.76	0.72	1.06	
Norway	1.67	-	-	-	
Finland	9.34	7.07	8.00	6.10	
Sweden	5.46	2.31	-	-	
Canada	0.67	-	-	-	
Uruguay	3.37	-	..	-	
New Zealand	48.71	35.98	25.11	11.38	
Others (unspecified origins)	44.38	63.47	55.31	73.47	

Source: Foreign Trade Yearbooks of the USSR 1981 to 1987.

80. In the United States, uncommitted public stocks of butter had been reduced to an historically low level, reaching 36 thousand tons on 31 December 1987 against 99 thousand tons on 31 December 1986. However, production having increased in 1988, government purchases of butter rose substantially, reflecting a jump in the surplus of high-fat products. Consequently, public stocks increased and were estimated at 70 thousand tons on 31 December 1988. It was, however, expected that public stocks would decline somewhat throughout 1989. Canadian stocks were expected to reach 16.5 thousand tons at the end of the dairy year 1988/89, down 8 per cent on 1 August 1988.

International prices

81. During 1981-85, international prices for butter declined sharply and continuously as supplies were in excess of demand with little or nothing being done to restore market equilibrium. After having been partially suspended since November 1984, the agreed minimum export price for butter was lowered in June 1985 from US\$1,200 to US\$1,000 per metric ton f.o.b. Over subsequent years participants exported substantial quantities of butter, notably old butter and butter oil, at prices below the minimum prices and by derogation from the price provisions of the Arrangement. Such sales were largely dominated by Community sales to the USSR, but other participants as well, made similar sales of additional quantities of butter and butter oil to various markets, including non-traditional outlets. Simultaneous with such special sales, steps were also being taken to dispose of surplus stocks on internal markets and to contain milk deliveries. Late in 1987 and early 1988, these efforts started to yield results, and the market situation, notably for fresh butter improved appreciably, and prices started to move up from the level of the minimum export price of US\$1,000 per metric ton f.o.b. Prices were expected to continue to strengthen in 1989.

82. International prices for fresh butter which had remained at or slightly above the minimum export price in 1986 and early 1987, during the last quarter of 1987 ranged between US\$1,000 and US\$1,200 per metric ton f.o.b. During the first half of 1988 quotations were in the range of US\$1,100 to US\$1,300 per metric ton f.o.b., and continued to firm up in the second half of 1988, fluctuating between US\$1,600 and US\$1,880 per metric ton f.o.b. in the fourth quarter. The minimum export price was raised from US\$1,000 to US\$1,100 per metric ton f.o.b. with effect from 23 March 1988 and again to US\$1,250 per metric ton f.o.b. with effect from 21 September 1988.

83. Further derogations for sale of old butter at prices below the minimum export prices were granted in 1988, notably for the sale of around 100 thousand tons of old Community butter to the USSR. Under this derogation, the EC concluded a contract with the USSR for the sale of 110 thousand tons of old butter. Deliveries according to this sale had been completed at the end of 1988. The supply situation in early 1989 indicated that no further derogations would be necessary in 1989/90.

Anhydrous Milk Fat

Production and trade

84. Output and exports of anhydrous milk fat of the EC and Australia were higher in 1988 than in the previous year. However, New Zealand's production and exports of anhydrous milk fat decreased in 1988. Production and trade of other participants were negligible.

Food aid

85. In 1988, Community food-aid programme provided for a maximum of 25 thousand tons of butter oil as compared to a maximum of 27.3 thousand tons in 1987. Actual food-aid deliveries in the first nine months of 1988, amounted to 28 thousand tons in relation to 15 thousand tons delivered in the corresponding period of 1987. In 1987/88 the Community effected certain sales of aged butter for welfare purposes to Algeria, Egypt and Tunisia. During 1987, transactions notified by the United States to the FAO Consultative Sub-Committee on Surplus Disposal amounted to some 13 thousand tons of butter and butter oil.

International prices

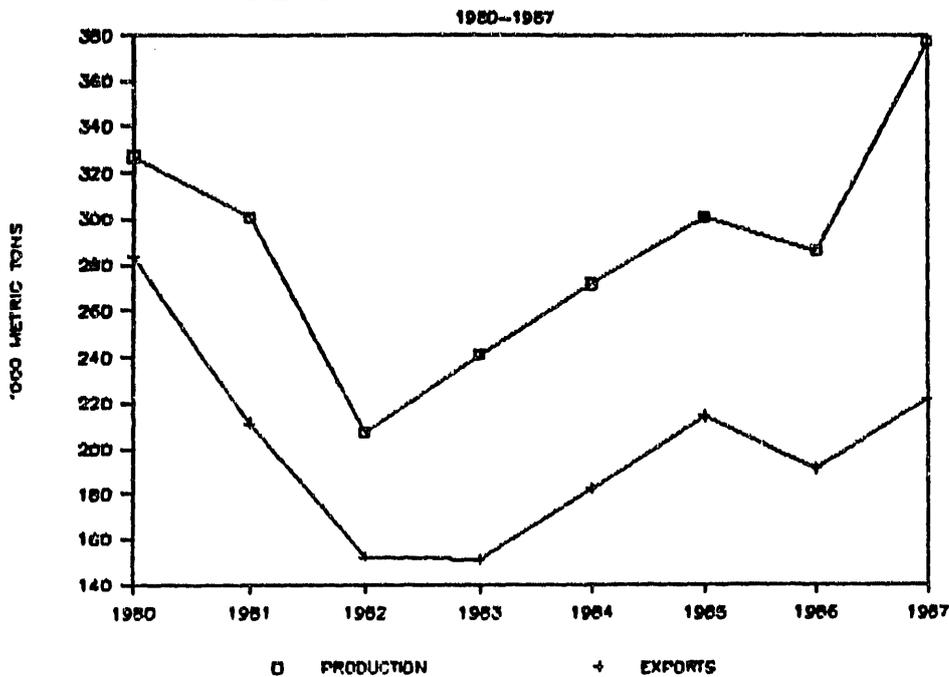
86. International prices of anhydrous milk fat remained close to the agreed minimum export price of US\$1,200 per ton f.o.b. throughout 1987. In the first quarter of 1988, prices were around US\$1,325 per ton f.o.b. They continued to improve throughout 1988 thus ranging between US\$1,900 and US\$2,100 per ton f.o.b. in the fourth quarter. As regards the future outlook, prices and sales of anhydrous milk fat remained sensitive to competition from vegetable oils.

87. The Committee of the Protocol Regarding Milk Fat raised the minimum export price for anhydrous milk fat from US\$1,200 to US\$1,325 per ton f.o.b. with effect from 23 March 1988 and again to US\$1,500 per ton f.o.b. with effect from 21 September 1988.

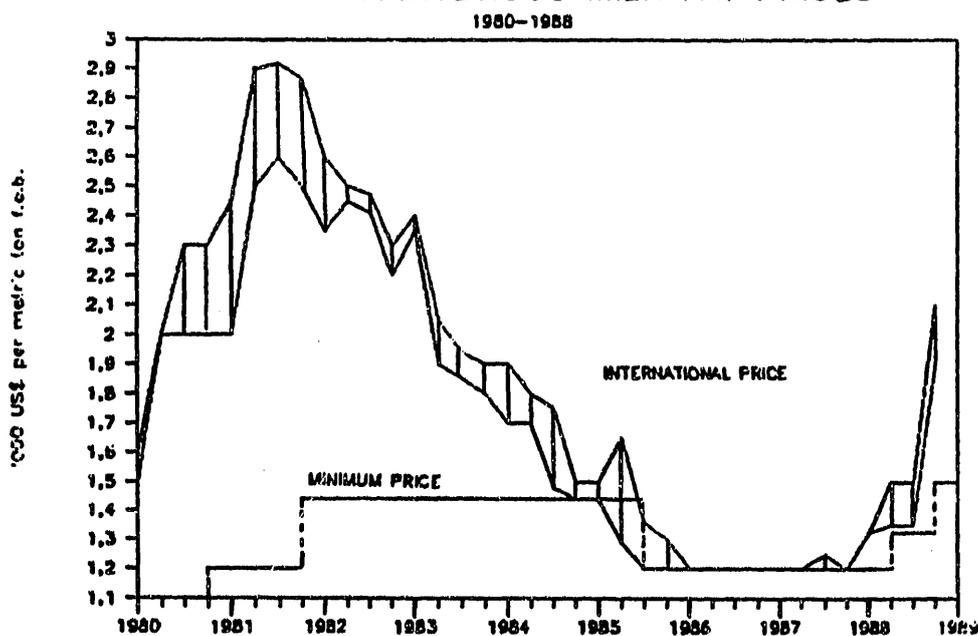
88. In accordance with the Decision of 22 March 1988, the Committee authorized the EC under Article 7:1 of the Protocol, to export around 50 thousand tons of butter oil/ghee, manufactured from butter aged at least 18 months out of public intervention stocks to Bangladesh, at a price inferior to the minimum export price. Exports should have been completed by 31 December 1988. However, the EC had not effected any sales under this derogation.

GRAPH II - ANHYDROUS MILK FAT^{1/}

IDA MEMBERS: AMF PRODUCTION AND EXPORTS



ANHYDROUS MILK FAT PRICES



^{1/} Source: see explanatory notes on page 1

Cheese

Production

89. World output of cheese at 15 million tons in 1988 was 1 per cent more than in 1987 and another 1 per cent gain was forecast for 1989. The trend was very similar in all regions, but with somewhat greater variations from one country to another. For 1989, it was forecast that the United States rather than the EC would provide the largest physical increment to the global total. In the EC, cheese production in 1988 reached 4.68 million tons, an increase by 2 per cent over 1987. This partially reflected the increase in domestic consumption 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. Forecasts for 1989 indicated that the growth rate would be somewhat slower as milk production continued to decline.

90. In Australia, production of cheese was expected to total 180 thousand tons in 1988/89, i.e. 2.1 per cent more than the level of the previous season. In New Zealand, production in the 1987/88 season increased by 14 per cent to 129 thousand tons and for the 1988/89 season, a further expansion was expected. Relative gains were recorded in 1988 in most other participating countries.

91. In 1988, the United States increased cheese production by 3 per cent to about 2.5 million tons due to growth in commercial use. A larger growth was forecast for 1989 as milk was diverted from butter production. Production in Canada was up 5.7 per cent in 1988 in response to rising domestic and export demand. A further expansion was projected for 1989. In the USSR, production of cheese at 861 thousand tons in 1987 was 3 per cent higher than in 1986; output in 1988 at 887 thousand tons showed an increase of the same order. A further increase was projected for 1989. In the German Democratic Republic, production remained unchanged at 264 thousand tons in 1988 and little change was expected for 1989. Production of cheese in developing countries hardly changed in 1988.

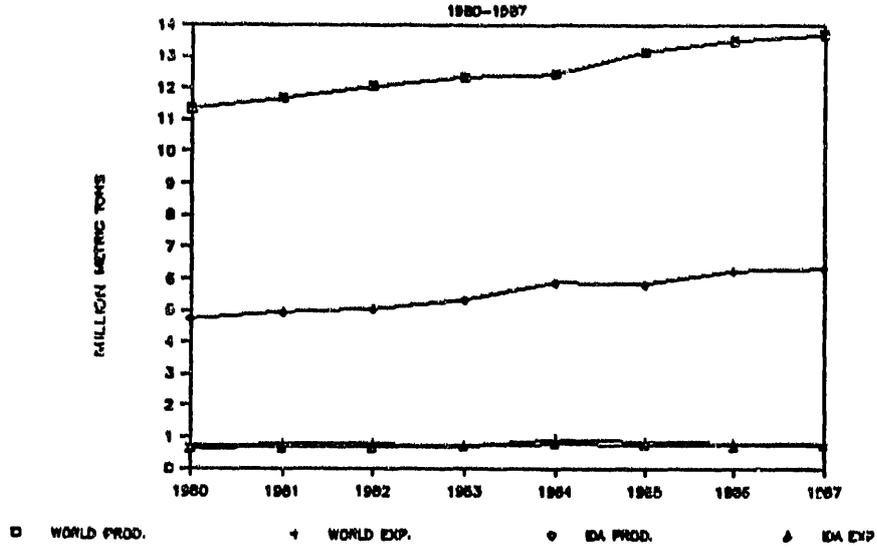
Consumption

92. Cheese consumption for the major producing countries continued to expand, up 1 per cent in 1988, as United States consumption was estimated to be about even with 1987 because of smaller government donations to the needy and as growth in European countries was limited. The EC estimated a gain of 1 to 2 per cent over 1987. The outlook for 1989 was for continued growth in total cheese consumption of about 1.5 per cent over 1988.

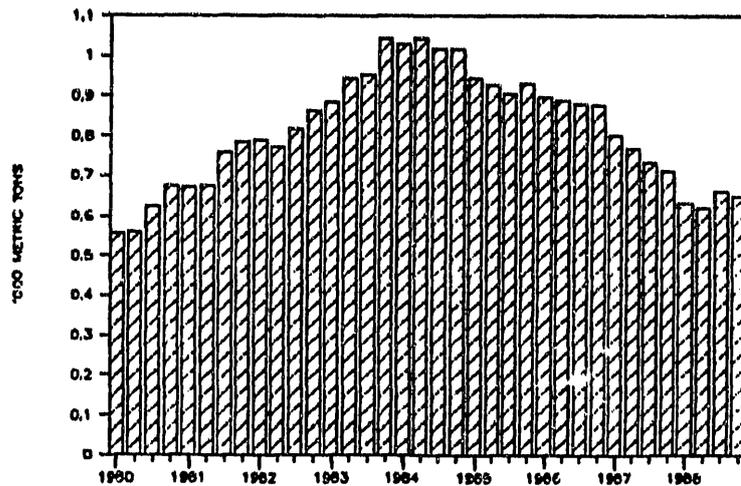
93. World per capita cheese consumption was moving up strongly, showing an average annual increase of over 2 per cent since the early eighties. However, the outlook for 1989 was for little change in per capita use. The overall average of 6.6 kgs. for 1988 concealed, however, a wide range of consumption levels. Per capita consumption was particularly high in the EC and in other countries of Western Europe (around 12 kgs.) and in North America (around 9 kgs.); the increase in consumption seemed to be the strongest in these high level consumption countries.

GRAPH III - CHEESE^{1/}

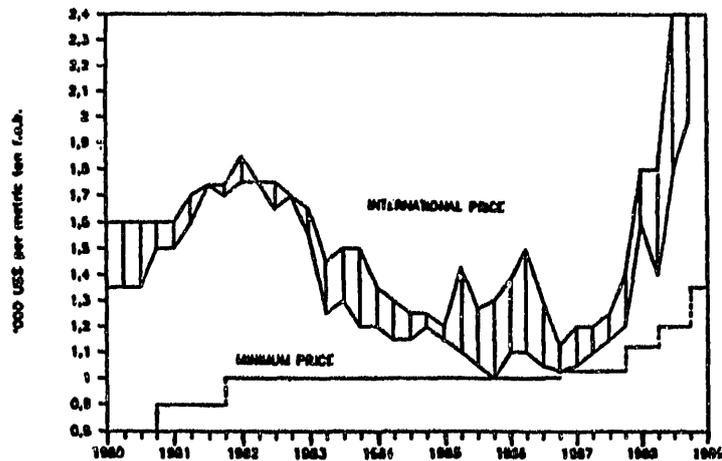
CHEESE PRODUCTION AND EXPORTS



CHEESE STOCKS 1980-88



CHEESE PRICES 1980-88



^{1/} Source: see explanatory notes on page 1

Trade

94. World exports of cheese were up 4 per cent for 1988 and to reach some 850 thousand tons. The outlook for 1989 was for exports to decline by 1 per cent over 1988. During the first half of 1988, signs of saturation were observed in certain markets and for specific qualities. The difficulties were considered to be of a temporary character, and the problems were overcome. The international cheese market was dominated by Western Europe and New Zealand, which together accounted for over 75 per cent of exports.

95. Community cheese exports expanded by 4 per cent in 1988 to 422 thousand tons. However, little change was expected for exports in 1989. New Zealand exports reached some 100 thousand tons in 1988, being one third above their average level of 1981-83, the main outlet remaining Japan. Little change was expected for 1989. New Zealand continued to invoke Article 7:2 for exports of cheese below normal export quality. For 1983-1988, New Zealand notified sales of almost 11 thousand tons under this provision to a range of countries. However, sales under derogation dropped sharply in 1988 reflecting improved market conditions. Australian exports of cheese increased by 29 per cent in 1987/88 to 73.6 thousand tons. Exports in 1988/89 were forecast at 65 thousand tons, a decrease by 11.7 per cent on 1987/88. In the fourth quarter of 1987, Australia notified its intention to conclude export sales under derogation of certain quantities of aged cheese in accordance with Article 7:2 of the Protocol. Such sales amounted to 5.5 thousand tons in 1987/88. The principal destinations were Eastern European countries.

96. Exports by Switzerland remained relatively stable in 1988 and amounted to some 60 thousand tons. Exports of Finland dropped from 39 thousand tons in 1987 to 31 thousand tons in 1988 and a further decrease was expected for 1989.

97. Cheese exports from the United States continued to remain at a low level in 1988, i.e. about 15 thousand tons. A further drop to 10 thousand tons was forecast for 1989. Austrian exports of cheese recovered in 1988 while exports from Canada and from the German Democratic Republic remained relatively stable.

98. On the import side, the United States purchases totalled 135 thousand tons in 1988, up by 12.5 per cent on 1987. The bulk of the imports was from the EC, New Zealand and Finland. However, certain exporters to the United States market experienced some difficulties in filling their bilateral quotas during the second half of the year. The outlook for 1989 was for little change in imports. The EC imports at around 100 thousand tons in 1988, mostly from Switzerland, were lower than in the previous year. Japanese imports of cheese in 1988 at 100 thousand tons were 6 per cent higher than in 1987, the main suppliers being the EC, New Zealand and Australia. Demand for cheese was constantly increasing and had in the past ten years almost doubled. This trend was likely to continue. In Switzerland, imports of cheese remained relatively stable in 1988 at around 24 thousand tons.

Stocks

99. Cheese stocks, on 1 January 1989, were lower than one year earlier and were expected to decline further throughout 1989. The decrease was mainly due to the sharp decline in stocks held by the United States which on 1 January 1989, were at 145 thousand tons as compared to 205 thousand tons one year earlier.

International prices

100. Market prices for cheese continued to vary according to types of cheeses and markets throughout 1988. Cheddar cheese prices strengthened and fluctuated between US\$1,400 and US\$1,800 per ton f.o.b. during the first half of 1988 and between US\$2,000 and US\$2,400 per ton f.o.b. during the fourth quarter, thus remaining well above the agreed minimum export price. Prices were expected to continue to firm in the coming months, as import demand was sufficient to absorb the increase in supplies. However, developments might differ for different qualities.

101. The Committee of the Protocol Regarding Certain Cheeses raised the minimum export price for certain cheeses from US\$1,120 to US\$1,200 per ton f.o.b. effective from 23 March 1988 and again to US\$1,350 per ton f.o.b. effective from 21 September 1988.

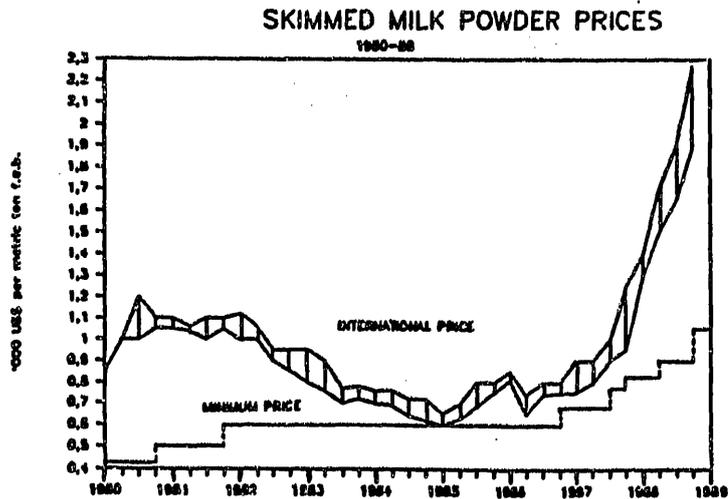
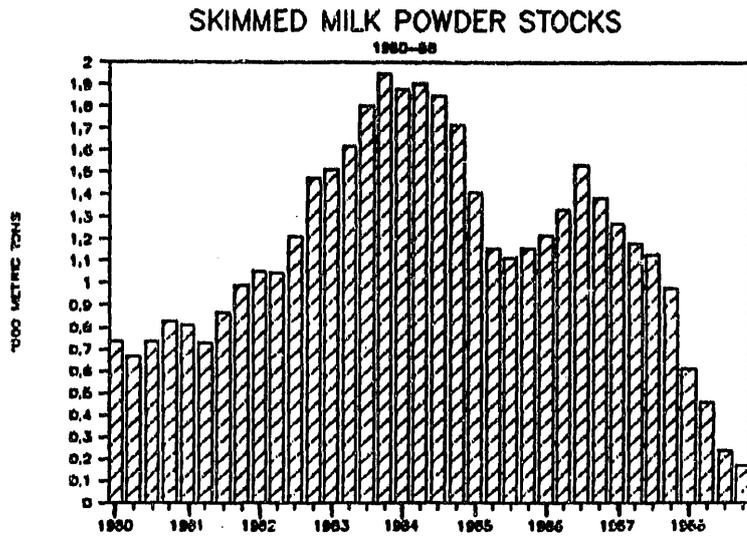
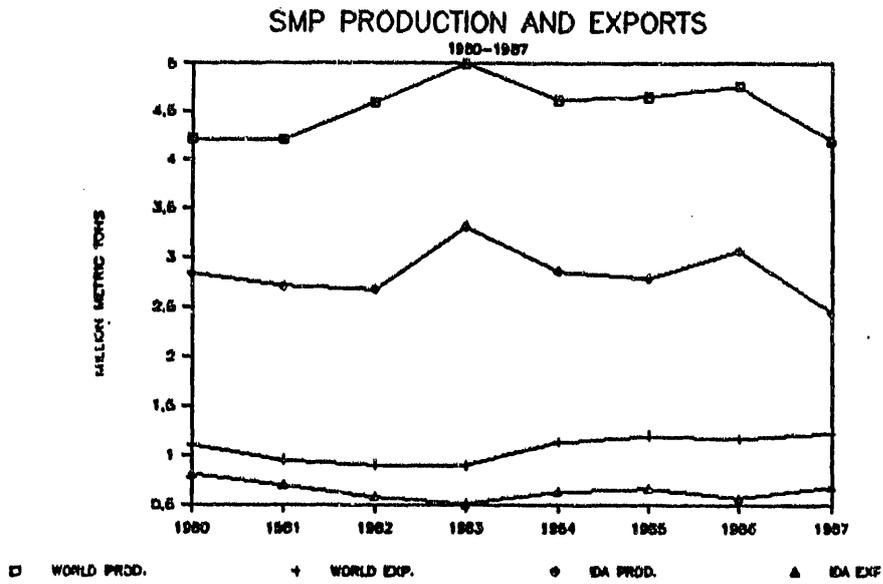
Milk Powders

Skimmed Milk Powder and Buttermilk Powder

Production

102. World production of skimmed milk powder in 1988 at 3.8 million tons was 8 per cent lower than in 1987 when it had increased by 14 per cent. Thus, the upward trend of recent years for skimmed milk powder production was halted in 1987 and the decline continued in 1988 although at a slower rate. These decreases for two consecutive years were mainly due to reduced butter production and consequently less skimmed milk becoming available for drying. Much of the decline can be attributed to the EC efforts to reduce milk output and surplus stocks. The reduction in EC production was particularly important as EC output had accounted for nearly half the world production since the 1960s but output for the EC in 1988 was only one third of world production. The United States also curtailed skimmed milk powder output. For 1989, world output of skimmed milk powder was projected to be unchanged from 1988, the projected declines for the EC, the United States and New Zealand being offset by sizable gains in output forecast for the USSR, Brazil and India.

GRAPH IV - SKIMMED MILK POWDER^{1/}



^{1/} Source: see explanatory notes on page 1

103. In 1988, production of skimmed milk powder in the EC decreased sharply for the second consecutive year (by 19 per cent) to 1.31 million tons as a result of measures taken to reduce milk production. Buttermilk powder production declined also and a further drop was expected for 1989. Output of skimmed milk powder was expected to decline by 3 to 4 per cent in 1989 to approximately 1.26 million tons. In New Zealand, where production of skimmed milk powder during 1986/87 had been reduced by nearly 20 per cent, output recovered in 1987/88 and increased by 15 per cent to 171 thousand tons. However, production was expected to remain steady in the season 1988/89 and decline somewhat in calendar year 1989. Buttermilk powder production increased in 1987/88. In Australia, production of skimmed milk powder/buttermilk powder in 1987/88 was 128 thousand tons as against 137 thousand tons in 1986/87. In 1988/89 output of these products was expected to register a slight decline. In Japan, production remained relatively stable in 1988 at around 150 thousand tons and little change was expected also for 1989. In Poland, output recovered in 1988 and amounted to approximately 160 thousand tons compared to 148 thousand tons in 1987. Production of skimmed milk powder by other participants followed varying trends in 1988.

104. In the United States, output decreased substantially (by 20 per cent) in 1987, reaching 471 thousand tons. However, only a slight drop (by 2 per cent) was registered in 1988 and a further drop (by 4 per cent) was forecast for 1989. Canadian production increased by 7 per cent to 107 thousand tons in 1987/88 but was expected to decline to 102 thousand tons in 1988/89. Production in the USSR continued to increase in 1988, reaching 518 thousand tons and might register a sizable gain in 1989. In the German Democratic Republic, output continued to increase in 1988, amounting to 55 thousand tons but a slight drop was forecast for 1989. Output in India was projected to increase by as much as 20 per cent in 1989 to 85 thousand tons while Brazilian production might develop at a very rapid pace and reach 35 thousand tons in 1989 compared to 20 thousand tons in 1988.

Consumption

105. World consumption of skimmed milk powder fell in 1988, reflecting the tighter supply situation for milk powders. A further reduction was anticipated for 1989 as world supplies continued to tighten. In the EC, total domestic consumption declined in 1988. In Japan and in the United States consumption expanded in 1988. In Japan, about one fourth of the consumption was used for animal feed purposes. United States use in animal feed dropped to negligible levels in 1988.

106. In Western Europe, where skimmed milk powder was used mainly for animal feed, measures were applied to promote its consumption. In the EC, the use of liquid skimmed milk and skimmed milk powder for animal feed purposes, subsidized at an average rate of nearly 50 per cent, was still of the order of 1.5 million tons of skimmed milk powder equivalent in 1987, more than average annual world exports of this commodity. As milk supplies were reduced, export prices were rising and stocks were declining, domestic subsidization schemes in Western Europe were curtailed late in 1987 and in

1988. In June and September 1988, the EC took decisions for a cut in the aid on skimmed milk powder used in animal feed, from ECU 80 to ECU 70 and again to ECU 65 per 100 kgs. as from 1 October 1988; a cut from ECU 6.5 to ECU 5.69 and again to ECU 5.28 per 100 kgs. in the aid on liquid skimmed milk used by the same industry. As a consequence of these cuts, the subsidy on skimmed milk powder for animal feed represented 37 per cent of the intervention price in 1988 as compared to 46 per cent in 1987. In June 1988, the EC also decided that the minimum amount of skimmed milk powder to be incorporated in animal feed qualifying for aid should be cut from 60 per cent to 45 per cent of the feed. Moreover, the EC decided that as from 1 October 1988, this aid would be granted whatever the amount of skimmed milk powder incorporated in the compound feed. As a result of these measures, total use of skimmed milk powder in the EC dropped by 10 per cent in 1988 (a 150 thousand ton decline) and a reduction of nearly 300 thousand tons was projected for 1989.

Trade

107. World exports of skimmed milk powder were down sharply in 1988, a 12 per cent decline from the 1.2 million tons exported in 1987. A reduced butter production entailed a reduction in production and stocks of skimmed milk powder. Consequently, international trade in skimmed milk powder in 1988 was affected although some exporters made efforts to maintain their sales by drawing down on stocks and reducing the use for feed. The outlook for 1989 was for continued tightness in world supplies of skimmed milk powder, and world exports might show a further substantial decline.

108. A considerable increase took place in the exports of skimmed milk powder by the EC (including food aid) when they totalled 390 thousand tons in 1987 from 267 thousand tons in 1986, i.e., a rise of 46 per cent. Exports in 1988 continued to increase but at a substantially lower rate, i.e. by some 2 to 3 per cent. These increases marked a positive improvement in the situation of the EC which had previously experienced a considerable drop in its share of the world market from 60 per cent in 1980 to 26 per cent in 1986. The market share of the EC subsequently increased to 33 per cent in 1987 and to about 38 per cent in 1988.

109. Skimmed milk powder exports by New Zealand continued to drop in 1987 and reached 138 thousand tons, a decrease by 14 per cent on 1986. The main destinations were countries in South East and Eastern Asia and Brazil. Exports recovered in 1988 and increased substantially (by 21 per cent) in the first nine months of the year. Buttermilk powder exports continued to decline in 1988. Australian exports of skimmed milk powder/buttermilk powder were at 77.4 thousand tons in 1987/88, down 13.7 per cent, reflecting decreased production levels. However, exports in 1988/89 were forecast to increase by 6 per cent to 82 thousand tons. Both New Zealand and Australia had committed their entire export availability for the remainder of the 1988/89 season.

110. Exports by the United States totalled 299 thousand tons in 1987, a decrease by 14 per cent on 1986, approximately 40 per cent of the shipments were made as food aid. Exports registered a sharper decline in 1988 as

they were estimated at around 200 thousand tons, a drop by more than 30 per cent with the share of food aid strongly reduced. As world stocks had dramatically dropped and output was down in many major countries, the United States skimmed milk powder market had had to cope in the spring of 1988 with a force rarely felt - strong export demand. International prices were now well above domestic support purchase prices, and in June 1988, agreements reportedly had been reached for domestic producers to commercially export around 45 thousand tons by February 1989 to Australia, France, Ireland, Mexico and Japan. Further large commercial exports were possible. In Canada, exports of skimmed milk powder fell slightly in 1987/88, as Canadian marketing programs had succeeded in creating new domestic outlets which were absorbing a growing volume of skimmed milk powder. However, taking into account the situation in the international market, domestic usage might decrease resulting in more exports in 1988/89.

111. On the import side, purchases by Japan increased slightly in 1987. Much of the powder imported was for use as animal feed. The principal sources of supplies were New Zealand, Australia and the EC. Imports increased substantially in 1988 as production remained relatively stable and as domestic demand was brisk.

112. Import demand 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. Imports of skimmed milk powder into Mexico reached some 140 thousand tons in 1988 as against 150 thousand tons in 1987, the principal supplier being the United States. Further decreases in imports were expected for 1989. Brazil, faced with a decline in domestic output and rapidly rising demand, became one of the world's largest buyers of milk powders and butter oil. Imports of skimmed milk powder into Brazil showed a very substantial increase in 1986, reaching some 156 thousand tons, the principal suppliers being the United States, the EC and New Zealand. However, total imports declined to about 98 thousand tons in 1987 and to only 30 thousand tons in 1988 as higher retail milk prices limited consumption. However, imports were expected to recover in 1989.

113. The reduction in supplies of skimmed milk powder available for export in 1988 together with a strong increase in prices, caused serious concern to a number of importing developing countries. It seemed unlikely that imports could be maintained at the level of recent years in 1989/90. Although reduced supplies of skimmed milk powder could to some extent be replaced by whole milk powder, this required technological changes in the recombining industry, entailing increased retail prices and possible reaction by consumers.

Food aid

114. Food-aid deliveries of dairy products consisted mainly of skimmed milk powder and anhydrous milk fat (Table 5). 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

TABLE 5

Share of Food Aid in Total Exports for Selected Countries

	Total exports			Food aid			Food aid/ Total exports		
	1986	1987	1988	1986	1987	1988	1986	1987	1988
	Metric tons						Per cent		
				<u>Skimmed Milk Powder</u>					
Australia	74,400	67,600		400	300		0.5	0.4	
EC	268,000	390,000		98,000	110,000		36.6	28.2	
Switzerland	8,400	10,300		700	800		8.3	7.8	
United States	366,000	298,800		148,600	126,800		40.6	42.4	
TOTAL	716,800	766,700		247,700	237,900		34.6	31.0	
				<u>Whole Milk Powder</u>					
Australia	38,000	43,100		70	20		0.2	0.1	
Switzerland	3,000	2,400		2,600	2,000		86.7	83.3	
TOTAL	41,000	45,500		2,670	2,020		6.5	4.4	
				<u>Anhydrous Milk Fat</u>					
Australia	23,800	13,100		100	-		0.4	-	
EC	119,500	148,000		29,000	19,000		24.3	12.8	
TOTAL	143,300	161,100		29,100	19,000		20.3	11.8	

United States and the EC. However, for 1989, shipments under food-aid programmes were forecast to contract even more than total exports. The reduction in food-aid shipments by the United States had been the result of lower supply. As regards skimmed milk powder, foreign donations by the United States decreased to 127 thousand tons in 1987 but still remained at high levels. A further substantial decrease was registered in 1988. Sharply reduced uncommitted stocks currently on hand were likely to curtail foreign donations in 1989 and 1990.

115. The EC has since the early 1980's cut the share of milk products in favour of 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 1988, and those of butter oil from 45 thousand tons to 25 thousand tons. In the first nine months of 1988, actual food-aid deliveries by the EC amounted to 83 thousand tons of skimmed milk powder in relation to 79 thousand tons delivered in the corresponding period of 1987.

Stocks

116. Total stocks of skimmed milk powder in the EC, North America and Oceania of approximately 92 thousand tons at 1 October 1988 were down by as much as 90 per cent from one year earlier. The decrease in stocks recorded at the end of 1988 was primarily accounted for by the sharp decreases in stocks in the EC and in the United States. Thus, surplus stocks had been eliminated in 1988.

117. In March 1987, the EC introduced limitations on intervention purchases of butter and of skimmed milk powder. Offers of skimmed milk powder to public intervention decreased very sharply in 1987. Community public stocks at the end of December 1987 totalled 473 thousand tons, a decrease of 39 per cent as compared to their level at the end of 1986. They continued to decrease rapidly and totalled only 7 thousand tons on 15 December 1988. Thus, at the end of 1988, there were hardly any uncommitted public stocks of skimmed milk powder, although private stocks appeared to have increased.

118. In Oceania, stocks did not register substantial changes in 1988 and were expected to remain at negligible levels throughout 1989. Surplus skimmed milk powder stocks in the United States had been all but eliminated.

International prices

119. The Committee of the Protocol Regarding Certain Milk Powders raised the minimum export price for skimmed milk powder and buttermilk powder from US\$825 to US\$900 per ton f.o.b. with effect from 23 March 1988 and again to US\$1,050 per ton f.o.b. with effect from 21 September 1988.

120. International prices of skimmed milk powder showed a steady improvement throughout 1987 and 1988 and world demand remained strong. As available supplies for export became more restricted in the EC, New Zealand

and the United States, prices rose rapidly. In early 1988, good qualities for human consumption of skimmed milk powder were traded at prices between US\$1,300 and US\$1,400 per ton f.o.b. During the second half of 1988, prices continued to strengthen and fluctuated between US\$1,900 and US\$2,270 per ton f.o.b. in the fourth quarter. Thus, international prices of skimmed milk powder more than doubled from December 1987 to December 1988 and at the end of 1988 they were substantially higher than those of butter and butter oil. The market reflected the effects of the tightening supply situation and was expected to remain firm in 1989. However, prices might increase at a slower pace.

Whole Milk Powder

Production

121. Aggregate output of whole milk powder, closely related to specific demand, continued to expand in 1988, reaching 2.18 million tons, 4.4 per cent more than in 1987. Production increased in all regions, but most strongly in Oceania and the EC. However, there was smaller production in some European countries outside the Community due to reduced supplies of milk for processing. World production of whole milk powder was expected to expand further in 1989 as demand remained strong, giving a significant incentive to expand production.

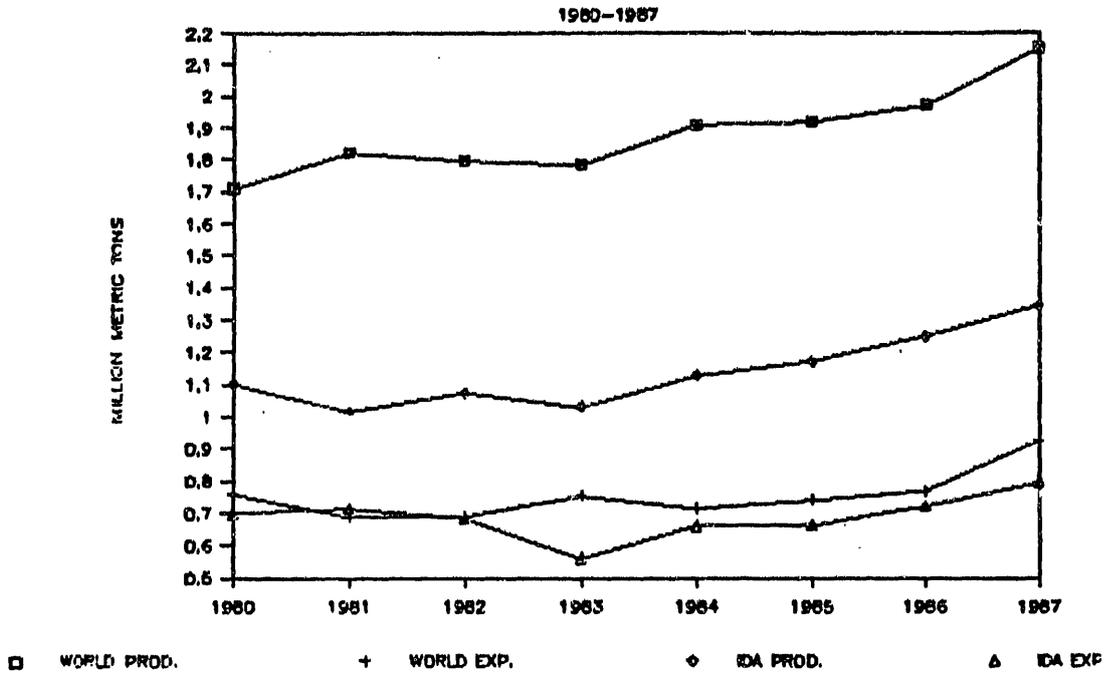
122. Output in the EC showed an increase of the order of 8 per cent in 1988 and amounted to about 960 thousand tons. In New Zealand, production of whole milk powder decreased in calendar year 1987 by 16 per cent to 158 thousand tons. However, in the 1987/88 season, output increased by 9.5 per cent to 171 thousand tons and for the 1988/89 season a significant further expansion was planned, depending on actual market developments in this sector. In Australia, production was 63.7 thousand tons in 1987/88, down slightly on 1986/87 production of 65.3 thousand tons. Output in 1988/89 was forecast to increase by around 10 per cent to 70 thousand tons in response to the continuing trend in international market demand. Production in Finland amounted to 21 thousand tons in 1988 in relation to 25 thousand tons in 1987. Production was forecast to decline further in 1989.

Trade

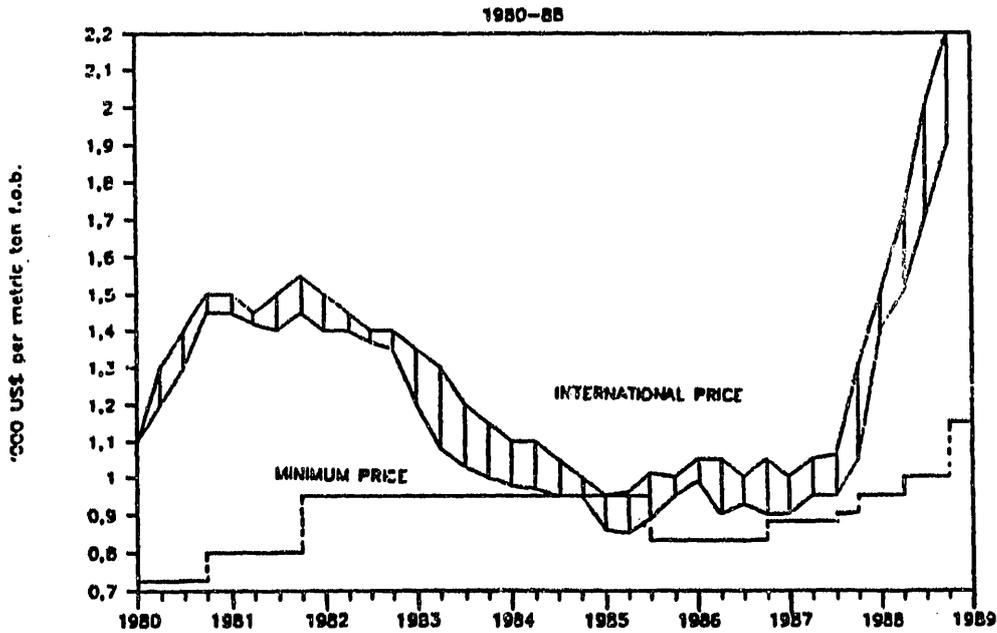
123. Whole milk powder exports continued their upward trend in 1988 and were around 975 thousand tons reflecting a strong import demand. They were expected to grow further in 1989, however most likely at a more modest rate than in 1988. Exports by the EC showed an appreciable increase to reach some 600 thousand tons, around 61 per cent of the world exports, the EC's share of world exports remaining unchanged compared to 1987.

GRAPH V - WHOLE MILK POWDER^{1/}

WMP PRODUCTION AND EXPORTS



WHOLE MILK POWDER PRICES



^{1/} Source: see explanatory notes on page 1

124. Exports from New Zealand, the world's second largest exporter, decreased to 160 thousand tons in 1987 due to limited supplies of milk for processing. However, they recovered in 1988 and were close to 170 thousand tons. The main outlets were South and East Asia and South America. Australian exports of whole milk powder in 1987/88 declined to 49.6 thousand tons as against 51.5 thousand tons in 1986/87. However, exports in 1988/89 were forecast to increase substantially (by around 15 per cent) to 57 thousand tons reflecting increased production levels. Due to continued strong demand, both New Zealand and Australia had committed their entire export availability for the remainder of 1988/89 season. Exports from Finland, which went exclusively to the USSR, amounted to some 20 thousand tons in 1988, a decrease by 26 per cent due to the decline in production. Exports were forecast to decrease further in 1989.

125. On the import side, whole milk powder purchases of the developing countries reached the record level of 650 thousand tons in 1988, an increase by 11 per cent over 1987. Owing to the rising demand of the developing countries, whole milk powder had become the most important item in terms of volume in international dairy products trade in recent years. This increase in whole milk powder purchases at a time of rising prices and growing foreign exchange difficulties of many importing countries appeared to reflect a certain amount of precautionary buying in anticipation of further rises in prices. Moreover, when international prices of skimmed milk powder temporarily exceeded those of whole milk powder, certain users switched to the latter.

International prices

126. The Committee of the Protocol Regarding Certain Milk Powders raised the minimum export price for whole milk powder from US\$950 to US\$1,000 per ton f.o.b. with effect from 23 March 1988 and again to US\$1,150 per ton f.o.b. with effect from 21 September 1988.

127. International prices of whole milk powder showed a steady improvement throughout 1987 and 1988. Early in 1988, whole milk powder was traded at prices around US\$1,400-US\$1,500 per ton f.o.b. During the third quarter of 1988, prices ranged between US\$1,700 and US\$2,000 per ton f.o.b. and strengthened further in the fourth quarter, fluctuating between US\$1,900 and US\$2,000 per ton f.o.b. in December 1988. Thus, the market remained firm, the supply situation was tight and prices were likely to increase further.

Other Dairy Products

Whey in powder or block or concentrate

128. A rational utilization of whey has become a great challenge to the dairy industry, and the commercial importance of whey would most likely increase. At the end of the eighties, roughly one quarter of the world milk production was devoted to cheese manufacture. Only about one half of

the solids in the milk being retained in the cheese, the other half would finish up on whey. Most of this whey was still disposed of as feed or as waste. To dispose whey as waste has met with environmental problems and the industry has been looking for commercial uses of whey. It should therefore be expected that supplies of whey products will increase rapidly over coming years.

129. The demand for whey and whey products for use as food and feed ingredients and in pharmaceutical applications remained strong in 1988, providing incentives to expand production in several countries. World production of whey powder concentrates and products increased in 1988 and could be approaching 3 million tons. This figure should be considered to be merely a rough estimate as statistics were incomplete, and include, apart from whey powder, a variety of milk concentrates, including lactose.

130. Community production of whey powder increased by about 2 per cent in 1988 compared to 1987, and reached approximately 870 thousand tons, thus accounting for half of world production. There was a similar increase in United States production. There was a further decline in production of whey concentrates in Canada, and minor changes for other countries. World production of whey powder was expected to increase in 1989, depending on developments in production of cheese and casein.

131. The market for whey powder remained firm in 1988, mainly due to the significantly reduced supply of skimmed milk powder and a consequent increased demand of whey powder in milk replacers. In the United States, prices reached a peak of US\$660 per ton in October 1987 but fell to around US\$550 per ton towards the end of the year. Whey powder prices have traditionally been subject to seasonal variation, with a peak in the autumn. In 1988, the peak occurred already in July, with prices both in Europe and the United States culminating just above US\$600 per ton. Prices fell later in the year. In light of expectations of continuing reduced supplies of skimmed milk powder coming on to the market and further expansion in demand for whey as a food and feed ingredient, the world market for whey powder was expected to remain firm in 1989 with significantly higher prices than in previous years, but traditional seasonal variation in prices would most likely persist.

Concentrated milk

132. After having declined for two consecutive years, world production of condensed milk recovered in 1988, to 4.55 million tons, an increase by 1.2 per cent over 1987. Production of condensed and evaporated milk in the EC increased by 5.5 per cent to 1.37 million tons. Output in North America at 1.03 million tons showed an expansion of 3.8 per cent over 1987. However, production declined in Oceania and remained relatively stable in the USSR.

133. After having reached a peak of nearly 1 million tons in 1985, world trade in condensed milk declined rapidly reaching only a bit more than half of that level in 1987, or some 570 thousand tons. However, overall sales recovered in 1988 and amounted to 614 thousand tons, an increase by some

8 per cent on 1987. Canadian exports registered a dramatic fall from 76 thousand tons in 1985/86 to 20 thousand tons in 1987/88. A further decrease in exports was expected for 1988/89. EC exports declined also (by 11 per cent) from 432 thousand tons in 1986 to 387 thousand tons in 1987, but increased in 1988 by 8.5 per cent to 420 thousand tons. Imports into developing countries which had been declining between 1985 and 1987 recovered also in 1988 and totalled 540 thousand tons compared to 517 thousand tons in 1987, thus representing the bulk (about 88 per cent) of world trade in this product.

134. Condensed milk prices remained unchanged throughout 1987, with wholesale prices in Europe and North America ranging from US\$1,200 to US\$1,500 per ton canned product. In 1988, prices were raised first by 5 per cent in May and by another 4 per cent in December.

Casein

135. The downward trend in world casein production persisted in 1988, and total production fell to 224 thousand tons, 2.2 per cent less than in the previous year. An 8 to 10 per cent decline was forecast for 1989.

136. Community production of casein was estimated to have increased. However, EC production was projected to decline in 1989 as producers reacted to decreased export prospects and tighter milk supplies. Higher skimmed milk powder prices resulted in stronger competition for supplies of raw material for processing into casein. Furthermore, the Community production subsidy on casein was reduced in October 1987, in June 1988 and in January 1989; under a new regime on granting aid for skimmed milk processed into casein, the aid would be restricted to casein for specific uses as from 1 March 1989; thus, Community casein producers were facing substantially increased production costs. New Zealand production of casein, which in 1986/87 was severely influenced by reduced milk supplies recovered appreciably in 1987/88, when it reached the average level of recent years, namely 65 thousand tons. However, with planned skimmed milk powder production about steady, casein production would be reduced by around 8 per cent to 60 thousand tons in 1988/89. Polish production of casein, at 20 thousand tons in 1988, was sharply down (by 20 per cent) on 1987. Little change was forecast for 1989.

137. Stocks of casein were very low at the end of 1988 and supplies depended almost entirely on current production early in 1989. World exports declined from 168 thousand tons in 1987 to 141 thousand tons in 1988, with reduced supplies both to the United States and the Community markets. Two thirds of the decline in world exports accounted for the sharp drop (by 17 per cent) in United States imports in 1988. United States imports were estimated to show a further decline in 1989.

138. The market situation which throughout 1987 and 1988 was characterized by tight supplies and firming prices, was continued in early 1989. The reductions on several occasions of Community producer subsidies for casein, the high skimmed milk costs and the depreciation of the United States

dollar also contributed to higher prices in international markets. At the beginning of 1988 casein quotations had reached a level of almost US\$150 per 100 lb. or US\$3,230 per ton, which was 50 per cent higher than a year earlier. In December 1988, prices were reported to have sharply increased to about US\$5,600 per ton, almost double the price recorded one year earlier. A continued tight supply situation might entail further rises in casein prices in 1989.