

# GENERAL AGREEMENT ON TARIFFS AND TRADE

RESTRICTED

DPC/W/67  
27 February 1987  
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International Dairy Arrangement

INTERNATIONAL DAIRY PRODUCTS COUNCIL

Status Report on the World Market for Dairy Products

Note by the Secretariat

Explanatory note

1. 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 1987.

2. In preparing the note, the secretariat based itself mainly on replies to questionnaires, other information submitted by participants and observers as well as various information arising from the operation of the Protocol Regarding Certain Milk Powders, the Protocol Regarding Milk Fat and the Protocol Regarding Certain Cheeses. Furthermore, the secretariat used supplementary information available to it from various national and international sources, notably documentation from the FAO, the 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.

3. The note provides information on production, trade, prices, consumption and stocks for milk and principal dairy products and covers developments up to and including 1986, and the outlook for 1987. The note should be read in conjunction with the statistical information contained in the following documents:

- |                  |   |
|------------------|---|
| DPC/W/66         | - Milk Deliveries and Production - Statistical Note by the Secretariat      |
| DPC/P/W/32/Rev.4 | - Committee of the Protocol Regarding Certain Milk Powders - Summary Tables |
| DPC/F/W/22/Rev.4 | - Committee of the Protocol Regarding Milk Fat - Summary Tables             |
| DPC/C/W/30/Rev.4 | - Committee of the Protocol Regarding Certain Cheeses - Summary Tables      |

4. 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 in paragraph 3 above. It should be noted that the drafting of the present note was completed on 13 February 1987.

TABLE 1  
Levels of Minimum Export Prices

Pilot products	US\$/metric ton f.o.b.		
	since 1 October 1981	since 5 June 1985	since 2 October 1986
Skimmed milk powder	600	600	680
Whole milk powder	950	830	880
Buttermilk powder	600	600	680
Anhydrous milk fat	1,440	1,200	1,200
Butter	1,200	1,000	1,000
Certain cheeses	1,000	1,000	1,030

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. Note should be taken of the fact that new minimum prices for skimmed milk powder, buttermilk powder, whole milk powder and certain cheeses became effective on 2 October 1986. Minimum export prices must not be considered as market prices, but merely the floor price levels which the participants have agreed to observe.

Contents

	<u>Page</u>
Overview of the situation	4
The situation for individual products	14
Milk	14
Fresh milk products	21
Butter	22
Anhydrous milk fat	29
Cheese	30
Skimmed milk powder	33
Whole milk powder	38
Buttermilk powder	40
Other dairy products	40

## Overview of the Situation

### Some highlights of the economic situation in general

1. World merchandise trade continued to grow in 1986 at an annual rate of close to 3.5 per cent in terms of volume and 10 per cent in terms of value. Changes in exchange rates to levels perceived to be more in line with economic fundamentals, notably a depreciation of the dollar, a decline in interest rates and a fall in petroleum prices, which however recovered in the later part of 1986, facilitated the growth in trade. This growth was however less than earlier anticipated, as economic activity in some industrial countries responded less strongly than expected. For 1986, world production was estimated to have increased by some 3 per cent and this growth rate was expected to persist into 1987. Aggregate world merchandise trade was also expected to show a growth rate in 1987 similar to that of the previous year.
2. Trade performance of developing countries as a group, was again disappointing in 1986 and notably oil-exporting countries experienced a further decline in their exports and imports.
3. There was little change in the employment situation in 1986, with almost 8 per cent of the labour force remaining unemployed for OECD countries. The rate of unemployment for Western European countries was on average nearly 11 per cent. Unemployment in developing countries was difficult to determine because of data limitations, but it would generally appear that in many countries labour force grew faster than employment.
4. Both industrial and developing countries were very successful in curbing inflation in 1986 and it was expected that inflation rates would remain low in developed countries in 1987. Persisting deficiencies in the current account balance and declining reserves for a number of oil-exporting countries were expected to adversely affect their import demand also in 1987.

### World dairy situation

#### Highlights

5. - Total world milk output continued to increase at a rate of 1.5 per cent in 1986.
  - This increase was mainly due to increases in importing countries, such as India and the USSR.
  - A strong decline in international butter trade and a further accumulation of stocks, which in the European Communities alone reached 1.4 million tons at the end of 1986.
  - Some reduction in import demand for cheese and skimmed milk powder, notably in oil-exporting developing countries.
  - Export prices for butter and anhydrous milk fat remained very depressed throughout 1986, while those for cheese and milk powders showed slight improvements.
  - Renewed efforts made early in 1987 by the European Communities and the United States, to dispose of surpluses, were creating uncertainties in the world dairy market, notably in the case of butter.

Dairy policies

6. Over recent years, substantial efforts have been made by most participants in the Arrangement to contain milk production and deliveries. Also other countries, notably Canada and the United States have taken measures to limit their milk production. A wide range of measures have been applied and in several cases, in rather complex combinations. The choice of measures applied has been influenced by the characteristics of production and marketing structures and also by the political environment in individual countries. The measures aimed at controlling directly the quantity produced range from quotas per farm and quotas per dairy, to global quantities for how much may be marketed at a guaranteed price. The quotas may have been compulsory, applied on a permanent or trial basis or merely based on voluntary schemes for limiting milk supplies. Other measures have been applied with the aim to encourage qualitative improvements of the products and to adapt the product range to current trends in the market, for instance by revaluating the solids non-fat component of the milk.

7. Various measures related to milk prices have remained important elements in dairy policies for some time. In a number of countries, support prices, target prices and advance payments have been reduced in order to discourage a further increase in milk production, or as a necessary adaptation to deteriorating export returns. Quota systems have been made effective through the application of two-price systems, penalties on production in excess of quotas and levies on production collected to provide funds for market intervention and payments on losses on exports. Furthermore, some countries have been trying to provide disincentives to milk production by restricting feed supplies either through price measures or otherwise.

8. Significant amounts have been spent on various measures implemented in order to provide structural changes in the industry, such as dairy termination schemes, outgoer schemes and the limitation of herd size. Attempts have been made in order to assess and evaluate the results of the efforts made to contain milk production, but so far much of the work has remained inconclusive and more time and information is needed to arrive at clear conclusions.

9. It should nevertheless be said that the upward trend in production has been halted and may have been reversed through the implementation of measures to contain milk production and deliveries. In many countries in Western Europe and in Canada a variety of measures have been applied for some time and projections for 1987 were indicating a further reduction in production in these countries and also in the United States and Oceania.

10. The stated aims of dairy policies in the USSR and other countries in Eastern Europe were to increase the self-sufficiency ratio of milk and dairy products. In the case of Hungary, it was also a stated aim to produce agricultural products in excess of domestic requirements which would be exported to earn hard currencies. In the USSR and Eastern Europe, prices to consumers have been maintained at the same level for years, and might have remained at levels below current costs of production. If these prices were to be adjusted upwards, this might have an adverse effect on consumption at some stage and even result in the accumulation of surpluses, which may be offered for sale on the world market.

11. In several developing countries, particularly in Asia, high priorities have been given to production, marketing and consumption of milk and dairy products in agricultural and rural development plans. This has been in line with general aims of improving nutritional standards and diversifying agriculture in these countries. It has been aimed at increasing the self sufficiency of milk and dairy products, something which may have reduced the potential import demand. On the other side, the current market situation may have discouraged a development of dairy production for export, something which might very well be technically possible for a number of developing countries.

#### Milk and dairy production

12. In spite of a stagnation or even decline in milk production in many countries, total world milk production expanded by another 1.5 per cent from 1985 to 1986, then totalling 515 million tons (including sheep, goat and buffalo milk). This increase was in line with the long-term trend. Prospects for 1987 suggested a total world production of the same size as in 1986, as an expected decline in Western Europe and North America would be outweighed by further increases in the USSR and in India and other developing countries in Asia. However, ample availabilities of feed, low feed prices and the introduction of new techniques, such as the use of bovine growth hormones to dairy cows, may result in any forecasts for the next few years being less reliable. Much will depend on how effective production control measures will be in the near future.

13. Cow milk production accounted for some 90 per cent of total milk production in 1986; buffalo milk for 6 per cent and sheep and goat milk for 2 per cent each. The increase in total world milk production was mainly due to the increase in the production of cow milk, for which world production reached a level of 464 million tons in 1986. Milk production in the USSR rose by almost 2.5 per cent from 1985 to 1986; while the increase in the United States was 0.7 per cent and the European Communities 0.5 per cent. While Community production thus recovered from its low level of 1985, it nevertheless remained inferior to the levels attained in 1983-84. There was also further expansion in Indian milk production which was in 1986 rapidly approaching 40 million tons, with buffalo milk accounting for more than half of the total. When the third stage of "Operation Flood" will be concluded by 1990, Indian milk production might have reached a planned target of 52 million tons. Also for China and Indonesia further progress was reported in the milk production, although total output still remained at a modest level in these countries.

14. In most other countries, both developed and developing, changes in milk production were small, but declines were reported for a number of countries, such as the Western Europe countries outside the European Communities, Australia and Canada. New Zealand milk production (deliveries) maintained its upwards trend but at a slower rate (0.8 per cent) than in previous years. The most striking reduction in production took place in Poland, where 1986 milk production fell back to the average level of 1981 to 1983 as many private farmers had given up milk production because of an insufficient profitability. Adverse climatic conditions affected adversely feed supplies and consequently milk production in countries in Africa and South America. In Brazil, where persisting drought caused problems, the anti-inflationary programme entailed a price freeze and producers claimed that milk returns hardly covered transportation costs and milk deliveries were consequently reduced.

15. World production of butter was estimated to have reached 7.8 million tons in 1986. This was entirely due to the increase in Community butter production which rose by 150 thousand tons from 1985 to 1986 with very strong increases in the new member countries, Portugal and Spain. Community butter production thereby attained a level of 200 thousand tons above the average of 1981-1983. This increase could be only partly outweighed by declines in other regions and countries. Butter production was substantially reduced in Australia and New Zealand and in some European countries outside the Community. In the United States, butter production was high during the early part of 1986, but fell appreciably during the remainder of the year and finally there was a decrease of 4 per cent compared with the previous year.

16. Notably because of the increase in Community butter production and heavy stocks, butter supplies at the beginning of 1987 remained far in excess of market requirements and unless drastic measures were applied to dispose of the surplus, the butter market would remain a depressed one for a long time yet. However, forecasts for 1987 suggested a significant decline in total world butter production.

17. World cheese production reached a total of nearly 13 million tons in 1986. There were substantial increases from the previous year in cheese production of Australia, Canada, Finland and the United States of 4 to 5 per cent. Community production also rose by 1 per cent and Japan, Norway and Switzerland experienced increases of the same order. Cheese production in New Zealand fell by 9 per cent and those of Austria and Sweden by 7 and 3 per cent, respectively. A reason suggested for the decline in these countries was a bleak market outlook for their cheese exports. However, early in 1987, the demand for hard cheese and regional speciality cheeses seemed to be strengthening.

18. Community skimmed milk production increased by 10 per cent from 1985 to 1986, and there were substantial increases in Canadian and Japanese production. This was only partly outweighed by a decline in the production in Oceania, Canada, Sweden and Switzerland and world skimmed milk production rose by some 120 thousand tons to a total of 4.3 million tons in 1986. The high Community production in 1986 was considered to be rather accidental and it was expected that the 1987 production would be of a level of previous years. Efforts made to contain butter production in several countries were likely to entail a reduced production of skimmed milk powder in 1987 and total world production was consequently expected to decline. World whole milk powder production declined slightly from 1985 to 1986, in the latter year estimated to have reached 1.3 million tons. The decline was mainly due to a 7 per cent reduction in Community production and to reductions in Finland, Sweden and Japan, which was only to some extent outweighed by an increase of 5 per cent in the United States and relatively strong increases of around 15 per cent in Australia and New Zealand.

#### Consumption

19. The consumption of milk and dairy products showed some signs of recovery in 1986. Both in Europe and in North America, commercial disappearance of milk and fresh milk products increased, notably in the case of low-fat products. In the European Communities, fresh milk consumption increased by 0.3 per cent from 1985 to 1986 and for the United States demand for fluid milk was reported to be strong throughout the year.

Demand for standard milk declined by another 1 per cent in Canada, but demand for cream rose by 0.4 per cent and that for low-fat milk (including flavoured milk) increased by more than 4 per cent. Sales of low-fat milk constituted more than 60 per cent of Canadian consumption of fluid milk products. Butter consumption recovered slightly in a number of countries. There was further appreciable expansion in Bulgaria, Hungary, Poland and Japan. Various efforts made to stimulate butter consumption had some effect in European countries, and Community butter consumption increased by almost 2 per cent from 1985 to 1986 and almost regained its average level of 1981-83. Substantial quantities of butter were disposed of by discount sales in other Western European countries, but doubts were expressed as to whether there would be any lasting effects in terms of increased demand for butter, and the downward trend might not yet have been reversed. In Canada, butter consumption fell by another 3 per cent in 1986, and was expected to fall at a similar rate in 1987. The upward trend in United States butter consumption was maintained in 1986, with further increase of about 3 per cent and declining retail prices, economic growth and vigorous promotion was expected to bring about a further increase of 1 to 3 per cent also in 1987.

20. In general, cheese consumption expanded further in 1986, but there were considerable variations from one country to another. Community cheese consumption increased by only a bit more than 1 per cent in 1986, and preliminary information for other European countries suggested only minor changes. The major exception was Sweden, where cheese consumption for the first nine months of 1986 was 7 per cent below that of the corresponding period of 1985. Also New Zealand consumption of cheese was low in 1986, while Australian consumption recovered appreciably from its low level in 1985 and was in 1986 about one third above its average level for 1981-83. Further expansion in cheese consumption was reported for Japan, Canada and the United States. With overall increases at 7.5 and 4.3 respectively in the United States and Canada, it was notably demand for speciality cheeses that remained strong.

21. Total world consumption of skimmed milk powder was slightly reduced in 1986. A decrease in Community consumption of 7.5 per cent was only to a limited extent outweighed by increased consumption in some other European countries, Japan and North America.

22. The general trends prevailing in recent years were expected to continue in 1987. While total consumption of milk and dairy products may be more or less in line with production developments, the situation for individual product categories may be different. The outlook remained bleak for the butter market and it was feared that the many sales promotion efforts made would not have long lasting effects on the demand. Cheese consumption was expected to develop further, notably that of speciality cheeses, while there were some uncertainties as to further development in demand for Cheddar cheese. There were also a few clouds on the horizon in respect of skimmed milk powder, as demand for feed might continue to be affected by regulations of milk deliveries. However, the outlook for milk powders for human consumption was fairly promising at the beginning of 1987.

#### Trade

23. Trade in fresh milk products remained of less significance in 1986 with the value totalling between 40 and 50 million US dollars. The butter market remained very difficult throughout 1986 and that was also the case

for anhydrous milk fat for recombination purposes. An aggregated total for the five major exporting participants in the Arrangement showed that butter exports for the first nine months were down to two thirds of their level in 1985, and that the decline in Community exports accounted for three fourths of the fall in butter exports. Over the same period United States butter exports amounted to only 4 thousand tons, one sixth of the quantity exported in the first nine months of 1985 and in spite of considerable efforts to dispose of substantial quantities under the Food Security Act of 1985. Total world butter exports were estimated to have amounted to less than 600 thousand tons in 1986, less than three fourths of their level in 1985. Considerable sales at discount prices below the minimum, and by derogation under Article 7:1 of the Protocol Regarding Milk fat, of butter and anhydrous milk fat to the USSR and Brazil had been concluded in 1986 and deliveries would take place throughout 1987 and the early part of 1988. Hopefully, this might result in higher export figures, but at the same time vegetable oils were available in great quantities and at low prices and the competition from margarine and other fats remained strong. The international market for butter and anhydrous milk fat was therefore expected to remain very depressed still for some time.

24. A series of measures adopted by the European Communities early in 1987 in order to dispose of 1 million tons of butter throughout 1987 and 1988 would hopefully in the end provide some relief to the market. However, it was feared that Community exports of 400 thousand tons of old butter at heavily subsidized prices could create serious difficulties for other exporters in 1987 and 1988. Similarly, the new Dairy Export Incentive Program adopted by the United States in February 1987 and the offers subsequently made of 140 thousand tons of fresh butter and substantial quantities of non-fat dry milk, whole milk powder and Cheddar cheese to countries in North Africa, the Middle East and Central and South America, also caused serious concern among other exporters to these markets.

25. Total world exports of cheese declined for a second consecutive year in 1986, and were estimated to have reached some 865 thousand tons. Among major exporters, only New Zealand increased cheese exports in 1986. There were substantial declines in both Australian and Community exports and some decline in Canadian and United States sales as well. The decrease was mainly due to smaller imports by OPEC countries and other developing countries. However, towards the end of the year import demand showed signs of improvement as Iran was again buying Feta cheese and Brazil was in the market to import cheese. The immediate future might hold some hope for a better cheese market, but supplies remained plentiful and competition keen.

26. There was a decline of nearly 2 per cent in world trade in skimmed milk powder in 1986, with reduced sales by all major exporting countries, with the exception of Canada and the United States. It was notably government-to-government sales of non-fat dry milk to Brazil and Mexico and sales of feed powder to Austria and Israel that boosted United States sales. Also Canadian exports were able to benefit from stronger import demand in Latin American countries, notably Mexico and Peru. Imports into OPEC countries fell by 7 per cent from 1985 to 1986 and demand for feed powder was lower than before in Europe and Japan. Trade in whole milk powder increased slightly and import demand remained strong.

### Food aid

27. Food aid in dairy products had accounted for roughly one sixth of world dairy trade throughout the first part of the eighties. In 1985, food aid deliveries of dairy products were low mainly due to reduced Community donations which were only partly outweighed by increased United States donations. In 1986, there was a further reduction in donations of dairy products by the European Communities. In 1986 and 1987, provisions were made by the United State to increase food aid exports, but it was not known to what extent this might result in increased donations of dairy products.

### Stocks

28. Increased milk production and slack demand for some dairy products resulted in further accumulation of stocks in 1986. By the end of the year Community butter stocks had reached new record levels, in December 1986 amounting to nearly 1.45 million tons, up one third from a year earlier. Apart from the general increase in Community milk supplies, reduced production of cheese, whole milk powder and condensed milk, reduced sales of fresh liquid milk following the Chernobyl accident resulted in more milk being diverted to the processing of butter and skimmed milk powder which in turn boosted intervention stocks. Community skimmed milk powder stocks were at the end of 1986 at 800 thousand tons, one and a half their level one year earlier. Heavy dairy stocks, notably of butter in the European Communities and New Zealand meant that available supplies remained far in excess of market requirements and that markets would remain over-supplied and depressed in the near future. With increasing age, the quality, notably of butter, would be deteriorating, making it increasingly difficult to find market outlets. A recent contract concluded by New Zealand with Brazil for the sale of 50 thousand tons of butteroil was expected to bring a substantial relief to New Zealand stocks. Similarly, various measures under consideration in the Community aiming at a substantial reduction in butter stocks, at a total cost of 3.2 billion ECU's, might hopefully bring about some relief, which would however be felt only in a couple of years. For most other countries, dairy stocks at the end of 1986 were reported to have generally remained at or below the level of previous years without causing too much concern.

### International prices

29. New minimum export prices came into effect on 2 October 1986, in the case of certain cheeses (US\$1,030 per ton f.o.b.), whole milk powder (US\$880 per ton f.o.b.), skimmed milk powder and buttermilk powder (US\$680 per ton f.o.b.). The minimum export prices for butter and anhydrous milk fat remained unchanged at the levels at which they had been since 5 June 1985 (respectively US\$1,000 and US\$1,200 per ton f.o.b.). (Tables 1 and 2 and Graph 1.)

30. The minimum export prices of anhydrous milk fat and butter were provisionally suspended from 16 November 1984 to 31 May 1985. During that period around two hundred thousand tons of butter was sold at prices below US\$1,200 per ton f.o.b., with deliveries being made well into 1986. In 1986, a total of 50 thousand tons of butteroil and some 450 thousand tons of old butter were reported to have been sold at prices below the agreed minimum, by derogation according to Article 7:1 of the Protocol Regarding

Milk Fat, with deliveries to be made up to the middle of 1988. Moreover, certain offers for the sale of butter were reportedly made at less than the minimum price. Both butter and anhydrous milk fat prices remained very depressed in 1986, near or at the minimum export prices set under the Arrangement and there was almost no hope for improvement in the near future.

31. There was keen competition in several major markets and Cheddar cheese prices were under some pressure from the middle of 1986 on. Prices remained at or above the minimum prices. However, for a number of other cheeses demand was firming at the end of the year, apparently following increased purchases by Brazil and Iran.

32. Apart from some irregular movement in skimmed milk powder prices early in 1986, international prices for milk powders showed a slight but steady improvement throughout the latter part of 1986 and early 1987. There was some concern as to prices for feed powder in the coming months, but for powder for human consumption, prices were expected to remain clearly above the minimum prices in 1987, and even improve following an upswing in the economic situation in major importing countries.

TABLE 2

International Prices (1985-1986-1987)

Product	1985				1986			1987			
	January-March	April-June	July-September	October-December	January-March	April-June	July-September	October-December	January-March	April-June	July-September
Skimmed milk powder	600-650	630-700	685-800	750-800	812-850	650-740	740-800	750-800			
Whole milk powder	860-950	850-960	890-1,010	950-1,000	990-1,050	900-1,050	930-1,000	900-1,050			
Anhydrous milk fat	1,440-1,500	1,290-1,650	1,200-1,360	1,200-1,300	1,200	1,200	1,200	1,200			
Butter <sup>b</sup>	1,200-1,300	850-1,450	1,000-1,150	1,000-1,200	1,000	1,000	1,000	1,000			
Cheddar cheese	1,150-1,200	1,100-1,430	1,050-1,270	1,000-1,300	1,100-1,380	1,100-1,500	1,050-1,300	1,030-1,130			

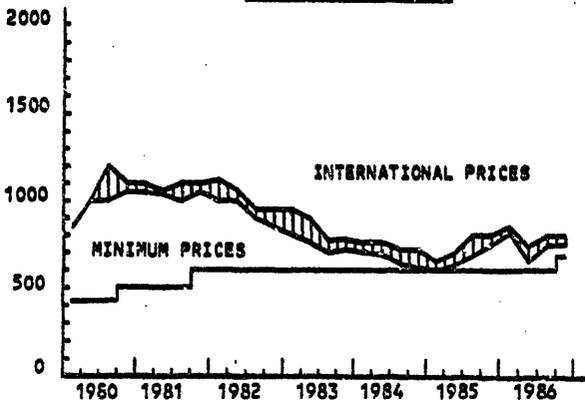
<sup>a</sup>Mainly skimmed milk powder for human consumption. Some sales of skimmed milk powder for animal feed made according to Article 3:5 of the Protocol Regarding Certain Milk Powders have been made at lower prices than the ranges indicated.

<sup>b</sup>The minimum export prices of anhydrous milk fat and butter were provisionally suspended from 16.11.84 to 31.5.85. During that period, around two hundred thousand tons of butter were sold at prices below US\$1,200/m.t. In 1986, some 450 thousand tons of old butter had been sold at prices below US\$1,000/m.t. f.o.b. and 50 thousand tons of anhydrous milk fat had been sold at prices below US\$1,200/m.t. f.o.b. by derogation under Article 7:1 of the Protocol Regarding Milk Fat.

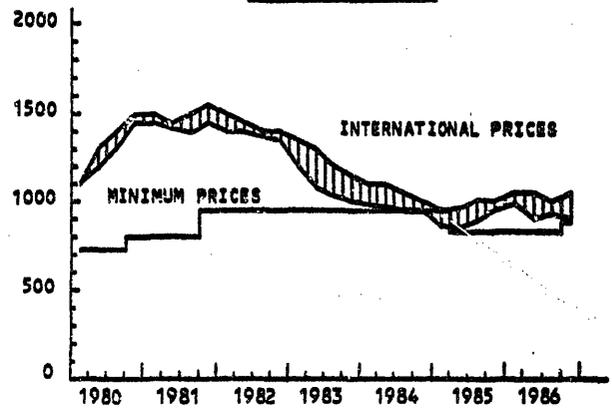
<sup>c</sup>Some sales of cheese below normal export quality made according to Article 7:2 of the Protocol Regarding Certain Cheeses have been made at lower prices than the range indicated.

INTERNATIONAL PRICES OF DAIRY PRODUCTS 1980-1986<sup>1/</sup>  
(US\$ per metric ton f.o.b.)

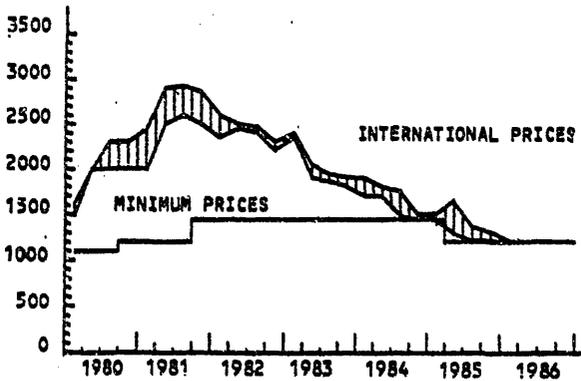
SKIMMED MILK POWDER



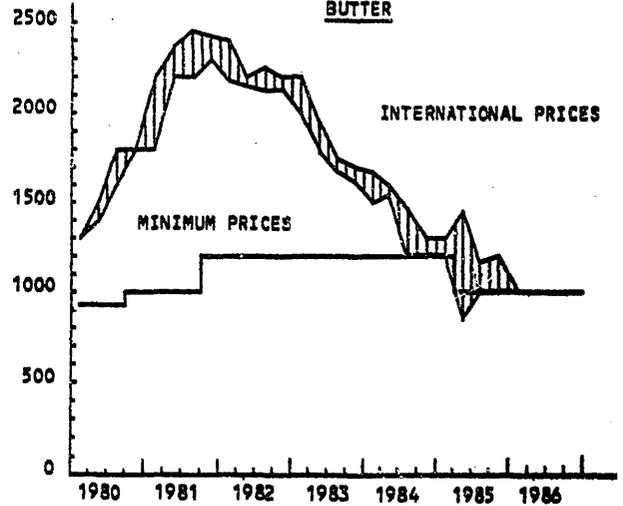
WHOLE MILK POWDER



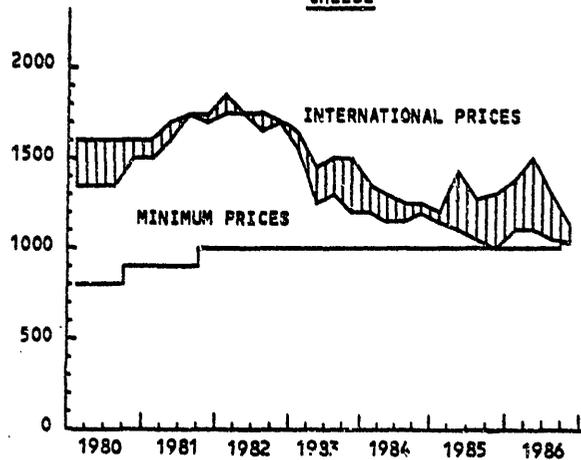
ANHYDROUS MILK FAT



BUTTER



CHEESE



<sup>1/</sup> See notes to Table 2.

## The Situation for Individual Products

### Milk

33. Total world milk production (including buffalo, sheep and goat milk) reached a new record level of 515 million tons in 1986, 1.5 per cent up on the previous year. Cow milk accounted for some 90 per cent of this total in 1986, reaching 464 million tons. The combined milk output for the countries accounting for the bulk of international dairy trade and a little more than two thirds of cow milk production showed an increase of almost 1 per cent from 1985 to 1986 (Table 3).

34. Forecasts for 1987 suggested a reduction in total milk production in Western Europe and North America which could however be outweighed by further increases in the USSR, India and other developing countries in Asia. Some uncertainty persisted, however, as to what effects continued ample availabilities of feed at low prices and the introduction of new techniques, such as the application of bovine growth hormones to dairy cows would have on the milk output. The world market will most likely remain over-supplied with dairy products even with no or only a slight increase in world milk production in 1987.

35. Milk production in the European Communities (excluding Spain and Portugal) totalled 107.3 million tons in 1985. This was 1.7 per cent less than 1984 production, showing the effects of the quota system introduced by the Community at the beginning of the 1984/85 fiscal year, under which milk deliveries were to be restrained to a "reference" level in the subsequent five years by way of a levy on milk deliveries in excess of that level. In terms of administration, the global reference level was shared out amongst member States. Member States had a choice as to how they, in turn, allocated their reference quantities. The allocation could be to individual producers (formula A) or to dairies (formula B). Milk deliveries over and above the established "quota" levels would be levied at a rate of 75 per cent under formula A and at 100 per cent under formula B.

36. For 1986, milk production was estimated to reach 107.8 million tons, an increase by some 0.5 per cent over the level in 1985. The reasons for the unexpected increase in production in 1986 were that the figure for 1985 had been quite low and that the climatic conditions had been quite good in parts of the Community. More important was the fact that producers had been willing to continue to produce even at the expense of the super-levy and that the quota system had probably been too flexible. Consequently, a flexible application of the super-levy arrangements, the realization by producers that a modest overshooting of their reference quantity was profitable, the persistent contraction of domestic demand and the continuing deterioration of the export market combined to boost use of intervention as a major outlet for some major dairy products.

37. Dairy cow numbers in the EC declined by 5.9 per cent in the past two years, to 24.3 million at 1 January 1986. It was forecast that a further reduction of 1 million head would have occurred by the end of 1987. However milk output has not declined at the same rate. The Commission assumed an average annual rate of increase in yield per cow of 1.5 per cent. Under the impact of quotas there had also been a slight increase in on-farm utilization of milk.

TABLE 3

Cows Milk Production, Rates of Change in Production, Yield  
and Dairy Cow Numbers in Selected Countries

		Milk Production (million tons)	Percentage Change from Previous Year		
			Production	Milk Yield	Dairy Cow Numbers
EC-10	1985	107.3	-2.7	+1.5	-2.8
Estimate	1986	107.8	+0.5	+2.5	-1.9
Forecast	1987				
USSR	1985	99.55	+0.3	+2.2	-1.0
Estimate	1986	102.00	+2.5	+3.0	-2.0
Forecast	1987				
United States	1985	65.24	+6.2	+2.9	+2.4
Estimate	1986	65.71	+0.7		
Forecast	1987				
Poland	1985	11.49	-2.0	+5.3	-4.0
Estimate	1986	10.80	-6.0	+2.0	-1.9
Forecast	1987				
New Zealand	1985	7.83	+1.7	+2.9	+1.9
Estimate	1986	7.80	-0.4		
Forecast	1987				
Canada	1985	7.48	-0.6	+1.5	-1.9
Estimate	1986	7.50	+0.3	+2.0	-1.9
Forecast	1987				
Japan	1985	7.38	+3.3	+1.5	+1.4
Estimate	1986	7.47	+1.2		
Forecast	1987				
Australia	1985	6.20	+0.2	+7.8	-5.3
Estimate	1986	6.17	-0.6		
Forecast	1987				

38. The 1986/87 farm price package, agreed in May 1986, left the quota limits and the target price for milk (ECU 27.84/100 kgs.) unchanged. The co-responsibility levy remained at 2 per cent of the target price. Contrary to the Commission's proposal, no change was made in the intervention prices for butter and skimmed milk powder. The price ratio between fats and solids-not-fat thus remained at 48:52. The super-levy was allowed to be collected twice a year, in order to check excess production early in the season.

39. In April 1986, a further reduction in the overall Community quota of 2 per cent was decided for the 1987/88 year and another of 1 per cent for 1988/89. To help achieve this, the EC had adopted an outgoers scheme aiming at taking farmers accounting for up to 3.2 million tons of milk out of production in 1986-88. Farmers undertaking to discontinue definitively all milk production were to be compensated at the rate of ECU 4 per 100 kgs. of milk annually for seven years. Member States were authorized to supplement this compensation payment according to various industry and regional factors. However, some elements of the scheme still remained to be determined.

40. The growing imbalance in the milk market in 1986 made further steps imperative. The EC Council of Ministers decided, on 16 December 1986, on an important package of reforms in the dairy and beef sectors. For the dairy sector, the main measures decided upon were as follows:

- (i) The 2 per cent cut in quota decided in April 1986 was maintained; it would be carried out by a voluntary abandonment of milk production scheme and the compensatory payment will be increased to ECU 6 per 100 kgs.
- (ii) An additional production reduction of 4 per cent would be implemented as from 1 April 1987, through a temporary linear suspension of the quota and a compensatory payment of ECU 10 per 100 kgs. Member States might increase this payment to ECU 12.5 per 100 kgs. for the year 1987/88. The ECU 10 compensatory amount was guaranteed for two years.
- (iii) Taking into account market prospects and stocks, an additional reduction of 2.5 per cent would be implemented for the 1988/89 production year, through:
  - the 1 per cent additional cut decided in April 1986, accompanied by the same conditions as in (i).
  - an additional temporary suspension of the quota of 1.5 per cent, compensated either as in (ii) or by an appropriate reduction of the co-responsibility levy.
- (iv) The supplementary levy applicable to deliveries beyond quotas was increased to 100 per cent.
- (v) Intervention buying for skimmed milk powder was suspended for the period 1 September-28 February, it being understood that the Commission would maintain the stability of this market.

41. In February 1987, the Council approved some proposals for dealing with surplus stocks of butter in 1987 and 1988. It was also announced that the Commission intended to proceed with a destocking programme relating to

butter. The new measures would be based on exports to certain destinations of 400 thousand tons in 1987, sales to animal feed industry of 200 thousand tons in both 1987 and 1988, non-food uses of 100 thousand tons in 1987 and the disposal of 130 thousand tons over two years through special action for EC consumers. Total disposal of stocks in 1987 should therefore be 765 thousand tons and 265 thousand tons in 1988. The overall cost of the measures would be in the region of ECU 3.2 billion.

42. Spain and Portugal joined the European Communities on 1 January 1986, though their integration with the Common Agricultural Policy was being phased over several years. Cow numbers in Spain increased slightly and yields went up by 1-2 per cent in 1984 and 1985, giving an average annual production increase for the two years of 1.9 per cent. Total production for 1985 was 6.4 million tons. The estimated total for 1986 was 6.5 million tons, an increase by some 2 per cent over 1985. Portuguese production increased by 2 per cent in 1985 to 1.06 million tons. A further increase of the same order was expected for 1986.

43. The two-tier pricing system as applied from the start of 1985, and other production restraint measures enacted by Finland continued to be effective. Final 1985 deliveries were down 3 per cent on 1984. This took annual production to below the 1981-83 average. Cow numbers continued the declining trend observed throughout the decade. Deliveries in 1986 were estimated to have declined by 1 per cent on 1985. It was forecasted that they would continue to decline in 1987. The current pricing system has been extended until the end of the 1987-88 farm year. Penalties for farmers exceeding their production quota have been raised for 1986 from FIM 1.60/litre to FIM 2.00/litre. The Farm Closure Act was revised in August 1986. The Act was originally enacted in 1974 and it provided a "farm closure" pension to eligible farmers, aged 55 years or more, who agreed to cease production and sell their farm. The changes made to the Act would allow the farmer to retain his land and return to production after six years of cessation.

44. Norwegian deliveries (including goat milk) declined by 4.5 per cent in 1985 to 1.9 million tons. A further decline was expected for 1986. This was attributed to the effect of the quota system, which was operating as intended. Consequently, it had been possible to increase the price paid to milk producers for the year beginning 1 July 1986. The quota limits remained unchanged.

45. The recent evolution of production in Sweden showed a 3 per cent decline in 1985. This appeared to have been the result of the two-price system introduced on a three-year trial basis in July 1985. For 1986, a further production decline of 5 per cent was estimated to 3.4 million tons. This was the result of a decline in cow numbers. Farmers who took part in the system were granted a full home market price for a quota equal to 92 per cent of the largest annual delivery from the farm in the base period 1981-83. For deliveries in excess of the quota the price paid was related to the export price obtained in the market. Those farmers who chose not to take part in the system received the home market price reduced by an export financing fee.

46. In Switzerland, some tightening of the quota system trimmed 1985 deliveries by 3 per cent to 3 million tons, only slightly above the 1981-83 annual average. However, it was estimated that deliveries in 1986 have

remained almost unchanged as compared to 1985. The overall milk quota was to be reduced in two stages by 750,000 tons to 3.05 million tons whereas currently allocated quotas total 3.125 million tons. The basic price for milk was raised by 5 centimes to 97 centimes/kg. from 1 July 1986. It is noteworthy that the reduction in deliveries in 1985 was ten times greater than the drop in total milk production, implying greater retention of milk on-farm in response to stricter quota restraints. This was largely used for calf feeding and as liquid skimmed milk for pig feed.

47. New Zealand milk production fell by 3 per cent in 1986, with the decline most marked in the second half of the year compared to the same period in 1985. Production in the first four months of the 1986-87 dairy season was affected by cold temperatures and heavy rainfall throughout the country. This was followed by summer drought in some areas. The adverse weather, combined with unfavourable market signals, has given rise to forecasts of a more substantial production drop in 1987. The milk limitation scheme adopted on a voluntary basis by the Dairy Board was expected to account for a 1-2 per cent reduction in milk output for manufacturing.

48. The 43.8 per cent cut in the milk price paid to producers announced in June 1986 was partially alleviated by a 30 per cent supplementary payout later in the year, but the net cut in milk price remained around 36 per cent. Dairy farm incomes for the current season were around 14 per cent lower than in the previous season. This was expected to lead to lower expenditure on inputs such as fertilizers, which would further affect production.

49. Australian milk production fell by about 1 per cent in 1986. This rate of change was forecast to continue in the first quarter of 1987, though overall the year's production total was expected to be close to the 1986 figure.

50. The new dairy policy introduced for 1986-87 aimed at the development of a more efficient market-oriented dairy industry. It was accompanied by some increase in milk prices to producers, which were partly benefiting from higher levies on milk and milk products sold on the home market and from more favourable export returns following the depreciation of the Australian dollar.

51. Following a 3 per cent rise in 1985 (to 7.38 million tonnes) production in Japan continued to increase at a similar rate in the first half of 1986. From August, however, the increase stopped, turning into a 1 per cent decline in the fourth quarter. For the year as a whole, however, the 1986 result was still 1 per cent up on 1985, at 7.52 million tonnes. The 1987 forecast is for a return to around 7.38 million.

52. Major influences on output were the strengthening of the voluntary quota scheme, premiums for extra slaughtering of dairy cows and a reduction of 2.8 per cent in the guaranteed price for manufacturing milk for fiscal year 1986 (April 1986-March 1987). Underlying these policy measures was a lessening in the long-term growth in demand for liquid milk.

53. 1986 milk production in South Africa declined, on the basis of preliminary figures, to 2.2 million tonnes - a drop of some 4 per cent on 1985. Forecasts for 1987 were for stability or a small increase to slightly under 2.3 million.

54. In Argentina, the price per kilogram of fat was increased by 25 per cent from the beginning of 1986, and this increase was confirmed for another year when the price convention between producers and the industry was prolonged in June 1986. Milk producers were thereby encouraged to raise the productivity, carry out further investments and keep up deliveries. Together with good feed supplies, this resulted in a further increase in milk production. There was also a slight recovery in Uruguayan milk production in 1986, which however remained below the 1981-83 average.

55. In Bulgaria, where milk production had been low in 1985, there was some recovery in State procurements in 1986. There was a further reduction of about 2 per cent in the dairy herd but yields improved. Similar developments occurred in Hungary and Romania, but a strong decline of 5 per cent in the dairy herds was only partly compensated for by improved yields and total milk production fell from 1985 to 1986. There was also a further strong decline of 6 per cent in milk production in Poland in 1986, following a hard winter, reduced cow numbers and many small private farms giving up dairying.

56. Also in Yugoslavia, small farmers were reported to be giving up milk production and milk deliveries were estimated to have fallen by 3 per cent from 1985 to 1986. No significant change in milk deliveries took place in the German Democratic Republic and Czechoslovakia as a decline in cow numbers was compensated for by improving yields.

57. In the USSR, the number of cows was again reduced in 1986 by between 1 and 2 per cent. However, yields continued to improve and milk production rose appreciably from 1985 to 1986 and were expected to increase further in 1987. According to the Twelfth Five-Year Plan, milk deliveries to the State by collecting and State farms, should be increased to 106 to 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.

58. There was a further increase in milk production in the United States in 1986, of 0.7 per cent compared to 1985. During the early part of 1986, milk deliveries remained high, but started to fall towards the end of the year. Ample feed supplies and prices of feed grains and concentrates remained low and obviously stimulated production. However, in April the Dairy Termination Programme came into operation which throughout the year seemed to attain some of its objectives and production fell below the level of one year earlier during the latter half of the year.

59. Forecasts for 1987 suggested a decline in milk deliveries of between 1 and 3 per cent. However, some doubts were expressed as to the reliability of these forecasts. Persisting ample feed supplies and favourable milk-feed price ratios might provide incentives to raise the productivity and increase yields. The application of bovine growth hormones to dairy cows could also stimulate production significantly. Although 450 thousand dairy cows were slaughtered during the first period of the Dairy Termination Programme, the United States dairy herd fell by less than 300 thousand. At 1 January 1986, the number of replacement cows totalled 4.8 million, the highest level since more than twenty years, and the number remained high throughout the year. Cow numbers might be significantly reduced in 1987, following a further decline in the number of herds and some disincentive provided by a threat of reducing the milk support price.

60. In Canada, the number of milk producers declined by 5 per cent from 1985 to 1986, and cow numbers by 2 per cent. There was a further improvement in yields and there was a slight increase in total milk sales off farms. Several provinces exceeded their quota allocation and had to pay penalties. Expectations for the 1986/87 dairy year were for continued stability in the Canadian dairy sector. The federal government extended its commitment for the subsidy of 6.03 Canadian dollars per hectolitre of standard industrial milk until 1990-91. This subsidy was payable on all industrial milk produced for domestic requirements and on 1.1 million hectolitres of Special Export Programme Milk. Some concern was expressed as to yields and productivity in 1987, as silage quality was lower than usual and as a possible increase in penalties and levies to discourage over-quota production and to provide funds to cover export costs could reduce the profitability of milk production. The industrial target return was raised from 45.68 to 46.30 Canadian dollars per hectolitre of standard milk, effective August 1986 and might be maintained for one year. It might however be changed before then, if a new pricing mechanism were to be adopted as a result of an ongoing review of the long-term dairy policies and the relevant support price mechanisms.

61. Milk production in Austria remained at the level of previous years in 1986, but there was a slight decline of less than half a per cent in milk deliveries, indicating a further increase in on-farm use of milk to avoid the payment of excess-quota penalties. A decline in the number of cows was compensated for by an increase in yields.

62. Among the developing countries, an increase in milk production was recorded solely by certain Asian countries where dairying continued to occupy an important place in nutrition and farm income improvement. In India, by far the largest producer in the developing world, the dairy co-operative societies under the "Operation Flood" project increased milk production by nearly one third in 1985/86. At around 40 million tons, Indian output was nearly one half the total Asian production of milk and one third the aggregate for all developing countries. China's production of milk which was only 4.7 million tons in 1985, rose by another 15 per cent in 1986, as a result of increased cow numbers and more emphasis in the national plans on the nutritional value of milk consumption. In Indonesia also, milk production showed a rapid increase, but from a very low base. On the other hand, demand and production generally stagnated in Africa. In Latin America, though overall production had slightly receded, demand for milk products outpaced and made larger imports necessary. Mexican milk output was about 15 per cent higher in 1986 due to a sharp increase in cow numbers and good pasture and feed conditions, but Brazilian output was slightly below the 1985 level as a result of drought conditions and a price freeze imposed by the Government as part of its economic package.

#### Consumption

63. Demand for fresh liquid milk for human consumption remained stagnant in 1986, and demand for milk for animal feeding slackened because of good availability of cheap substitutes and also because some whole milk was held back on farms and used as feed, in order to avoid payments on milk produced in excess of quotas. The major exception was constituted by some developing countries where demand for fresh milk was increasing but from rather low levels. This reflected political efforts to raise nutritional standards. However, the main explanation of the increase in milk consumption in many developing countries remained the population growth and urbanization.

64. In developed countries, a tendency to move away from whole milk to skimmed milk had been apparent for some time. However, recent studies suggested that partially skimmed milk was gaining an increasing share of the market and might in several countries soon be accounting for one half of fresh milk consumption. In some countries, such as the Federal Republic of Germany and the United Kingdom, there was a strong increase in the consumption of cream, apparently because of increased use of cream for cooking. The Chernobyl accident had at least temporarily adverse effects on the consumption of fresh milk in many European countries in the early summer of 1986, but the confidence in fresh milk as a safe and healthy element of nutrition was rapidly regained. The generally favourable developments in the consumption of dairy products in the United States also benefited whole milk sales. Heavy promotion, declining retail prices and general economic recovery were thought to have stimulated demand for liquid milk. Health considerations may also have changed slightly in favour of fresh milk. Commercial sales of liquid milk continued to increase in Canada, with 2 per cent partly skimmed milk accounting for more than 60 per cent of the market in 1986.

65. The principal area of growth in consumption was Asia, both developed and developing countries. Japan expected the trend of slowly increasing consumption to continue. The government was subsidizing a campaign to promote it and maintained a school milk subsidy. Thailand maintained a government sponsored promotion campaign aimed specifically at adolescents. Consumption had risen steadily in recent years in India and China.

66. In Eastern Europe and the USSR, government policies had involved substantial subsidies to keep consumer milk prices stable. In the USSR the current retail price of liquid milk in 1986 was little more than half of the total cost of production and marketing. Prices of milk (and major milk products) had remained virtually unchanged for twenty-five years. As a result demand had remained strong, sometimes ahead of supply.

#### Fresh Milk Products

67. The production of fresh milk products (e.g. yoghurt, flavoured milk, cream, etc.) continued to expand in 1986 and appeared to be maintaining its growth in 1987. In the developed countries of Europe and North America these products constituted the fastest-growing sector of demand for dairy products in recent years. The growth might have slackened in some older-established markets but the general trend remained positive.

68. In the European Communities, 1986 output of fresh milk products other than whole and skimmed milk exceeded the equivalent of 9 million tons of milk. Around 6 million tons of this was cream and the rest yoghurt, flavoured milk, etc. There were indications that the fashion for low-fat products would be superseded by a preference for the taste qualities of full-fat products.

69. In Norway, yoghurt and cream production and consumption continued to increase in 1986, but remained relatively stable for other products groups. The situation was fairly static in Sweden and Finland. In Switzerland, production and consumption of flavoured milk products increased by nearly 50 per cent in 1986. In Japan production and consumption of all types

increased substantially in 1985. New Zealand output of fresh milk products (all types) increased further in 1986. In the United States where consumption of yoghurt had increased by 120 per cent from 1974 to 1984, fresh products showed continued demand growth in 1986. In Canada commercial sales of cream, flavoured milk and yoghurt were up on 1985/86 and were projected to increase further in 1986/87.

70. Total world trade in fresh milk products (including fresh milk) might have reached 150 thousand tons in terms of milk equivalent in 1986 with a value of 40 to 50 million US dollars. For comparison, it might be mentioned that intra-Community trade in fresh milk and products amounted to more than 2.5 million tons in 1984. Both for Australia and New Zealand exports of fresh milk and products remained steady over recent years, around 10 to 12 thousand tons in both cases, but efforts were made to develop demand for a variety of fresh dairy products which could hopefully produce results in the near future. In New Zealand there was a sharp increase of more than 60 per cent from 1983 to 1984, in the production of fresh milk products, including ice-cream, yoghurt and cottage cheese. Efforts were made to develop demand for ultra heat treated (UHT) milk products. In 1984, New Zealand sales of flavoured milk expanded well in the Caribbean, Western Samoa and Guam. However, the exclusion of New Zealand products from the New Caledonian market more than outweighed the progress achieved elsewhere. New Zealand introduced a one litre pack of UHT cream which had been successfully marketed in the Caribbean, the Pacific, South East Asia and the Middle East. Efforts had been made to develop the flavoured milk sector, and a new product Fruyo - a combination of yoghurt and fruit juice - was introduced to the domestic market early in 1985 and plans had been made for export sales of the product. Other dairy exporting countries were also active in developing recombining industries in developing countries, notably the Middle East. The purpose was to create new markets for anhydrous milk fat and milk powder to be used for the manufacture of yoghurt, flavoured milk and other dairy products, and improving nutritional levels in developing countries.

## Butter

### Production

71. World production of butter and butteroil was estimated to be 7.8 million tons in 1986, which was about 2.4 per cent up from a year earlier. In the EC, butter output in the first nine months of 1986 amounted to 1.64 million tons, around 8 per cent more than in the corresponding period of 1985. For the year 1986 as a whole, butter production was estimated to have totalled 2.15 million tons, an increase by 6 per cent in relation to 1985. In New Zealand, production decreased by 11 per cent in the first three quarters of 1986, totalling 129 thousand tons and output in calendar year 1986 would be below the 1985 level. In Australia, butter production in the first nine months of 1986 dipped by nearly 23 per cent to a level of 33.4 thousand tons, mainly due to increased output of non-Cheddar cheese and whole milk powder. Production in calendar year 1986 was below the 1985 level.

72. In Finland, butter production in the first nine months of 1986 was 1.8 per cent lower than in the corresponding period of 1985. For the year 1986 as a whole, production might reach 71 thousand tons, a slight decline

(by 1 per cent) compared to 1985. Polish output of butter in the first three quarters of 1986 was 7.7 per cent lower than in the corresponding period of 1985; for the whole year, production might have declined by the same rate in relation to 1985. In Sweden also, butter production fell by 20 per cent in the first nine months of 1986; for the whole year, production might have decreased to 36 thousand tons as compared to 42.5 thousand tons in 1985. Trends in other participating countries varied somewhat.

73. In the United States butter production might have decreased by 5 per cent to 544 thousand tons in 1986 as compared to 1985. Production of butter in Canada, totalling 77.5 thousand tons in the first nine months of 1986, was 4.3 per cent higher than its level in the corresponding period of 1985. However, for the year as a whole, production might have showed a slight decrease. USSR production rose by 0.5 per cent reaching a level of 1.6 million tons in 1985. However, in the first ten months of 1986, it increased by 5 per cent as a result of increased milk deliveries and higher yields. Output of butter in Democratic Republic of Germany showed an increase from 309 thousand tons in 1984 to 316 thousand tons in 1985, but remained relatively stable in 1986.

74. As a result of larger milk output in several developing countries, especially in India and China, butter production increased by a slight margin.

75. The outlook for 1987 was for butter output to decline by 3 per cent in relation to 1986. With the projected decrease in EC milk output in 1987, butter production was expected to decline by 4.5 per cent, receding to the 1984 level of 2.01 million tons. In New Zealand, production of butter for the 1986/87 season was likely to decrease by 25 thousand tons to 225 thousand tons, in line with the expected decline in milk production and the anticipated slight increase in the production of whole milk powder. In Australia, production of butter was forecast to reach 73.6 thousand tons in 1986/87, a 3 per cent decrease compared to 1985/86 output (75.8 thousand tons). In Poland and Sweden, butter production might decline in 1987.

76. In the United States, butter production was forecast to decrease by 14 per cent in 1987 to 465 thousand tons. In the USSR and in India production of butter was expected to continue to increase in 1987.

#### Consumption

77. Total consumption of butter in the countries for which statistical information was available registered a slight decrease in 1986. However, there were indications that it would slowly increase again in a number of countries as a result of numerous measures adopted to promote its consumption.

78. In 1986, the EC continued its policy to encourage butter consumption with a view to reducing stocks. Special sales of cut-price butter within the Community such as sales to ice-cream and cake manufacturers and to non-profit-making institutions and bodies, were continued. Moreover, a campaign financed by funds from the co-responsibility levy was designed to expand consumption of dairy products. Community assistance to the milk and milk products distribution programme in schools was expanded covering

all the member States. In January 1987, it was decided that this aid would be granted also to those persons most in need when circumstances so warrant. Efforts were being made in the EC, in particular through sales at reduced prices, to make butterfat competitive with vegetable fats. The preference given to the latter apparently was due to either great differences of price in relation to butter or to certain consumer preferences. The Christmas butter scheme was not repeated for 1985/86 as the measure proved to be expensive and not effective in terms of increased butter sales. Instead, the Commission took additional measures on the sale at reduced prices of concentrated butter; various Community measures containing provisions to this effect had been adopted since 1972. In July 1986 a scheme was adopted under which old butter would be incorporated in animal feeds, after processing into butteroil. However, sales under this scheme were very limited. In January 1987, the Commission adopted a regulation on the emergency supply of butter to the most deprived persons in the Community. Under this scheme the intervention agencies should make available to welfare and charitable organizations butter for free distribution to the most deprived persons. The scheme would apply to butter which was taken into storage after 1 January 1986 and would run until the end of March 1987. The EC sold under special programmes 283 thousand tons in 1985 and sales in 1986 were estimated at 330 thousand tons, including sales of concentrated butter for cooking purposes at half the normal price. Total consumption of butter in 1985 was estimated at 1,638 thousand tons, as compared to 1,794 thousand tons in 1984. However, total consumption in the first three quarters of 1986 appeared to have increased and it was expected that for the year as a whole it would increase by 2 per cent in relation to 1985.

79. 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. Advertising campaigns were launched to promote butter consumption. In addition, charges were applied on imports of edible oils and fats in order to narrow the gap between the price of butter and other fats. Domestic consumption of butter, which amounted to 44.5 thousand tons in 1984, fell to 40.9 thousand tons in 1985 and declined by another 1 per cent in 1986.

80. In Finland, where consumption of dairy products, particularly butter, was high, the consumer price of butter was subsidized. This subsidy was granted on all butter produced in dairies or on farms. The price of margarine was increased by consumption tax in order to maintain a constant ratio between butter and margarine prices, but the ratio was being modified in favour of butter. Total consumption of butter increased by 11 per cent in 1985 to reach a level of 60 thousand tons. However, it appeared to have decreased to 53 thousand tons in 1986.

81. In Poland, butter consumption continued to recover in 1985 and 1986. With the discontinuation of butter rationing, consumption was expected to increase further.

82. In South Africa, consumption of butter continued to decline in the face of increased competition from margarine. Steps had been taken to foster butter consumption with the help of advertising programmes, and a special campaign was conducted during which the retail price of butter was subsidized from the Dairy Board's Stabilization Fund.

83. Until recently, butter prices in New Zealand were much lower than those of margarine. Following an increase in the retail price of butter, however, the two products were being sold at the same price. Consumption had been assisted by a promotional campaign undertaken by the New Zealand Dairy Board and by the introduction of two new butter products. Domestic consumption of butter remained stable at around 39-40 thousand tons a year; it was expected that it would continue to remain stable.

84. In Australia, domestic consumption of butter was expected to reach 58 thousand tons in 1986/87, a marginal increase on the level of consumption in 1985/86 (57.5 thousand tons). The Australian Dairy Corporation was endeavouring to promote consumption of butter within the context of a decrease in overall fat consumption in Australia.

85. In Austria, sales drives involving reduced butter prices were undertaken for social and economic reasons. Likewise, the army and hospitals could obtain butter at reduced prices throughout the year. Advertising campaigns to promote consumption, whether of butter or margarine, led to some increase in consumption during 1986. In the United States, total consumption of butter increased in the years 1982 through 1985 after several years of decline. The reasons for that earlier decline included competition between butter and margarine and competition between the various types of margarine depending on fat content. In order to bring down surplus stocks, a number of butter distribution programmes were launched. Total domestic consumption in 1985 was 567 thousand tons as compared to 551 thousand tons in 1984. However, consumption appeared to have declined somewhat in 1986. In Canada, aggregate consumption of butter at the end of 1985 amounted to 101.7 thousand tons, i.e., 1.5 per cent less than in 1984. However, consumption increased slightly in the first three quarters of 1986 in relation to the corresponding period of 1985.

#### Trade

86. Exports of butter increased by around 5 per cent during 1985. The participating countries, as a group, accounting for about four fifths of the world trade, recorded an increase in their butter exports during 1985. For the first three quarters of 1986, aggregate exports by the main participants showed a substantial decline in relation to the corresponding period of 1985. The market situation was characterized by a high level of stocks, weak demand and intense competition resulting in depressed prices. The strong competition among major suppliers and the weak international demand were expected to keep butter and butteroil prices down in the near future.

87. EC exports of butter to third countries during 1985 decreased to 201 thousand tons from 221 thousand tons in the preceding year. The main destinations of exports were still the Mediterranean countries, the USSR and the OPEC countries. In the first nine months of 1986, EC sales totalled some 102 thousand tons compared to 186 thousand tons in the same period of 1985. On 14 March 1986, the EC adopted Regulation No. 765/86 laying down detailed rules for the sale of butter from intervention stocks for export to certain destinations in accordance with the Decision of the Committee on the Protocol Regarding Milk Fat on 31 May 1985 (BISD 31S/173). 100 thousand tons of old butter were sold to the USSR at a price of US\$450 per ton f.o.b. Another 50 thousand tons of butter were expected to be sold to the USSR as a part of the same deal some time later. In December 1986, a Community operator concluded a contract for further sales of butter to the USSR.

88. Exports by New Zealand in 1985 at 215 thousand tons, as compared to 153 thousand tons in 1984, were 40 per cent higher. During the first nine months of 1986, exports had totalled about 112.5 thousand tons, a decrease by 14 per cent in relation to the same period of last year. The United Kingdom remained the main outlet. Under the preferential regime for butter imports, the United Kingdom had been authorized to import from New Zealand 81,000 tons in 1985 and 79,000 tons in 1986. Due to problems of over-supply of dairy products, pressures within the EC for New Zealand to share the burden of supply adjustment by reducing its exports of butter led to a reduction in import quotas for 1987 and 1988 which respectively would be 76,500 tons and 74,500 tons. New Zealand also sold 23,500 tons to Algeria and 26,200 tons to the USSR.

89. Australian exports of butter which had increased strongly in 1984 reaching 22,900 tons continued their uptrend so that their level was 27,400 tons by the end of 1985. In the first three quarters of 1986, exports had decreased by 17.4 per cent to 17,600 tons. The main destinations were Algeria, Iran and a number of Pacific countries. Exports for 1986/87 were expected to be 38,000 tons, as compared to actual exports in 1985/86 of 54,400 tons. The fall reflected producers' decisions to direct production out of the over-supplied butter/skimmed milk powder sector to cheese and whole milk powder. The downtrend in Finland's butter export continued in 1985 so that the level was only 19,000 tons as compared to 23,000 tons in 1984, i.e., one fifth less. The main outlets remained the USSR and some African countries. Exports continued to decrease in the first three quarters of 1986, totalling 8,300 tons as compared to 11,100 tons in the corresponding period of 1985. Exports by Sweden decreased to 13,300 tons in 1985 as compared to 14,900 tons in 1984. This downtrend continued in 1986 and exports in the first three quarters of 1986 decreased by 32 per cent to 7,400 tons. Exports for the whole year 1986 decreased to 9 thousand tons.

90. Exports of butter from the United States, which had reached a level of 44,200 tons in 1984, totalled only 30,000 tons in 1985. In the first nine months of 1986, exports amounted to 4,000 tons only as compared to 23,200 tons in the corresponding period of the previous year. The main destinations being Mexico, Egypt and Jamaica. Under the US Food Security Act of 1985, a five-year farm-subsidy programme allowed export sales of 100,000 tons of surplus butter in each of the three fiscal years 1986 through 1988, provided that the butter was available and that it would not disrupt domestic or world markets. At the end of August 1986, only 3,000 tons of butteroil had been exported under the programme. However, under the new Dairy Export Incentive Program, adopted in February 1987, the United States offered some 140 thousand tons of butter to certain countries in North Africa, the Middle East and Central and South America. Exports from the Democratic Republic of Germany declined in 1985, as they also did in the case of Austria.

91. On the import side, exports of butter to the EC by third countries, which had declined by 9 per cent to a level of 96,000 tons in 1984, receded further in 1985 to aggregate 63,000 tons. New Zealand remained the main source of Community imports. In the first nine months of 1986, butter imports totalled 60,000 tons as compared to 51,000 tons in the same period of the preceding year. Imports into Switzerland, which were reduced by one third to a level of 8,000 tons in 1984, diminished further by 12 per cent

to total 7,100 tons in 1985. In the first nine months of 1986, butter imports at 5,100 tons were 70 per cent more than in the corresponding period of last year. For the year as a whole, imports were expected to be higher than in 1986. Imports into Poland in the first three quarters of 1986 amounted to 11.5 thousand tons compared to no imports in 1985. The main source of these imports was the EC.

92. Imports into the USSR decreased to a level of 198,000 tons or by 2 per cent in 1984, but they increased by 39.2 per cent to 276,000 tons in 1985, the bulk of which came from the EC countries (see Table 4).

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

	1981	1982	1983	1984	1985
<u>World</u>	<u>215.06</u>	<u>150.69</u>	<u>202.63</u>	<u>198.02</u>	<u>276.04</u>
Belgium	31.63	-	18.37	0.49	16.72
Ireland	8.80	13.06	25.40	25.70	19.79
Netherlands	17.74	18.40	8.00	29.14	34.80
France	45.96	5.30	23.99	48.77	94.14
<u>Total EC countries mentioned</u>	<u>104.13</u>	<u>36.76</u>	<u>75.76</u>	<u>104.10</u>	<u>165.45</u>
Hungary	-	-	10.44	5.16	1.76
Norway	1.91	-	3.11	0.30	-
Finland	9.55	6.41	12.05	9.87	7.07
Sweden	-	5.97	10.41	5.04	2.31
Canada	-	-	2.00	-	-
Uruguay	3.22	3.21	3.67	1.00	-
New Zealand	34.29	67.98	43.87	-	35.98
Australia	..	..	..	..	..
Others (unspecified origins)	61.96	30.36	40.82	72.55	63.47

Source: Foreign Trade Yearbooks of the USSR.

### Stocks

93. Total stocks of butter in the EC, North America and Oceania on 1 October 1986 at 1.73 million tons were about 18 per cent higher than a year earlier. Aggregate stocks of butter in the EC, public and private stocks of butter, increased to a level of 1.48 million tons on 1 October 1986 as against an aggregate level of 1.21 million tons on 1 October 1985, showing an increase of about 22 per cent over the year. Aggregate stocks receded to 1.39 million tons on 27 November 1986 (including 114 thousand tons of stocks with private agencies). It was estimated that some 600 thousand tons could be deemed to be older than 18 months, of which a great part was quite deteriorated butter. In order to reduce the level of stocks, the Commission had adopted two decisions. The first was to delay payment for butter sold into intervention stocks for 240 days instead of 60 days. The second was to make the seller responsible for the costs of the first 240 days of storage. It was considered that these two changes would have the effect of reducing the intervention price by about 2 per cent. Further important decisions were taken by the EC in February 1987 to dispose of 1 million tons of old butter in 1987 and 1988. Despite special sales in the domestic market and large export contracts with the USSR and other measures to reduce production and to increase exports, the high level of stocks remained a source of serious concern to the Community.

94. New Zealand stocks decreased to 83.3 thousand tons on 1 October 1986 as compared to 91.6 thousand tons on 1 October 1985. The sale of 50 thousand tons of butteroil to Brazil under derogation had largely removed excess inventories of old stocks. The reduced milk flow should ensure balanced stock position by the end of the 1986/87 season, provided that anticipated butter sales specially to the USSR and Iran were achieved. Australian butter stocks at 11.4 thousand tons on 1 October 1986 were 50 per cent less than a year earlier.

95. In Poland, stocks of butter decreased very sharply to 9.2 thousand tons on 1 October 1986 as compared to 40.6 thousand tons on 1 October 1985. In Finland, butter stocks at 18 thousand tons on 1 October 1986 were 10 per cent less than a year earlier. Swedish butter stocks decreased to 5.1 thousand tons on 1 October 1986 as compared to 9.2 thousand tons on 1 October 1985. Butter stocks held by Japan at 37 thousand tons on 1 October 1986 were 27.6 per cent more than a year earlier.

96. In the United States, measures had been taken to curb production and to increase exports. One of the basic purposes of the United States Food Security Act of 1985 was to boost United States exports of dairy products and to reduce stocks. On 1 October 1985 stocks of butter stood at 116 thousand tons, a decrease by some 40 per cent compared with their level on 1 October 1984. However, on 1 October 1986, stocks soared to a level of 142 thousand tons. They were estimated to be at 111 thousand tons at the end of 1986 as compared to 93 thousand tons at the end of 1985. Canadian stocks on 1 October 1986 at 21.3 thousand tons were 22.5 per cent less than a year earlier. They were estimated to be at 13.8 thousand tons at the end of 1986 as compared to 20.2 thousand tons at the end of 1985.

### International prices

97. On 31 May 1985, the Committee of the Protocol Regarding Milk Fat decided to reduce with effect from 5 June 1985 the minimum export price for butter from US\$1,200 to US\$1,000 per ton. Simultaneously, a decision was

taken with regard to sales of old butter by derogation from the provisions of paragraphs 1 to 4 of Article 3, and pursuant to Article 7:1 of the Protocol Regarding Milk Fat (BISD 31S/173). The Council subsequently decided to rescind the Resolution of 16 November 1984 and agreed that no further sales could take place under said Resolution. Sales of about 200 thousand tons of butter were reported to have been made at prices below the minimum of US\$1,200 per metric ton f.o.b. All deliveries of butter sold under the Resolution were completed by 30 June 1986. Sales of some 450 thousand tons of old butter were concluded at prices below US\$1,000 per ton f.o.b. in 1986, by derogation under Article 7:1 of the Protocol. The derogation expired on 31 December 1986.

98. In the past three years, international prices of butter had declined continuously, in particular because of slack demand. Butter stocks remained high and continued to cause pressure on the market. In 1986, export prices for fresh butter were US\$1,000, or slightly above, per ton f.o.b. Certain offers reportedly had been made at less than the minimum price and serious concerns had been expressed about possibilities of selling fresh butter at the minimum export price. The price situation and the level of stocks, therefore, remained a source of serious concern to participants.

#### Anhydrous Milk Fat

##### Production

99. Output of anhydrous milk fat in the first three quarters of 1986 was higher in Australia and in New Zealand. It, however, decreased in the EC in the period considered.

##### Trade

100. Traditionally, the major exporters of anhydrous milk fat were the EC and New Zealand. EC exports reached 74 thousand tons in the first three quarters of 1986, i.e., 37 per cent lower than in the corresponding period of 1985. Exports from New Zealand increased to 30.7 thousand tons in the first nine months of 1986 compared with 27.4 thousand tons exported in the first three quarters of 1985. A sale of 50 thousand tons of butteroil was concluded with Brazil for delivery throughout 1987. Australian exports showed a decrease by 8 per cent in the period considered, reaching 16.3 thousand tons.

##### Food aid

101. The 1985 food-aid programme of the Community provided for a maximum of 28.7 thousand tons of butteroil, as against 32.8 thousand tons in 1984. Deliveries of butteroil as food aid amounted to 29 thousand tons in 1985 as against 49 thousand tons in 1984 (Table 5). The 1986 food-aid programme of the Community provided for a maximum of 27.3 thousand tons of butteroil. In the first three quarters of 1986, deliveries of butteroil as food aid amounted to 16 thousand tons as against 22 thousand tons delivered in the corresponding period of 1985.

102. Foreign donations by the United States under Section 416 during 1985 totalled some 31 thousand tons of butteroil in terms of butter equivalent.

### Stocks

103. In New Zealand, stocks of anhydrous milk fat reached a level of 5.2 thousand tons on 1 October 1986 compared to 8.5 thousand tons a year earlier. Australian stocks during this period decreased from 4.1 thousand tons to 3.3 thousand tons.

### International prices

104. On 31 May 1985, the Committee of the Protocol Regarding Milk Fat decided to reduce the minimum price of anhydrous milk fat from US\$1,440 to US\$1,200 per metric ton f.o.b. as from 5 June 1985. International prices of anhydrous milk fat had been weakening since 1983. Throughout the year 1986, export prices remained close to the minimum export price of US\$1,200 per ton f.o.b. New Zealand concluded a sale with Brazil in 1986, concerning 50 thousand tons of butteroil at a price of US\$450 per ton C & F under the derogation of 31 May 1985 (BISD 31S/173).

### Cheese

#### Production

105. World output of cheese at 12.9 million tons in 1986 was 1 per cent more than in 1985 when it increased by 3 per cent. Another 1 per cent gain was forecast for 1987. Lack of export markets for butter and some success in exporting non-traditional cheeses were stimulating the higher cheese output. In the EC, cheese output at 3.14 million tons in the first nine months of 1986 was nearly 1 per cent less than in the corresponding period of 1985. However, for the year 1986 as a whole, total production was expected to increase by 1.2 per cent to 4.25 million tons.

106. In Australia, cheese production at 105 thousand tons in the first nine months of 1986 was 5.7 per cent higher than in the corresponding period of 1985. Production of cheese for 1986/87 was expected to be 167 thousand tons, a decline of almost 2 per cent compared with the 1985/86 production of 170 thousand tons in light of reduced export orders. Cheddar cheese production was forecast to decrease by 6.9 per cent and non-Cheddar cheese output was expected to increase by 11.2 per cent in 1986/87. The New Zealand cheese production in the first three quarters of 1986 decreased by 1.7 per cent to 64.4 thousand tons. Production for 1986/87 was forecast to decrease.

107. Relative gains were recorded in cheese output in Finland (+5.0 per cent), Norway (+5.2 per cent), South Africa (+2.4 per cent) and Switzerland (+3.2 per cent) in the first three quarters of 1986. Production in the first nine months of 1986 also edged higher in Bulgaria (+10.5 per cent) and Japan (+9.5 per cent) relative to the corresponding period of 1985. However, declines were recorded in Poland (-1.4 per cent) and in Sweden (-7.5 per cent) in the period considered.

108. In Austria, cheese manufacture showed a decline by 8.5 per cent in the first nine months of 1986 and the forecast for the year as a whole was about 6 per cent decline over 1985. Cheese output in the United States in

the first nine months of 1986 at 1.78 million tons, was 4.6 per cent more than the level of the corresponding period of the year before. Preliminary figures for 1986 indicated an almost 3 per cent rise in cheese production, reaching a level of 2.35 million tons. Further gains were anticipated for 1987. Cheese production in Canada totalled 172 thousand tons in the first nine months of 1986, i.e., 12 per cent more than in the corresponding period of 1985. It was expected to increase to 225 thousand tons by the close of 1986 and to 235 thousand tons in 1987. In the USSR, the production of cheese was around 800 thousand tons, 2 per cent higher in 1986 than in 1985 and a further expansion was projected for 1987.

### Consumption

109. Preliminary figures for 1986 showed that consumption of cheese was nearly 4 per cent higher than in 1985. With the exception of a few countries, the demand for different types of cheese increased at a steady rate, and the outlook for 1987 was a further improvement in world demand for cheese, especially the speciality-type cheeses.

110. Cheese consumption in the EC, which had increased by 2 per cent in 1985 to a level of 3.88 million tons, remained almost stable at the level of 2.93 million tons in the first nine months of 1986. However, consumption for the entire year of 1986 was expected to increase by 1.9 per cent in relation to the previous year. In the first three quarters of 1986, consumption was reported to have increased in Australia (+16.1 per cent); Finland (+6.5 per cent); Japan (+4.2 per cent); Norway (+4.6 per cent); Poland (+2.5 per cent); South Africa (+5.5 per cent) and Sweden. In New Zealand, domestic consumption was forecast to increase slightly in 1986/87.

111. Consumption in Austria increased by 8.8 per cent in the first three quarters of 1986. In Canada also consumption went up by 12.4 per cent in the period considered. United States consumption of cheese in 1985 was 2.45 million tons, but in 1986 it had increased by 5.2 per cent to reach an aggregate level of 2.58 million tons. Further gains in consumption were expected for 1987. Consumption also increased in the USSR from 820 thousand tons in 1985 to 836 thousand tons in 1986. A further increase was anticipated for 1987. In the Democratic Republic of Germany, it steadily increased and in 1986 was almost 3 per cent higher than in the previous year.

### Trade

112. Import demand for cheese in the Near East slackened, and overall trade in cheese decreased by almost 1 per cent in 1986 in relation to 1985. The EC exports in the first three quarters of 1986 at 255 thousand tons were at least 10 per cent below those in the corresponding period of last year. The main destinations were the United States, Canada, Japan and some Middle East countries. In order to help its exporters compete with other major suppliers, export refunds on cheese were differentiated according to destination. Under Regulation No. 1831/86 of 12 June 1986 export refunds would be allowed for additional specific destinations (particularly Japan for certain cheeses) and export refunds for certain cheeses exported to Australia were revised. In general, the changes reflected movements in exchange rates during the previous year, but in the case of Australia, no

changes had been made since November 1983. As a result the adjustment had been quite large, though for one category no change had been made. Under Regulation No. 2185/86 of 11 July 1986, Canada was removed from the list of countries eligible for export refunds on certain cheeses and reductions had been made in refunds allowed for some others.

113. Deliveries by New Zealand increased by 15.4 per cent in the first nine months of 1986 to 77.2 thousand tons, the main outlet remaining Japan. New Zealand continued to invoke Article 7:2 for exports of low-quality cheese during 1986 at below the minimum price and sold 2,129 tons in the first three quarters of 1986 to different countries including Romania (1,139 tons), Spain (302 tons) and Portugal (285 tons). Australian exports of cheese during the first nine months were about 14.5 per cent lower than their level of the corresponding period of last year. Export availability for 1986/87 was estimated at 70.7 thousand tons as compared to exports of 61.9 thousand tons in 1985/86.

114. Exports from Switzerland decreased slightly (by 1 per cent) in the first three quarters of 1986 to 46.4 thousand tons. It was forecast that exports would decrease by 1 to 2 per cent in 1987 in relation to 1986. Finland's exports of cheese at 23.8 thousand tons in the first three quarters of 1986 were about 14 per cent below their level of the corresponding period of last year. However, they were reported to be stable for the whole of 1986 in relation to 1985. According to indications available for other participants, exports of cheese were lower from Bulgaria (-27.5 per cent); Romania (-40 per cent) and Sweden (-18.0 per cent). Exports from Norway and Poland remained unchanged.

115. United States cheese exports decreased to a level of 8 thousand tons in the first three quarters of 1986 from 10.5 thousand tons in the corresponding period of 1985. For the year as a whole, they showed a decrease of almost 6 per cent, reaching a level of 15 thousand tons. Under the new Dairy Export Incentive Program adopted in February 1987, 73 thousand tons of Cheddar cheese and bulk American cheese for processing was offered to a number of countries, including Egypt (33.5 thousand tons). Canadian cheese exports increased to 7.1 thousand tons in the first three quarters of 1986 as compared to 6.3 thousand tons in the corresponding period of 1985. Exports from Austria in the first three quarters of 1986 dipped by 21 per cent to a level of 24.2 thousand tons and the downtrend continued in the fourth quarter of 1986.

116. On the import side, the United States purchased a total of 88.7 thousand tons of cheese in the first three quarters of 1986 as against 91 thousand tons in the same period of last year. At the close of 1986, cheese imports added up to 138 thousand tons, bulk of which originated from the EC, New Zealand and Finland. The EC imports of cheese at 75 thousand tons on the other hand, were about 9 per cent lower during the first three quarters of 1986 than in the corresponding period of the previous year. Similarly, cheese imports by Japan at 58.1 thousand tons were 1.5 per cent lower in the first three quarters of 1986 than in the corresponding period of 1985. The main suppliers were the EC, New Zealand and Australia. In Switzerland, cheese imports at 16.3 thousand tons were 5.2 per cent higher in the first three quarters of 1986.

### Stocks

117. At the global level, cheese stocks at the close of 1986 were lower than their level at the end of 1985. The decrease was mainly due to the fall in stocks held by the United States. Cheese stocks in the EC which

were normally not subject to wide variations due to a strong domestic demand nonetheless increased in 1986 as a result of less than anticipated growth in demand and a fall in Community exports. Private stocks on 1 October 1986 were estimated to be 131 thousand tons, some 15 thousand tons more than a year earlier. In Australia, stocks on 1 October 1986 were at 74.8 thousand tons in relation to 78.9 thousand tons on 1 October 1985. New Zealand stocks on 1 October 1986 at 50 thousand tons were 18 per cent higher than their level a year earlier. Cheese stocks in the United States on 1 October 1986 amounted to 425 thousand tons, about 11 per cent less than their level at the same time last year. Stocks at the end of 1986 were estimated to be 358 thousand tons, some 70 thousand less than a year earlier. On 1 October 1986, cheese stocks were lower in Norway, Poland, South Africa, Sweden, Switzerland and Canada; and were higher in Finland.

#### International prices

118. During its annual review of the minimum export prices in September-October 1986, the Committee of the Protocol Regarding Certain Cheeses decided to raise the minimum export price for certain cheeses from US\$1,000 (at which level it had remained since 1 October 1981), to US\$1,030 per ton f.o.b. effective from 2 October 1986. Market prices for cheese continued to vary according to types of cheese and market in 1986. International prices for Cheddar cheese which in 1985 had ranged between US\$1,000 and US\$1,430 per ton f.o.b. improved slightly in the early part of 1986. However, towards the middle of the year, prices again came under pressure due to abundant supplies with some quotations close to the agreed minimum export prices. Prices fluctuated between US\$1,030 and US\$1,130 per ton f.o.b. during the fourth quarter of 1986.

#### Skimmed Milk Powder

##### Production

119. Total world production of skimmed milk powder in 1986 (4.75 million tons) was 4.6 per cent higher than in 1985 when it had decreased by 1.5 per cent. Most of the increase for 1986 occurred in the EC as surplus milk went into skimmed milk powder and butter manufacture. Substantial cutbacks in skimmed milk powder production by the United States, New Zealand, Australia and Poland partly offset the 1986 gains by the EC and USSR. In the EC, production increased by about 12 per cent in the first three quarters of 1986 to the level of 1.75 million tons. For the year as a whole, it was estimated to have been up by about 7 per cent from the 1985 level. As a result of higher milk collection, lower domestic sales of fresh milk products and reduced manufacture of whole milk powder and condensed milk for export, EC production of butter and skimmed milk powder rose sharply. In New Zealand, production in the first three quarters of 1986 amounted to 89.7 thousand tons, a decrease of 18.3 per cent in relation to the corresponding period of 1985. For the year 1986 as a whole, output was down from the 1985 level. In Australia, production in the first three quarters of 1986 showed a decrease of 14.2 per cent, reaching 65.2 thousand tons. For the year 1986 as a whole, output was down from the 1985 level. This decline was due to the decline in butter production as a result of the diversion of milk fat from butter to cheese and whole milk powder production and the reduction in milk flow. Production of skimmed milk powder by other participants followed varying

trends in the first nine months of 1986; for the year as a whole, output appeared to have increased in Finland, and to have declined in Japan, Poland, Sweden and Switzerland.

120. In the United States, output increased by 2 per cent in the first nine months of 1986, reaching 495 thousand tons. However, for 1986 as a whole, production appeared to have decreased by 7 per cent in relation to 1985, with a production level of 585 thousand tons. In Canada, production in the first nine months of 1986 totalled 89.6 thousand tons, an increase of 7 per cent in relation to the corresponding period of 1985. Output in calendar year 1986 was above the 1985 level. Production in the USSR continued to increase in 1986, reaching 825 thousand tons.

121. World production of skimmed milk powder was expected to decrease by 5 to 6 per cent in 1987 as the EC and the United States both reduced milk output. In the EC, a decline in skimmed milk powder production was expected for 1987. In the United States, production might decline by 30 per cent in the first quarter of 1987 and for the year as a whole production is expected to amount to 470 thousand tons, a decline of 20 per cent over 1986. In New Zealand, production in the 1985/86 season should decrease by about 30,000 tons. In Australia, production of skimmed milk powder was forecast at 117 thousand tons in 1986/87, a 6.3 per cent decrease compared with 1985/86.

#### Consumption

122. World consumption of skimmed milk powder decreased in 1986. In the EC, total internal consumption had declined to the level of 1,232 thousand tons in the first nine months of 1986, a decrease by 14.5 per cent in relation to the corresponding period of 1985. Human consumption was estimated to have decreased to 218 thousand tons i.e., 86 thousand tons less than in the corresponding period of 1985. Consumption for animal feed - the major outlet for skimmed milk powder in the Community - decreased by about 122 thousand tons in the period considered, reaching 1.01 million tons. In the United States, total consumption of skimmed milk powder increased by some 6 thousand tons in 1986, to the level of 365 thousand tons. In Japan, domestic consumption totalled 205 thousand tons in the first nine months of 1986, i.e., 14 thousand tons more than in the corresponding period of 1985; 152 thousand tons was used for human consumption. In Finland and Hungary most of the skimmed milk powder consumed in the first three quarters of 1986 was used for animal feed.

123. In Western Europe, where skimmed milk powder was used mainly for animal feed, measures were applied to promote its consumption. EC direct aid for the use of skimmed milk powder in feeding calves was at the rate of ECU 80 per 100 kgs., or 46 per cent of the intervention price of this product. In addition, subsidies were granted on liquid skimmed milk, either to promote its use in the animal feed sector or for processing into casein. Furthermore, special measures could be taken in the "pig-and-poultry" compound feed sector if the stock situation so required. The "pig-and-poultry" scheme was discontinued in April 1985 because the stocks had come down to their lowest level of about 350 thousand tons. Due to the subsequent rise in stocks, the EC reintroduced this scheme in August 1986. In July 1984, the Council decided to extend the aid régime in respect of skimmed milk powder for calves to include partly skimmed milk powder (9 to 11 per cent fat), which would provide an additional outlet.

124. Other countries too, in particular Austria, Finland and Switzerland launched promotion drives for the use of skimmed milk powder or liquid skimmed milk as animal feed. In the United States, donations of dairy produce under domestic food programmes had in recent years risen to an annual average of 6 million tons of milk equivalent, or about 8 per cent of total consumption. In addition, some old skimmed milk powder stocks were disposed of as animal feed.

#### Trade

125. World exports of skimmed milk powder (including food aid) decreased in 1986, due mainly to the fall in exports by the EC, New Zealand, Australia and Poland. The major exception was the United States with its elevated export levels of skimmed milk powder. Exports by the EC (including food aid), decreased by 25 per cent in the first three quarters of 1986, totalling 190 thousand tons of which 60 thousand tons were delivered as food aid. Exports would, for the year as a whole, register a substantial decrease. Exports by New Zealand decreased by 2.7 per cent in the first nine months of 1986. The main destinations were countries in South East and Eastern Asia and Brazil. Exports from Australia decreased by 24.7 per cent in the first nine months of 1986 to the level of 50.8 thousand tons, and would, for the year as a whole, decline substantially. Exports from Poland decreased sharply (by 52 per cent) in the first three quarters of 1986 to reach 15.6 thousand tons; the main destinations were Algeria, Japan, Bangladesh and New Zealand.

126. Exports by the United States rose in the first three quarters of 1986 by 12.4 per cent in relation to the corresponding period of 1985 to a level of 254 thousand tons; approximately 48 per cent of the shipments - about 121 thousand tons - was made as food aid. The principal destinations for these exports were countries in Africa, South and Central America. Government-to-government sales of non-fat dry milk in relation to the Food Security Act of 1985, in the period 1 October 1985-31 August 1986, amounted to 124.6 thousand tons, of which 50 thousand tons to Brazil at prices between US\$665 and US\$690 per ton f.a.s. and 41 thousand tons to Mexico at prices between US\$730 and US\$800 per ton f.o.b. Furthermore, 33 thousand tons of feed powder was sold to Austria at a price of US\$350 per ton and 600 tons to Israel at a price of US\$450 per ton. Under the new Dairy Export Incentive Program adopted in February 1987, the United States offered some 370 thousand tons of non-fat dry milk and whole milk powder to countries in Africa, the Middle East and Central and South America. Exports from Canada increased in the first three quarters of 1986 by 14 per cent in relation to the corresponding period of 1985 to a level of 52 thousand tons. The principal destinations of Canadian exports were Mexico and Peru.

127. On the import side, purchases by Japan declined by 12.2 per cent in the first three quarters of 1986 to 71 thousand tons. Much of the powder imported - 54 thousand tons - was for use as animal feed. The principal origins of supplies in 1986 were New Zealand and Australia. Mexico, whose Government operated a large milk distribution scheme, 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 continued to increase, reaching some 161 thousand tons in 1986, as against 145 thousand tons in 1985, the principal supplier

being the United States. Brazil, faced with a decline in domestic output and rapidly rising demand, became one of the world's largest buyers of milk powders and butteroil. Imports of skimmed milk powder into Brazil showed a very substantial increase, reaching some 130 thousand tons in 1986 as against 40 thousand tons in 1985, the principal supplier being the United States.

128. Total exports by the United States could continue to increase and reach 420 thousand tons in 1987. Foreign donations are likely to continue to be large in 1987 and the Commodity Credit Corporation was expected to make more government-to-government direct export sales. Exports by Australia in 1986/87 could decline in relation to 1985/86.

#### Food aid

129. Food-aid deliveries of dairy products consisted mainly of skimmed milk powder and anhydrous milk fat (Table 5). Food aid shipped by the United States, the EC and a number of smaller developed countries accounted for approximately one seventh of world exports of dairy products, partly reflecting the persistent excess of supply over commercial demand. Food-aid deliveries from the EC of skimmed milk powder and anhydrous milk fat decreased in 1985 while foreign donations by the United States increased in that year. As regards skimmed milk powder, foreign donations by the United States amounted to 222 thousand tons in 1985 as against 180 thousand tons in 1984, the main destinations being Egypt, Brazil, Chile and Ethiopia. During the first nine months of 1986, foreign donations amounted to 121 thousand tons, out of total exports of 254 thousand tons. These figures do not include skimmed milk powder exported as a component of a mixture of corn, soya and skimmed milk powder. Foreign donations were expected to continue at high levels in 1987.

130. The EC food-aid programme for the year 1985 provided for a maximum of 108.6 thousand tons of skimmed milk powder, as against 122.5 thousand tons in 1984. Food-aid deliveries by the EC amounted to 124 thousand tons in 1985, as against 167 thousand tons in 1984. The main beneficiaries under the 1985 programme were India with 16 thousand tons and the World Food Programme (35 thousand tons). The 1986 food-aid programme of the Community provided for a maximum of 94 thousand tons of skimmed milk powder. The main beneficiaries under the 1986 programme were Egypt with 3.3 thousand tons, Tunisia with 3 thousand tons and the World Food Programme (22 thousand tons). As of 30 September 1986, some 26 thousand tons under the 1986 programme had not yet been allocated. During the first nine months of 1986 food-aid deliveries by the EC amounted to 60 thousand tons in relation to 92 thousand tons delivered in the corresponding period of 1985.

131. According to available data, food-aid deliveries of milk powder had also been made by Australia, Austria, Canada, Finland, Japan and Switzerland. China, which had not traditionally been a large milk producer and consumer, was now attaching greater importance to dairy development and might be seeking food aid in the form of skimmed milk powder and anhydrous milk fat as a major element in its dairy development programme.

TABLE 5  
Share of Food Aid in Total Exports

Participating countries	Total Exports			Food Aid			Food aid/ total exports		
	1984	1985	1986	1984	1985	1986	1984	1985	1986
	Metric tons						Per cent		
	<u>Skimmed Milk Powder</u>								
Australia	70,200	90,200		4,200	800		6.0	0.9	
Austria	15,736	...		718	...		4.6	...	
Canada	70,000	60,580		28,000 <sup>a/</sup>	...		40.0	...	
EC	307,000	309,000		167,000	124,000		54.4	40.1	
Switzerland	700	8,800		700	1,200		100.0	13.6	
United States	264,517	304,883		180,533	221,928		68.3	72.8	
TOTAL	733,153	...		381,151	...		52.3	...	
	<u>Whole Milk Powder</u>								
Australia	27,300	31,700		600	40		2.2	0.1	
Austria	26,441	...		-	...		-	...	
Switzerland	3,100	3,000		2,700	2,600		87.1	86.7	
TOTAL	56,841	...		3,300	...		5.8	...	
	<u>Anhydrous Milk Fat</u>								
EC	129,000	146,000		49,000	29,000		38.0	19.9	

<sup>a/</sup> Food aid for Canada is fiscal year, while total export figures relate to calendar year.

Note: Foreign donations of butteroil and butter by the United States in 1985 totalled some 31,000 tons (butter equivalent).

### Stocks

132. Total stocks of skimmed milk powder in the EC, North America and Oceania of approximately 1.27 million tons at 1 October 1986 were up by 22 per cent from one year earlier. Total stocks of skimmed milk powder held by other countries showed divergent trends between 1 October 1985 and 1 October 1986. At the end of 1986, the level of world stocks of skimmed milk powder was higher than at the end of 1985. The increase in stocks recorded at the end of 1986 was primarily accounted for by the increase in public stocks in the EC.

133. Public stocks in the EC totalled 845 thousand tons on 1 October 1986, as compared to 478 thousand tons on 1 October 1985. Subsequently, they decreased to 799 thousand tons on 27 November 1986. As indicated in the section regarding consumption, the EC reintroduced special disposal measures in the "pig-and-poultry" compound feed sector in order to reduce stocks. On 1 October 1986, United States stocks amounted to 385 thousand tons, down by 18 per cent in relation to one year earlier. Stocks at the end of 1986 were estimated to be substantially below their level one year earlier, totalling some 300 thousand tons. On 1 October 1986, stocks of skimmed milk powder in New Zealand and Canada were substantially below their level one year earlier, while Australian stocks remained stable. The decline in United States and New Zealand stocks in 1986 had partially offset the larger EC stocks. In 1987, all three were projected to reduce their stock levels.

### International prices

134. During the annual review of the minimum export prices, the Committee of the Protocol Regarding Certain Milk Powders decided on 1 October 1986 to raise the minimum export price of skimmed milk powder from US\$600 to US\$680 per ton f.o.b. as from 2 October 1986. During the first quarter of 1986, prices of skimmed milk powder for human consumption ranged between US\$812 and US\$860 per ton f.o.b. However, since the beginning of March 1986, prices had fallen and during the second quarter of 1986, they were within the range of US\$650 to US\$740 per ton f.o.b. Prices firmed in the third quarter of 1986, in particular because of the depreciation of the United States dollar, and fluctuated between US\$740 and US\$800 per ton f.o.b. In the fourth quarter of 1986, prices remained firm and ranged between US\$750 and US\$800 per ton f.o.b. At the end of 1986, the situation on the skimmed milk powder market was healthy and prospects were encouraging.

### Whole Milk Powder

#### Production

135. Aggregate output of whole milk powder, which was more closely related to specific demand than some other dairy products, appeared to have slightly increased in 1986 in relation to 1985 when it had increased at a slower rate than in 1984. According to provisional data, output in the EC declined by 2.8 per cent in the first three quarters of 1986, reaching 552 thousand tons. Production for the year 1986 as a whole showed a decline. In New Zealand, production rose by 34 per cent in the first three quarters of 1986 to 119 thousand tons. For the 1986/87 season, production for export was expected to show a slight increase. In Australia, output

increased by 32 per cent in the period considered to 36.5 thousand tons. Production was forecast to increase by 9.4 per cent in 1986/87 to 57 thousand tons in response to the continuing trend in international market demand. In Finland and in Switzerland production remained stable in the first nine months of 1986.

136. In Austria, production increased by 18 per cent in the first three quarters of 1986 to 17.7 thousand tons. Output progressed in 1986 in the United States.

#### Trade

137. Total exports of whole milk powder by the main exporter participants increased slightly in the first three quarters of 1986 in relation to the corresponding period of 1985. The EC remained the leading exporter of whole milk powder, exporting 328 thousand tons in the first three quarters of 1986, i.e., 7.6 per cent less than in the corresponding period of 1985. Exports from New Zealand, the world's second largest exporter, increased by 41 per cent in the first three quarters of 1986 to 121 thousand tons. The main outlets were South and East Asia, Central America, Brazil and the USSR. The increase in exports in recent years was largely the result of the growth of exports to the USSR. Exports from Australia increased to 26.7 thousand tons. Exports in the 1986/87 season were expected to show an increase in relation to 1985/86, to around 44.5 thousand tons as against 40.7 thousand tons in 1985/86. Exports from Finland, which went almost exclusively to the USSR, amounted to 22.7 thousand tons in the first three quarters of 1986, an increase by 3 per cent in relation to the corresponding period of 1985.

138. The United States exported some 18.4 thousand tons of whole milk powder in the first three quarters of 1986, almost exclusively to Brazil, as compared to 21.5 thousand tons in the corresponding period of 1985.

#### Stocks

139. Stocks of whole milk powder at 1 October 1986 were higher in Australia and Finland in relation to their level at 1 October 1985.

#### International prices

140. During the annual review of the minimum export prices, the Committee of the Protocol Regarding Certain Milk Powders decided on 1 October 1986 to raise the minimum export price of whole milk powder from US\$830 to US\$880 per ton f.o.b. as from 2 October 1986. In the first half of 1986, international prices of whole milk powder ranged between US\$990 and US\$1,050 per ton f.o.b. in the first quarter and between US\$900 and US\$1,050 per ton f.o.b. in the second quarter. In the third quarter of 1986, prices fluctuated between US\$930 and US\$1,000 per ton f.o.b. In the fourth quarter of 1986, prices ranged between US\$900 and US\$1,050 per ton f.o.b. At the end of 1986, the situation on the whole milk powder market improved, demand was strong and the prospects were encouraging.

### Buttermilk Powder

141. In New Zealand and in Australia output and exports of buttermilk powder decreased in the first three quarters of 1986. Stocks at 1 October 1986 were lower in New Zealand and slightly higher in Australia as compared to their levels at 1 October 1985. EC production of buttermilk powder amounted to 35 thousand tons in 1985 as compared to 40 thousand tons in 1984.

142. During the annual review of the minimum export prices, the Committee of the Protocol Regarding Certain Milk Powders decided on 1 October 1986 to raise the minimum export price of buttermilk powder from US\$600 to US\$680 per ton f.o.b. as from 2 October 1986, i.e., the same as the minimum price for skimmed milk powder.

### Other Dairy Products

#### Whey in powder or block, or concentrate

143. Only a few years ago most of the whey was disposed of in drains and waterways, but increasing concern about the unfavourable effect of such disposal on the environment and increased demand for whey and whey products used as food and feed ingredients and in pharmaceutical application has led to the processing of whey into a range of products. Total world production of whey powder showed a steady increase over recent years, from about 1 million tons in the mid-seventies to nearly 2 million tons in 1986. This figure should be considered to be merely a rough estimate as statistics still remained incomplete.

144. The European Communities remained the main producer of whey powder, and Community production including whey concentrate and other whey products, amounted to 750 thousand tons in 1986, about 1 per cent less than in 1985. Production of whey powder and concentrated whey declined also in other European countries in 1986. Switzerland experienced a further decline of 12 per cent in its production of whey powder which for 1986 did not reach 3 thousand tons.

145. In 1986, Austrian whey powder production remained at the level of recent years, around 3.5 thousand tons, which was almost entirely disposed of on the internal market mainly as feed. Canadian whey powder production recovered appreciably from its low level of the previous year and total production for 1986 amounted to 60 thousand tons. On the contrary, United States production of whey powder which had shown a strong recovery in 1985, continued to grow early in 1986, but fell again later in the year and for the year as a whole reached 445 thousand tons, the same as in 1985.

146. Whey powder prices remained low throughout 1986, with international prices as low as US\$220 per ton at the end of the year. There might, of course, be a considerable variation in whey powder prices, according to difference in quality and use.

### Concentrated milk

147. In 1986, total world production of condensed and evaporated milk amounted to 4.5 million tons, which meant a decline of 3 per cent from the previous year. This was mainly the result of reduced production in the EC, the United States, Australia and Canada, which outweighed further expansion in India, Malaysia and the USSR. Developing countries in the Far East had by 1985 expanded their aggregate production of condensed milk to a total of 520 thousand tons, a level comparable to the traditional level of production in the Federal Republic of Germany, the Netherlands and the USSR. World trade in concentrated milk in 1986 was much lower than in previous years, down to around 670 thousand tons. Prices remained steady throughout 1986 at a level slightly below US\$2,000 per ton.

148. Community production of condensed milk fell by almost 7 per cent from 1985 to 1986, in the latter year amounting to 1.2 million tons, following slack demand on the world market. While Community exports had recovered appreciably in 1985, reaching a total of 542 thousand tons, there was a decline in 1986, when exports were down by 22 per cent. In Australia, production of condensed, concentrated and evaporated milk production was again on the decline in 1986, by a couple of per cent. Australian exports of condensed and evaporated milk were declining for the fourth consecutive year in 1986. In Argentina, both production and consumption declined in 1986 and there were no exports and stocks were further reduced. In South Africa the downward trend in production continued in 1986 and exports were negligible.

149. In Canada, production of concentrated whole milk fell again in 1986, reaching 115 thousand tons. Consumption had been steadily declining since 1982, and more than two thirds of Canadian production was exported in subsequent years. In 1984/85 exports amounted to 137 thousand tons, but fell during subsequent years and were for 1986/87 expected to reach only 60 thousand tons following a further reduction in the special export programme. United States production of condensed milk declined by 10 per cent in 1986. Austrian production of condensed milk continued to grow in 1986, increasing by 5 per cent and amounting to nearly 15 thousand tons. In the USSR condensed milk production amounted to a total of 575 thousand tons the same level as in 1985. In 1985, 20 thousand tons were exported which was 10 per cent less than the average for recent years, and exports remained low in 1986 as well.

150. Imports of condensed milk into developing countries had been declining over recent years. Notably there had been a decline in imports into countries in Africa and Latin America, while imports into countries in Asia continued to increase. Total imports into developing countries amounted to 660 thousand tons in 1985.

### Casein

151. Total world production of casein was in 1986 lower than in the previous year, amounting to 235 thousand tons. Community production of casein reached some 136 thousand tons. Australian casein production which in 1985 had been down to 7.3 thousand tons, declined further in 1986 and

production was then expected to reach only 7 thousand tons. The decline was attributed to a change in product mix because of environmental problems associated with casein production. In New Zealand, production of casein and caseinates reached 76 thousand tons in 1986, an increase of 2 per cent compared with 1985.

152. In early 1986, world market prices for casein showed weakening tendencies as a result of abundant supplies. In May 1986 edible casein was quoted at 92 US cents per 100 lbs. or just above US\$2,000 per ton (wholesale) in the United States market, 5 per cent lower than one year earlier and prices were also lower in Community markets. However, prices improved throughout the year and by the end of 1986 United States import prices for casein were slightly above US\$2,200 per ton on a delivered basis.