

# GENERAL AGREEMENT ON

RESTRICTED

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## TARIFFS AND TRADE

Special Distribution

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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 September 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 IDF, IFAP, 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 the first half of 1987, and the outlook for 1987/88. The note should be read in conjunction with the statistical information contained in the following documents:

- DPC/W/66/Rev.1 - Milk Deliveries and Production - Statistical Note by the Secretariat
- DPC/F/W/27/Rev.1 - Committee of the Protocol Regarding Milk Fat - Summary Tables
- DPC/C/W/33/Rev.1 - Committee of the Protocol Regarding Certain Cheeses - Summary Tables
- DPC/P/W/33/Rev.1 - Committee of the Protocol Regarding Certain Milk Powders - Summary Tables

4. The present note, as subsequently completed or amended, will be issued as the eighth annual report under the International Dairy Arrangement. 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 14 August 1987.

TABLE 1

Levels of Minimum Export Prices

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

Pilot products	Effective since:					
	1 Jan. 1980	1 Oct. 1980	1 Oct. 1981	5 June 1985	2 Oct. 1986	25 June 1987
Skimmed milk powder	425	500	600	600	680	765
Whole milk powder	725	800	950	830	880	900
Buttermilk powder	425	500	600	600	680	765
Anhydrous milk fat	1,100	1,200	1,440	1,200	1,200	1,200
Butter	925	1,000	1,200	1,000	1,000	1,000
Certain cheeses	800	900	1,000	1,000	1,030	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 and whole milk powder became effective on 25 June 1987. Minimum export prices must not be considered as market prices, but merely the floor price levels which the participants have agreed to observe.

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Note: A statistical annex will be issued in an addendum to this note.

## Overview of the Situation

### Some highlights of the economic situation in general

1. World merchandise trade continued to grow in 1986 at an estimated annual rate of 3 1/2 per cent in terms of volume and 10 per cent in terms of value. The growth in trade was facilitated by a decline in interest rates and a fall in petroleum prices, which however began to rise in the latter part of the year. World production increased by some 3 per cent in 1986. During the first half of 1987, there was a further growth in world merchandise output and trade, but apparently at a slower pace than in the previous year.
2. The trade performance of developing countries as a group was again disappointing in 1986, and notably oil-exporting countries experienced a further decline in the dollar value of their exports and imports. However, petroleum prices strengthened in 1987 and there were increasing signs that the post-1979 price decline was bottoming out for a number of other primary products, and indeed major price increases were recorded by the middle of the year. This might bring about some relief in several developing countries in the current year.
3. Trade in agricultural products declined by 1 per cent from 1985 to 1986 in spite of incentives and assistance, notably subsidies, provided by major trading nations to facilitate their agricultural exports. Once more, trade performance fell short of the modest increase in world agricultural production, reflecting the inward-looking policy approach to agriculture in many countries. The decline is indicative of a difficult state of world trade in some major agricultural products and of how difficult it has become for some agricultural exporters to maintain, let alone expand, their export earnings.
4. There was little change in the employment situation in 1986 with 8 per cent of the labour force remaining unemployed in the OECD countries. The rate of unemployment in Western Europe remained high, on average 11 per cent. Unemployment in developing countries was difficult to determine because of data limitations, but it would appear that in many countries the labour force grew faster than employment. A number of developing countries were successful in curbing inflation in 1986 and inflation rates remained moderate in industrial countries. In the middle of 1987, there were, however, signs of a pick-up of inflation in some industrial countries. Huge current account imbalances persisted for some main countries, despite a significant depreciation of the United States dollar against other major currencies.

## World dairy situation

### Highlights

5. - A long awaited decline in world milk production came about in 1987. Although the decline was very modest, it at least indicated that the upward trend which had persisted for years was halted or even reversed. The efforts made in many countries to contain milk production were beginning to show results.
  - Reduced milk production in the European Communities, New Zealand and the United States, was only partly offset by increases in India and the USSR.
  - World milk production might have been stabilized in 1987 and could hopefully be kept within reasonable limits in the future. However, ample availability of feed at low prices and the application of new technology, notably the use of somatotropin, might make any forecasts for the near future less reliable.
  - The international market for butter and anhydrous milk fat remained very depressed in 1987, and significant quantities had to be disposed of through sales under derogation from the price provisions of the Arrangement at extremely low prices. However, such sales together with substantially reduced production resulted in an appreciable reduction of stocks providing some hope for improvement in the butter market in 1987/88.
  - Import demand for cheese and milk powders which had been relatively low in 1986, recovered appreciably in 1987. At the same time, quantities available for export, notably of powder, were reduced and prices were showing a tendency to firm up.
  - Renewed efforts to dispose of dairy surpluses made early in 1987, notably by the European Communities and the United States, were creating uncertainties in the world dairy market throughout the year, but the simultaneous reduction in surplus stocks was creating some hope for a better balance between commercial import demand and export availabilities.

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 Austria, 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 which could 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. The encouragement of exports of dairy cattle to developing countries often on very favourable terms, might not have had insignificant effects in that context.

9. Attempts have been made to assess and evaluate the results of the measures taken to contain milk production, but so far much of the work has remained inconclusive and more time and information is needed to reach more definitive conclusions. 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.

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 have remained at levels below current costs of production. If retail prices were to be adjusted upwards, something already taken up for consideration by the authorities notably in the USSR, this could have an adverse effect on consumption at some stage and result in the accumulation of surpluses. Such surplus quantities of dairy products might very well be offered for sale on the world market at very low prices, made possible by a strong price differential between sales in the domestic market which will remain the dominating outlet and export sales of a marginal size. Various export pricing practices might also be facilitated by monetary policies, exchange rate fluctuations and particular trading patterns.

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. In recent years, significant exports of live dairy cattle from Northern Hemisphere countries to developing countries in South America and Asia have taken place, often on concessional terms. Furthermore, there has also been an increase in financial and technological assistance for developing milk production and dairy processing and marketing in many developing 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.

12. Ongoing analysis and studies of various national dairy programmes would obviously increase the general understanding of the problems to be dealt with. A certain redefinition of aims and objectives, or at least a further clarification of these might prove necessary. Such redefinition and clarification might entail subsequent adjustments and improvements in the choice of measures or combination of measures to be applied. In light of the dominating role of the dairy sector in the agriculture of many countries, persisting general and structural surpluses and a strong potential for further growth in milk production as a result of technological progress, close international co-operation about production and trade policies will remain more important than ever before.

#### Milk and dairy production

13. In spite of a stagnation or even decline in milk production in many countries, world milk production expanded by another 1.4 per cent from 1985 to 1986, then totalling 520 million tons (including sheep, goat and buffalo milk). This increase was in line with the long-term trend. Cows' milk production which accounted for 90 per cent of the total, amounted to 468 million tons with an increase of 1.3 per cent from 1985 to 1986. At the same time there was a comparatively stronger increase in buffalo milk of 3.8 per cent, mainly due to a strong development in Indian buffalo milk production. However, buffalo milk accounted for less than 7 per cent of

world milk production with sheep milk and goats' milk making up the balance of 3 per cent.

14. 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 1.4 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 in 1986 reached 44 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 and a significant part of consumption requirements continued to be covered by imports.

15. 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.

16. 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.

17. Information for the early part of 1987, indicated that the world milk production was not increasing any further and would remain at almost the same level as in 1986. Milk production had continued to increase in India and the USSR, but this was more than outweighed by reduced production in the European Communities, New Zealand and the United States. Although the decline appeared to be very modest, it represented a modest but welcome hope that the upward trend which had persisted for years had been halted and maybe even reversed. The efforts made in many countries to contain milk supplies were beginning to produce results, and in addition less favourable climatic conditions had similar effects in some areas. However, ample availabilities of feed, low feed prices and the introduction of new techniques, such as the use of somatotropin 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.

18. World production of butter reached the level of 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.

19. The increase in Community butter production in 1986 was to a large extent accidental, partly caused by a temporary reduction in sales of fresh milk due to some fear of radionuclide contamination in spring 1986. Butter supplies at the beginning of 1987 remained far in excess of market requirements and drastic measures had to be applied in order to alleviate the pressure on the market. Measures taken by the Community to discourage butter production including restrictions on intervention purchases, were having appreciable effects and for the first half of 1987, Community butter production fell by 15 per cent compared to the corresponding period of 1986, and was for the year as a whole expected to be brought back to the average level of 1981-83, at last. This would in itself entail a significant reduction in the world butter production in 1987. Reduced butter production was reported for New Zealand and some other countries as well, and it was expected that world butter production would be significantly reduced in 1987/88.

20. 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 and later in the year, import demand for Feta cheese in the Middle East was recovering. The improved export market outlook gave rise to some optimism and subsequent increase in production. Community cheese production for the first half of 1987, was more than 3 per cent higher than in the corresponding period of 1986.

21. 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, Sweden and Switzerland and world skimmed milk production rose by some 5 per cent to a total of 4.8 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 increased slightly from 1985 to 1986, in the latter year estimated to have reached 1.3 million tons. There was a 7 per cent decline in Community production and also a decline in Finland, Sweden and Japan, which was outweighed by an increase of 2 per cent in the United States and relatively strong increases of around 30 per cent in Australia and New Zealand. Whole milk powder production continued to grow in 1987, in spite of reduced production in Europe.

### Consumption

22. 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 in 1987.

23. 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 in 1986 was about one third above its average level for 1981-83. Further expansion in cheese consumption was also reported for Japan, Canada and the United States. With overall increases at 7.5 and 4.3 per cent respectively in the United States and Canada, it was notably demand for speciality cheeses that remained strong.

24. 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.

25. The general trends prevailing in recent years continued in 1987. While total consumption of milk and dairy products was more or less in line with production developments, the situation for individual product categories differed. 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

26. Trade in fresh milk and fresh milk products remained relatively insignificant in 1986 with the value totalling between US\$40 and US\$50 million. 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 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 1985, in spite of considerable efforts to dispose of substantial quantities under the Food Security Act of 1985. Total world butter exports 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 large quantities at low prices and the competition from margarine and other fats remained strong. The international market for butter and anhydrous milk fat therefore was expected to remain very depressed throughout 1987. However, in 1988 market conditions might improve, due to reduced supplies of butter.

27. A series of measures adopted by the European Communities at the end of 1986 and 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, anticipated Community exports of 400 thousand tons of old butter at extremely low prices caused concern among other exporters. 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 a large number of countries also caused concern among other major exporters to these markets. However, until the middle of 1987 no significant sales had been made under the programme.

28. 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 was keen.

29. There was a decline of nearly 2 per cent in world trade in skimmed milk powder in 1986, with reduced sales by several 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. Throughout 1986 and well into 1987, international trade in milk powders was adversely affected by matters related to radionuclide contamination, as a number of importing countries were applying very restrictive measures in order to protect the health of consumers. In this situation, the absence of internationally agreed standards for tolerance limits with respect to radionuclide contamination of food was strongly felt.

#### Food aid

30. 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. Provisions were made by the United State to increase food aid exports in 1986 and 1987, but it was not known to what extent this might have actually resulted in increased donations of dairy products.

#### Stocks

31. 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 milk supplies, reduced production of cheese, whole milk powder and condensed milk, temporarily 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

at the end of 1986 at 800 thousand tons, were one and a half their level a 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 remained over-supplied and depressed. With increasing age, the quality, notably of butter, would be deteriorating, making it increasingly difficult to find market outlets. For most other countries, dairy stocks at the end of 1986 were reported generally to have remained at or below the level of previous years without causing too much concern.

32. A contract concluded by New Zealand with Brazil for the sale of 50 thousand tons of butter oil was expected to bring a substantial relief to New Zealand stocks. Similarly, various measures applied in the Community aiming at a substantial reduction in butter stocks, at a total cost of 3.2 billion ECU's, started to bring about some relief.

#### International prices

33. 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 powders were again raised with effect from 25 June 1987 to US\$900 per ton f.o.b. for whole milk powder and US\$765 per ton f.o.b. for skimmed milk powder and buttermilk powder. 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.)

34. In 1986, a total of 50 thousand tons of butteroil and some 425 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 and throughout 1987, near or at the minimum export prices set under the Arrangement.

35. Competition remained keen in several major cheese markets and Cheddar cheese prices were under some pressure from the middle of 1986 on. Prices nevertheless 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, and throughout the early part of 1987, international cheese prices remained well above the agreed minimum prices.

36. 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. Similarly, prices for whey powder and casein tended to increase in 1987, perhaps reflecting expectations of a firmer skimmed milk powder market.

TABLE 2  
International Prices (1985-1986-1987)

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

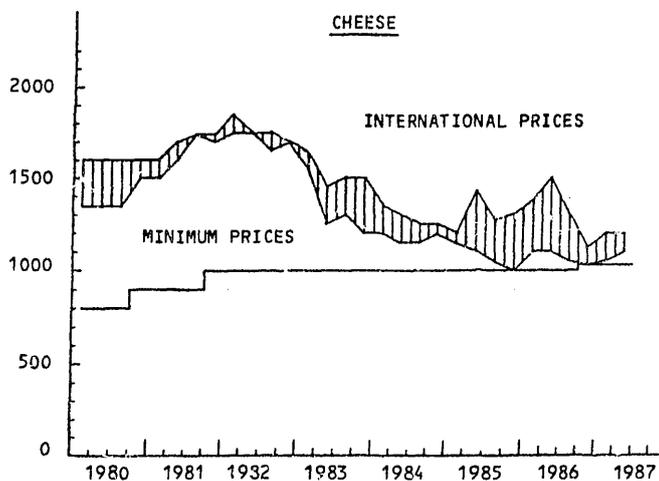
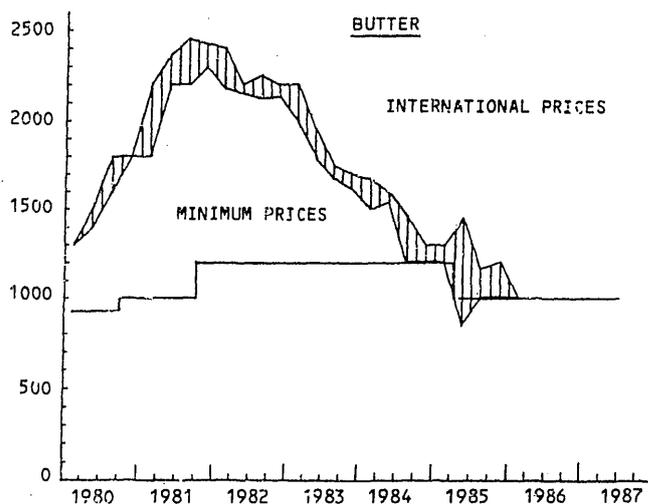
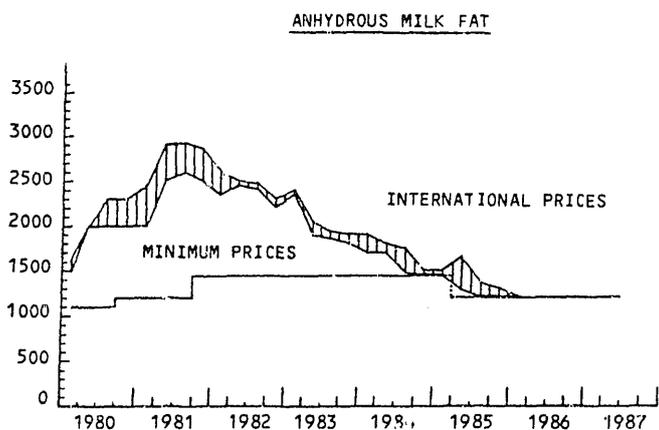
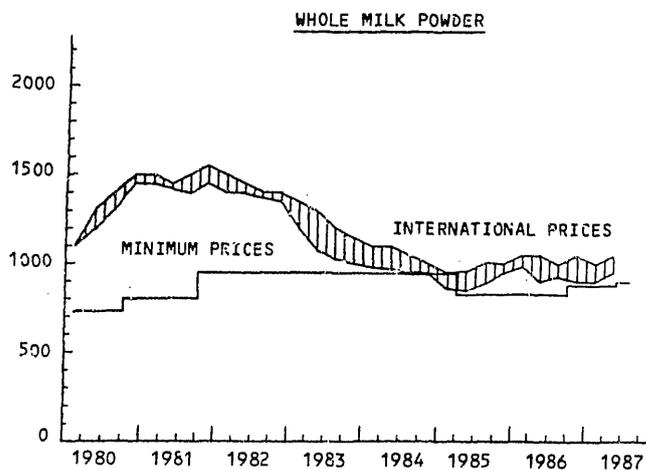
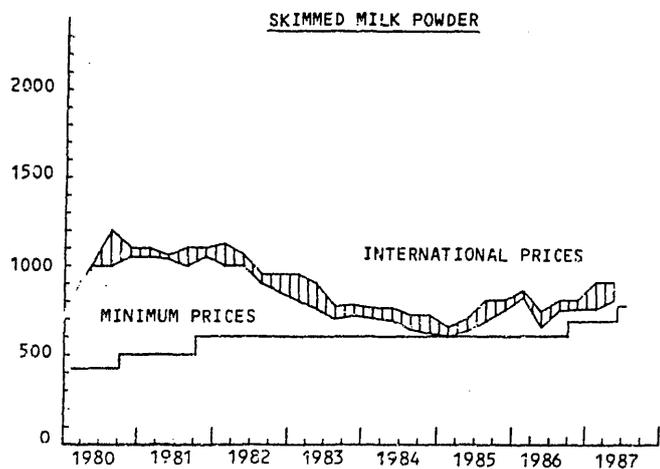
Product	1985				1986				1987		
	January-March	April-June	July-September	October-December	January-March	April-June	July-September	October-December	January-March	April-June	July-September
Skimmed milk powder <sup>a</sup>	600-650	630-700	685-800	750-800	812-850	650-740	740-800	750-800	750-900	800-900	
Whole milk powder	860-950	850-960	890-1,010	950-1,000	990-1,050	900-1,050	930-1,000	900-1,050	900-1,000	950-1,050	
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	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	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	1,050-1,200	1,100-1,200	

<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.i.84 to 31.5.85. In 1986 and 1987, some old butter and anhydrous milk fat was sold at prices lower than the ranges indicated by derogation under Article 7:1 of the Protocol Regarding Milk Fat.

<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.

GRAPH 1  
INTERNATIONAL PRICES OF DAIRY PRODUCTS 1980-1987<sup>1/</sup>  
(US\$ per metric ton f.o.b.)



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

The Situation for Individual ProductsMilk

37. World milk production (including buffalo, sheep and goat milk) touched a new record level of 520 million tons in 1986, 1.4 per cent more than in 1985. Cow milk, which accounted for about 90 per cent of the total, amounted to 468 million tons in 1986, showing an increase of 1.3 per cent over the previous year. Buffalo milk output, however, increased more sharply from 34 million tons in 1985 to 35 million tons in 1986 or by nearly 4 per cent, due mainly to increases in certain Asian countries, particularly in India. However, buffalo milk still accounted for just under 7 per cent of the world milk production with sheep and goats' milk making up the balance of 3 per cent.

38. Forecasts for 1987 suggested a reduction in total milk production in Western Europe and the United States due mainly to policy measures to curb production and adverse weather conditions affecting production in other areas. This reduction was not likely to be outweighed by some increases in the USSR, India and other developing countries in Asia. However, some uncertainty remained as to the future levels of production, with ample supplies of low cost animal feeds and the introduction of new techniques contributing to dramatic increases in yields. It was, nevertheless, certain that the world market would remain over-supplied with dairy products even with no further increase in world milk production in 1987.

39. Milk production in the European Communities (including Spain and Portugal) totalled 116.54 million tons in 1986, i.e. 1.2 per cent more than in 1985 despite the quota system introduced to curb production. Generally favourable pasture conditions and lower prices for concentrate feed increased productivity. Dairy cow numbers in the Community declined by about 5 per cent in the past two years and a further reduction of 1 million head was forecast for 1987. However, milk output on an average increased by 1.5 per cent per annum. This was in spite of an increased utilization of milk on farms under the impact of the quota system. Producers also realized that a modest over-shooting of their reference quantities was still profitable. Within the EC, 1986 milk production increased by 2.6 per cent in the Federal Republic of Germany and Belgium and 1.8 per cent in France, 1.3 per cent in the United Kingdom and 4.5 per cent in Greece. It declined in Ireland, Luxembourg and Spain. EC milk production in 1987 was expected to drop by about 1 per cent as cow numbers declined by about 2 per cent.

40. 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.

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-12	1985	115.15	- 1.5	+ 1.5	- 2.8
Preliminary	1986	116.54	+ 1.2	+ 2.0	- 2.0
Forecast	1987				
USSR	1985	97.76	+ 0.3	+ 2.2	- 1.0
Preliminary	1986	100.00	+ 2.3	+ 2.0	- 2.0
Forecast	1987				
United States	1985	64.93	+ 5.7	+ 3.0	- 2.0
Preliminary	1986	65.35	+ 0.7	+ 2.3	- 1.5
Forecast	1987				
Poland	1985	16.43	- 1.8	+ 5.3	- 4.0
Preliminary	1986	15.70	- 4.5	+ 2.0	- 3.0
Forecast	1987				
New Zealand	1985	7.90	+ 6.3	+ 0.9	+ 2.2
Preliminary	1986	7.80	- 1.2	+ 0.6	+ 1.5
Forecast	1987				
Canada	1985	8.14	- 0.6	- 0.7	- 1.9
Preliminary	1986	8.10	- 0.5	+ 2.1	- 1.9
Forecast	1987				
Japan	1985	7.37	+ 3.3	+ 4.2	- 0.9
Preliminary	1986	7.45	+ 1.0	- 0.1	+ 1.0
Forecast	1987				
Australia	1985	6.21	+ 1.8	+ 2.0	- 5.3
Preliminary	1986	6.18	- 0.5	+ 2.4	- 2.5
Forecast	1987				

41. 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.

42. 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 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.

43. In February 1987, the Council approved further 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.

44. 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 and yield was slightly down in 1986. Total production for 1986 was estimated to be 6.7 million tons. Portuguese production increased by about 3 per cent in 1986 to 978 thousand tons.

45. In Finland, milk production and deliveries in 1986 were slightly lower than in 1985. While dairy cow numbers had slightly gone down, yields per cow had comparatively increased. The two-tier pricing system adopted in 1985 continued to operate successfully. Penalties for farmers exceeding production quotas had been increased for 1986 from FIM 1.60/litre to FIM 200/litre. The Farm Closure Act was revised in August 1986. The Act was originally enacted in 1974 providing for 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 now allow the farmer to retain his land and return to production after six years of cessation. Milk production in 1987 was expected to remain unchanged at the 1986 level of 2.89 million tons.

46. Norwegian deliveries (including goat milk) slightly increased in 1986 to a level of 1,845 thousand tons. However, some decline was expected for 1987 as a result of the operation of the quota system. The limits of the quota system remained unchanged for 1986, but the price paid to milk producers was increased with effect from 1 July 1986.

47. Milk deliveries in Sweden were 4.5 per cent lower to a level of 3.42 million tons in 1986 compared to their level in 1985, mainly as a result of the two-price system introduced on a three-year trial basis in July 1985. A further small decline was expected for 1987. While productivity showed some increase, the number of cows declined in 1986 by 5 per cent. Farmers taking 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 on the market. Those farmers who chose not to take part in the system received the home market price reduced by an export financing fee. The export financing fee, which was levied on their total deliveries, was based on the difference between the prices on the home market and the export market and the total amount of milk delivered by producers who did not participate in the two-price system.

48. In Switzerland, the strict quota system kept the deliveries of milk at around 3.05 million tons in 1986. The overall milk quota was to be reduced in two stages by approximately 2.5 per cent to a level of 750 thousand tons. The first stage involving a reduction of 430 thousand tons had already been implemented, but the second administrative reduction planned for 1 May 1987 was left to the milk producers to implement by their own

devices. Premiums were paid for non-marketing of milk and for processing milk into cheese which had a relatively high price in the domestic and international markets. The basic price for milk was raised by 5 centimes to 97 centimes/kg. from 1 July 1986. It was noteworthy that the reduction in deliveries in 1986 was far greater than the drop in total milk production, implying greater retention of milk used for feed on the farm in response to stricter quota restraints.

49. In New Zealand, milk production in 1986 was about 4 per cent higher than in 1985 due to good pasture conditions and to a lengthened milking season as farmers tried to take advantage of the higher guaranteed prices. The situation, however, changed as drought occurred in the current season. Further, as part of the wide ranging changes in general economic policy, the price guarantee scheme was abolished in view of low world prices for dairy products. At the beginning of the 1986/87 season, the New Zealand Dairy Board introduced a voluntary scheme to curb milk supplies. The basic pay-out price for the season was initially fixed at NZ\$2.25/kg., 44 per cent lower than that of the 1985/86 season, but it was later raised to NZ\$2.55/kg. The fall in prices together with the rise in interest rates affected farmers' returns. These factors were expected to lead to a projected 15 per cent decline in 1986-87 with the milk limitation scheme accounting for 1-2 per cent of the total reduction.

50. In Australia, milk production was down by 1 per cent in 1986, but rising profitability due to the expected boost to export returns as a result of a devalued Australian dollar, was expected to hold 1987 production at the 1986 level. Dairy cow numbers were projected to fall by nearly 1 per cent, but production per cow was expected to increase through genetic and management improvements. The long-term trend of declining cow numbers was likely to continue. The 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 Japanese milk production in 1985 to a level of 7.38 million tons, the upward trend continued in 1986 when production aggregated 7.45 million tons or 1 per cent more than in the previous year. It was forecast to return to around 7.38 million tons in 1987. The introduction of the Production Adjustment Scheme had brought about a sharp decline in the number of dairy farms, stopped the increase in production and led to a decline in milk output.

52. The South African production of milk at 1.90 million tons in 1986 was slightly below the level of the previous year. Deliveries, however, were slightly more than in 1985. Forecasts for 1987 were for stability or a small increase.

53. 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 thus encouraged to raise their productivity, carry out further investments and to increase deliveries of milk. Together with good feed supplies, this resulted in a further increase in milk production. At 6.20 million tons in 1986, milk deliveries were 15 per cent higher than in 1985. There was also a slight recovery in Uruguayan milk production in 1986, which, however, remained below the level of the 1981-83 average.

54. 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 but a strong decline of 5 per cent in the dairy herds was only partly compensated for by improved yields and the levels of production were lower in 1986 than in 1985. There was also a further strong decline of 5 per cent in milk production in Poland in 1986 following a hard winter, reduced cow numbers and a lack of profitability in dairying, which had led many private farmers to reduce their herds. The decline was however expected to be reversed with the Government's raising of milk support prices.

55. In Romania, the system of compulsory quotas and supply tasks had been abolished and replaced by an unitary system of contracting for the purchase of agricultural products from agricultural production co-operatives, their members and private producers. The new system defined the tasks and liabilities of the socialist production units concerning delivery of agricultural products from co-operative farmers and private producers, assuring reasonable and stable prices for the products delivered. The State granted contractual prices and incentive purchase prices to State agricultural units, as well as to members of agricultural production co-operatives and to private producers. The contractual prices for milk and cream in respect of the agricultural co-operative units, their members and the private producers constituted purchase ceiling prices. The Ministry of Food Industry and Agricultural Product Purchase was responsible for establishing contracts and making purchases of milk and dairy products from all the categories of producers.

56. Also in Yugoslavia, small farmers were reported to be giving up milk production and milk deliveries had fallen by 3 per cent from 1985 to 1986. Like Poland, however, the increase in milk support prices should increase milk production in 1987. No significant change in milk deliveries took place in the Democratic Republic of Germany and Czechoslovakia as the decline in cow numbers was outweighed by an improvement in yields.

57. Despite the fall in cow numbers by 1 per cent in 1986, the USSR milk production was estimated to be 2 per cent higher due to favourable forage and concentrate feed supplies. For 1987, further increases in productivity were expected, more than offsetting another decline in cow numbers. According to the Twelfth Five-Year Plan, milk deliveries to the State by collective and State farms, should be increased to 106-110 million tons by 1990, which meant annual rates of increase between 1.5 and 2.5 per cent. Production in excess of delivery plans might be sold freely and at higher prices.

58. In the United States, the overall milk output in 1986 was 1 per cent higher than its level in 1985 in spite of a decline in cow numbers. Average yield increased by 2 per cent over that of 1985, following the ending of the 15-month dairy diversion programme as a result of favourable milk-feed price ratios which encouraged the increase in concentrate feeding. The introduction of the Dairy Termination Programme (DTP) on 1 April 1986, which provided for the slaughter of 8.5 per cent of dairy cow herd over an 18-month period, and the reduction of the milk support price by 2.2 per cent (from US\$11.60/cwt. to US\$11.35/cwt.) in January 1987 had adversely affected milk output. About 20 thousand cows per month were expected to be culled under this programme in the first half of 1987. Already in the first quarter of 1987, milk production was 3.7 per cent below the level of a year earlier and the output for the whole of 1987 at 64.3 million tons was expected to be 2.3 per cent down. However, production was projected to rise in 1988 onwards due to higher milk yields resulting from lower cow feed prices following policy changes in the cereal/feed sector, and the growing use of bovine hormones and new technology.

59. Canadian milk deliveries in 1986 were marginally up on the level of the previous year, despite a 5 per cent reduction in the number of milk producers and a 2 per cent decline in cow numbers. Not only yields had improved, milk sales off farms had also increased. Several provinces exceeded their quota allocation and had to pay penalties. The Federal Government extended its commitment for the subsidy of Can\$6.03/hl. of standard industrial milk until 1990/91. This subsidy was payable on all industrial milk produced for domestic requirements and a 1.1 million hectolitres of Special Export Programme milk. There was some concern regarding the 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 Can\$45.68 to Can\$46.30/hl. of standard milk from August 1986 for one year.

60. Milk production in Austria in 1986 remained stable at the previous year's level, but deliveries were slightly lower, showing an increase in on-farm use of milk to avoid the payment of excess quota penalties. The decline in cow numbers was compensated for by an increase in milk yields.

61. Milk production in the developing countries generally remained at low levels due to technical and economic factors. However, production in India, which accounted for nearly one half of the total Asian milk production and one third of the aggregate for all developing countries, expanded under the "Operation Flood" project sponsored by the European Community. At around 44 million tons in 1986, it showed an increase of nearly 5 per cent over the output of the preceding year. China's production of milk, which was only 4.9 million tons in 1985, rose by 11 per cent in 1986 to a level of 5.5 million tons in 1986, as a result of increased cow numbers and more emphasis in 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 of milk more or less remained unchanged in Africa.

In Latin America, though the overall production was a shade higher, demand for milk products outpaced the supplies and made larger imports necessary. Mexican output increased by 15 per cent in 1986 due to favourable pasture conditions and abundant feed supplies. Likewise, in Chile, milk deliveries increased by 14 per cent in 1986, with the consequence that dairy imports were almost eliminated and small exports were made to Bolivia, Brazil and Peru. In Brazil production fell by 6 per cent due to a drought and a price freeze imposed by the Government as part of its economic package.

### Consumption

62. 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.

63. 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. A 1 to 2 per cent rise in consumption of partially skimmed milk was reported by the following countries: Belgium, Denmark, Finland, France, the Federal Republic of Germany, Italy, Sweden and Switzerland. 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.

64. 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 although the absolute levels still remained low.

65. 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. However, in 1987, considerations were being made of a possible adjustment of retail prices which might result in an increase in prices. Per capita milk consumption was reported to have increased also in Czechoslovakia, the German Democratic Republic and Hungary.

#### Fresh Milk Products

66. 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.

67. 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.

68. 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 again increased substantially in 1985. New Zealand's 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.

69. 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 and Anhydrous Milk Fat

#### Butter

##### Production

70. World production of butter and butter oil in 1986 was estimated to be 7.8 million tons, which was 2.2 per cent up on the level of 1985. The outlook for 1987 was for a decline of 3 per cent to the lowest level in several years. Butter output expanded sharply in the European Community even though milk production had increased by only 1/2 per cent in 1986. An increase of about 150 thousand tons from 1985 to 1986 to reach a level of 2.17 million tons was in part attributable to sharp increases in the new member countries, Portugal and Spain. Fluid use of milk in the Community declined and the small rise in cheese manufacture was not enough to absorb the rise in surplus milk supplies. With an anticipated drop of 1 per cent in EC milk output in 1987, butter production was expected to fall by nearly 15 per cent to a level of 1.85 million tons.

71. In New Zealand, production was down to 232 thousand tons in 1986 from a level of 263 thousand tons in 1985, showing a decline of 12 per cent; mainly as a result of lower milk production due to adverse climatic conditions. During the first quarter of 1987, production at 52.5 thousand tons was 33 per cent less than the level in the corresponding period of last year. The total fall anticipated for 1987 was around 9 per cent compared to the level in 1986. In Australia, butter output at 68.5 thousand tons in calendar year 1986 was 14 per cent below the level in 1985, in spite of an increase in milk output. This was mainly due to increased production of non-Cheddar cheese and whole milk powder. Production of butter including butter oil in 1986/87 (July-June season), was forecast at 101 thousand tons, which would be 3,900 tons less than in the corresponding previous season. On a calendar year basis, a drop of 7 per cent was projected for 1987.

72. Polish output of butter at 259 thousand tons was 6 per cent smaller in 1986 than in 1985, also due to reduced supplies of milk. There was a considerable improvement in the first quarter of 1987 when production aggregated 47 thousand tons, which was nearly 14 per cent more than its level in the corresponding period of last year. For 1987, as a whole, however, output was expected to be lower than in 1986.

73. In Finland, butter production in 1986 remained unchanged at the previous year's level of 72 thousand tons. Projection for the current year again showed no change in butter output due to the same level of milk deliveries. In Sweden, output of butter in 1986 fell by nearly 13 per cent to reach a level of 37 thousand tons. It was expected to decline further due to reduced supplies of milk in 1987.

74. In the United States butter production dropped by nearly 5 per cent to a level of 544 thousand tons in 1986, as more milk moved into cheese manufacture and increased sales of fluid milk. With an anticipated decline of more than 2 per cent in milk production, butter output was projected to drop by nearly 14 per cent in 1987. Butter production in Canada in 1986 was 2 per cent lower than in the previous year due to increased allocation of milk for cheese production. A further 2 per cent decline was anticipated for 1987 in continuation of the previous trend. USSR production rose by 6 per cent reaching a level of 1.6 million tons in 1986 as a result of increased milk deliveries and higher yields. Output of butter in the German Democratic Republic showed a slight increase from 316 thousand tons in 1985 to 317 thousand tons in 1986 and was expected to remain unchanged at this level in 1987.

75. As a result of larger milk output in several developing Asian countries, especially in India, Pakistan and China, butter production showed some increase in 1986. Elsewhere, it either declined or remained static.

#### Consumption

76. Global consumption of butter lagged behind aggregate world production resulting in a further accumulation of stocks. However, there were indications that 1986 total consumption of butter in the participating countries edged slightly higher than in 1985 as a result of numerous measures taken to promote its consumption.

77. The European Community continued its policy of encouraging butter consumption. Special sales of cut-price butter within the EC such as sales to ice cream and cake manufacturers and to non-profit making institutions, were continued. A campaign financed by funds from the co-responsibility levy was launched to promote consumption of dairy products. Community assistance to the milk and milk products distribution programme in schools was expanded in all member States. In January 1987, this type of aid was extended to individuals in need of such help. Another measure which was expected to influence consumption of butter and butter oil was the proposed tax on oils and fats; if adopted it would raise the prices of competing

products like vegetable oils and marine fats. In July 1986, a scheme was adopted under which old butter would be incorporated in animal feeds, after processing into butter oil. 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 would make available to welfare and charitable organizations butter for free distribution to such people. The scheme applied to butter which was taken into storage after 1 January 1986 and was valid until the end of March 1987. The EC sold under special programmes 283 thousand tons in 1985 and 330 thousand tons in 1986, including sales of concentrated butter for cooking purposes, at half the normal price. Total consumption of butter in 1986 at 1.61 million tons was slightly more than in 1985. In 1987, however, it was projected to drop by 0.7 per cent to a level of 1.59 million tons. Butter consumption fell by 3 per cent and 12 per cent respectively in France and the United Kingdom but seemed to have increased in the Federal Republic of Germany and in the Netherlands where margarine demand declined and butter demand increased.

78. 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 40.9 thousand tons in 1985, declined by another 1 per cent in 1986.

79. 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 decreased to 53 thousand tons in 1986. In Norway domestic consumption of butter registered a fall, while in Sweden it somewhat increased.

80. In Poland, butter consumption continued to recover in 1985 and 1986. With the discontinuation of butter rationing, consumption increased to 66 thousand tons in the first quarter of 1987, about 6 per cent higher than in the same quarter of 1986.

81. 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.

82. 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.

83. In Australia, domestic consumption of butter was expected to reach 60 thousand tons in 1986/87, a marginal increase on the level of consumption in 1985/86 (59.6 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.

84. 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 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. In 1986, consumption fell by another 3 per cent and was expected to fall at a similar rate in 1987. Consumption of butter in the USSR and some other European countries was also growing although shortage of foreign currencies was restricting imports.

#### Trade

85. World trade in butter remained sluggish in 1986; the situation was not likely to change substantially in 1987. An aggregate for the five major exporting participants in the Arrangement showed that butter exports during 1986 were almost one-fifth less than in 1985 and the decline in New Zealand's exports accounted for more than half of the fall in aggregate butter exports. The market situation was characterized by a high level of stocks, weak demand and intense competition resulting in depressed international prices. The strong competition among major suppliers and the weak international demand were expected to keep butter and butter oil prices down in the near future. Despite low prices, import demand tended to remain weak in developing countries, because of foreign exchange shortages and their general economic situation. Also, production of dairy products was expanding in some of these countries reflecting domestic dairy policies. Import demand in the USSR and Eastern Europe was likely to remain along past trends as long as dairy products in international trade remained available at very low prices. Their import demand would weaken substantially if and when those prices were to increase.

86. EC exports of butter to third countries, which had decreased to 201 thousand tons in 1985 from 221 thousand tons in 1984, dipped further to their lowest level of 186 thousand tons in 1986. Shipments were mainly directed to certain Mediterranean and OPEC countries and to the USSR. Exports to the USSR increased by about 91 per cent, while they declined by about 30 per cent for other destinations. The export refund of the EC payable for butter, which was at ECU 181.45 per 100 kgs., since the end of

September 1985, was increased to ECU 200 per 100 kgs. as from 17 October 1986. Since February 1986 the Community had been fixing export refunds by tendering procedures, allowing differentiation according to destinations. This might have resulted in higher export refunds than those which were fixed periodically and published regularly under a price derogation. The EC exported 300 thousand tons of butter (18-months' old) to the USSR in the first quarter of 1987 compared with 100 thousand ton sales in 1986. Further sales were envisaged to the USSR, Pakistan and India.

87. Exports by New Zealand in 1985 at 215 thousand tons as compared to 174 thousand tons in 1984, were 23 per cent higher. In 1986, however, they fell by one-fourth to a level of 162 thousand tons. 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 thousand tons in 1985 and 79 thousand 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 were 76 thousand tons and 74 thousand tons. New Zealand also sold 23 thousand tons to Algeria and 26 thousand tons to the USSR. Butter exports in the first quarter of 1987 were 35 per cent lower when they amounted to 27 thousand tons as against 43 thousand tons in the same three months of 1986. It was also reported that New Zealand had sold 35 thousand tons of unsalted butter to Iran in August 1987.

88. Australian exports of butter which had increased strongly in 1984 reaching 23 thousand tons continued their uptrend so that their level was 27 thousand tons by the end of 1985. In 1986 exports decreased by almost 28 per cent to a level of 20 thousand tons. The main destinations were Algeria, Iran and a number of Pacific countries. Exports of butter and butter oil for 1986/87 were forecast at 34 thousand tons as against 54 thousand tons in 1985/86 (exports over July 1986-March 1987 amounted to 27 thousand tons). The fall reflected producer's decision to direct production out of the over-supplied butter/skimmed milk powder sector to cheese and whole milk powder.

89. The downtrend in Finland's butter exports continued in 1985 so that the level was only 19 thousand tons as compared to 23 thousand tons in 1984, i.e. one-fifth lower. The main outlets remained the USSR and some African countries. Exports declined steeply to a level of 10 thousand tons in 1986, due mainly to a sharp reduction in exports to African countries. Exports to the USSR at 8 thousand tons were slightly more than in the previous year. Exports by Sweden decreased to 8 thousand tons in 1986 from a level of 13 thousand tons in 1985.

90. Exports of butter from the United States, which had reached a level of 44 thousand tons in 1984, totalled only 30 thousand tons in 1985. In 1986, exports declined to 6 thousand tons only. The forecast for 1987 was for a substantial increase. The main destinations being Mexico, Egypt and Jamaica. Under the US Food Security Act of 1985, a five-year farm-subsidy programme allowed for 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 thousand tons of butter oil had been exported under the programme. However, under the new Dairy Export Incentive Programme, adopted in February 1987, the United States offered some 140 thousand tons of fresh butter to a large number of countries. It appeared, however, that no significant sales had so far been made under this programme.

91. Exports from the Democratic Republic of Germany declined in 1986. In the case of Austria, exports of butter in 1986 rose sharply to a level of 7,500 tons from 2,600 tons in 1985.

92. 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 thousand tons in 1984, receded further in 1985 to aggregate 80 thousand tons. New Zealand remained the main source of Community imports. In 1986, butter imports totalled 85 thousand tons. Imports into Switzerland, which were reduced by one-third to a level of 8 thousand tons in 1984 diminished further to a level of 7 thousand tons in 1985. In 1986, however, imports recovered by 11 per cent to a total of 7.9 thousand tons and preliminary indications suggested that imports in 1987 would be higher than their level in 1986.

93. Imports into Poland in 1986 amounted to 38.9 thousand tons compared to no imports in 1985. The main source of these imports was the EC. Further expansion in imports was anticipated in 1987.

94. Imports into the USSR increased from 198 thousand tons in 1984 to 276 thousand tons in 1985, i.e. by 39.2 per cent. Preliminary data for 1986 indicated that imports at 250 thousand tons were about 10 per cent smaller, mainly due to increased domestic production. The bulk of these imports originated from the EC (Table 4). In the first quarter of 1987, 30 thousand tons of old butter (over 18 months) was bought from the EC as compared to a total of 100 thousand tons in 1986. Further imports from the EC and New Zealand in the course of 1987 were anticipated.

#### Stocks

95. 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. In April 1987, aggregate stocks of these countries amounted to 1.46 million tons compared to 1.43 million tons a year earlier, an increase of less than 2 per cent.

96. Aggregate stocks of butter in the EC (public and private) increased to a level of 1.48 million tons on 1 October 1986 as against a 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 1.19 million tons on 1 April 1987, but already on 11 June 1987 had again increased to 1.23 million tons, i.e. 1.19 million tons in the public sector and 42,000 tons in the private sector. It was estimated that some 600 thousand tons, or nearly half of the total stocks, were of the older butter (over 18 months), of which a great part was quite deteriorated butter. Despite

TABLE 4  
Imports of Butter into USSR by Origin  
(<sup>'000</sup> metric tons)

	1981	1982	1983	1984	1985	1986
<u>Total</u>	<u>215.06</u>	<u>150.69</u>	<u>202.63</u>	<u>198.02</u>	<u>276.04</u>	
of which from						
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</u> <u>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.

subsidized 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.

97. In order to reduce the level of stocks, the Commission took two measures. The first was to delay payment for butter sold into intervention stocks of 240 days instead of 60 days. Member States with higher interest rates were particularly hard hit by this move, since the additional delay effectively meant an average price cut of 2.5 per cent. The second was to make the seller responsible for the costs of the first 240 days of storage. Further important decisions were taken by the EC in February 1987 to dispose of 1 million tons of old butter in 1987 and 1988. The current system would be maintained during the transitional period and the present delays in payments and intervention buying-in would be maintained. The transitional period would end some time after 1 April 1987, and as soon as the volume of butter offered for intervention would exceed 150 thousand tons. To prevent speculation during the month of March when normally 30 thousand tons of butter would be offered, a limit was set at 180 thousand tons. When the limit of 180 thousand tons for offering butter for intervention had been exceeded, the Commission could suspend intervention purchases in the whole Community or a part of it, but nevertheless observe the principle of non-discrimination as between member States. The Commission could resort to other means as well in order to support market prices and avoid the triggering of a downward spiral movement. If market prices for butter in one or more member States should fall below 92 per cent of the intervention price, intervention purchases could be resumed in the States concerned. In any case, whenever physical stocks might exceed 250 thousand tons and without taking into account quantities offered before 1 March 1987, the floor price might be modified from 92 to 90 per cent of the intervention price. By the end of June 1987, offers of butter into intervention since March, had reached a total of 180 thousand tons, and the Commission suspended intervention buying. Further sales into intervention were based on a tender basis.

98. New Zealand stocks decreased to 102 thousand tons on 1 April 1987 as compared to 130 thousand tons on 1 April 1986. The sale of 50 thousand tons of butter oil 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, especially to the USSR and Iran, were achieved. Australian butter stocks on 1 October 1986 at 11.4 thousand tons were half their level a year earlier. They climbed up to 35.9 thousand tons on 1 April 1987, mainly as a result of a substantial fall in exports.

99. In Poland, stocks of butter decreased very sharply to 9.2 thousand tons on 1 October 1986 as compared to 40.6 thousand tons a year earlier. They recovered in April 1987 to a level of 13 thousand tons.

100. In Finland, butter stocks at 17 thousand tons on 1 April 1987 were 40 per cent more than a year earlier, and indications were that they would increase further in the course of the year due to declining exports. Swedish butter stocks increased to 7.4 thousand tons on 1 April 1987, as compared to 4.2 thousand tons on 1 April 1986, due to falling exports.

Butter stocks held by Japan on 1 April 1987 at 29 thousand tons, were slightly less than a year earlier. In the course of 1987 there was a further decline, but the level was reckoned to be still high due to a stagnation in butter demand.

101. 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 US exports of dairy products and to reduce stocks. On 1 April 1987 stocks of butter stood at 120 thousand tons, a decrease by some 7 per cent compared with their level on 1 April 1986. In the course of 1987, butter stocks were again declining and by the end of the year were expected to be at the lowest level since the mid 1970's due to strong domestic demand, reduced production and an aggressive export policy. Canadian stocks on 1 October 1986 at 21 thousand tons, were 33 per cent smaller than a year earlier. They declined further to 16 thousand tons in the beginning of 1987 due to a decline in butter production.

#### International prices

102. The minimum export price of butter was reduced from US\$1,200 per ton to US\$1,000 per ton on 31 May 1985 by the decision of the Committee of the Protocol Regarding Milk Fat. The decision came into effect on 5 June 1985. 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 425 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 of May 1985 expired on 31 December 1986.

103. In the past few 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 and early 1987, the observance of the agreed minimum price was found to be difficult by certain participants for sales of fresh butter to certain markets. Thus, in accordance with Article IV(6) of the International Dairy Arrangement and paragraph 5 of the Decision of 31 May 1985 (BISD 31S/173), the Committee of the Protocol Regarding Milk Fat decided on 2 June 1987, that it was not possible for certain traditional volumes of butter sales to the USSR to be concluded at prices fully consistent with Article 3 of the Protocol. In light of the present difficult situation, therefore, the traditional suppliers to this market could export at below the minimum prices in 1987 (DPC/F/48).

## Anhydrous Milk Fat

### Production

104. Production of anhydrous milk fat in 1986 was higher in Australia and New Zealand, but was significantly lower in the EC. Combined output in the EC, Australia, New Zealand, Sweden, Switzerland and Uruguay at 293 thousand tons was 3 per cent smaller in 1986 than in the previous year. In the first quarter of 1987, output was relatively higher in the EC, New Zealand, Sweden and Switzerland as compared to the level in the corresponding period of last year.

### Trade

105. Traditionally, the major exporters of anhydrous milk fat were the EC and New Zealand. EC exports in 1986 were 120 thousand tons or 22 per cent smaller than in last year. Exports considerably picked up in the first quarter of 1987 when they reached the level of 41 thousand tons compared to 14 thousand tons in the same period last year. Exports from New Zealand at 47 thousand tons, as compared to 36 thousand tons in 1985, were 31 per cent higher in 1986. Their level in the first quarter of 1987 at 16 thousand tons compared most favourably with only 5 thousand tons in the same period last year. A sale under derogation, of 50 thousand tons of butter oil was concluded with Brazil for delivery by the end of 1987. Australian exports in 1986 at 23 thousand tons were marginally below their level of 1985 and, in the first quarter of 1987 ran much below their level in the corresponding period of last year.

### Food aid

106. The 1985 Community food aid programme provided for a maximum of 28.7 thousand tons of butter oil, as against 32.8 thousand tons in 1984. Deliveries of butteroil as food aid amounted to 28 thousand tons in 1985 as against 49 thousand tons in 1984. The 1986 and 1987 food-aid programmes provided for a maximum of 27.3 thousand tons for each year. In 1986, deliveries of butter oil as food aid amounted to 28 thousand tons, the same as in 1985. The relative importance of food aid sales increased, however, as the percentage of total Community exports of anhydrous milk fat going to food aid increased from 18 to 23 per cent from 1985 to 1986. In 1987, 7 thousand tons of butter oil had so far been allocated to eight developing countries, with Djibouti due to receive 4 thousand tons alone. Actual food aid deliveries during the first three months of 1987, amounted to 5 thousand tons in relation to 6 thousand tons delivered in the corresponding period of 1986.

107. Foreign donations by the United States under Section 416 during 1985 totalled some 31 thousand tons of butter oil in terms of butter equivalent. During fiscal year 1986, signed commitments to donate United States dairy products under Section 416 included 16 thousand tons of butter oil and 1.6 thousand tons of butter, the main beneficiaries being Mexico, Mauritania and Poland. During 1 October 1986-19 June 1987, signed commitments to donate US dairy products under Section 416 included 3 thousand tons of butter oil and 7.5 thousand tons of butter, the main beneficiaries being Mexico and Mozambique.

### Stocks

108. 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. In the first quarter of 1987, stocks had risen to 9 thousand tons, but still lower than their level a year earlier. Australian stocks during this period increased from 3.3 thousand tons to 4.1 thousand tons, and in the first quarter of 1987 stood at 2.9 thousand tons as against 2 thousand tons in the same quarter of 1986.

### International prices

109. On 31 May 1985, the Committee of the Protocol Regarding Milk Fat decided to reduce the minimum price of anhydrous milk fat from US\$ 1,400 to US\$ 1,200 per metric ton f.o.b. as from 5 June 1985.

110. International prices of anhydrous milk fat had been weakening since 1983 and throughout the years 1986 and 1987, export prices remained close to the minimum export price of US\$1,200 per ton f.o.b. New Zealand sold 50 thousand tons of butter oil to Brazil at US\$550 per ton c.a.f. under derogation from the price provisions of the Protocol. The outlook remained bleak in 1987. Concerns were repeatedly expressed with regard to the observance of the minimum price for anhydrous milk fat, and in this respect it was recalled that participants had undertaken to take the steps necessary to ensure that the minimum prices were observed and that efforts were further pursued to this effect.

## Cheese

### Production

111. World output of cheese at 12.9 million tons in 1986 was 1 per cent more than in 1985 when it had increased by 3 per cent. Another 1 per cent gain was forecast for 1987. Lack of export markets for butter and increased consumption of non-traditional cheeses were stimulating the overall cheese production. In the EC, cheese production in 1986 totalled 4.31 million tons, as compared to 4.17 million tons in 1985. It was forecast to increase to 4.36 million tons in 1987 or by 1 per cent over the level in 1986. Already in the first half of the current year, production was estimated to have increased by more than 3 per cent.

112. In Australia, cheese production at 168.2 thousand tons in 1986 was 2.5 per cent higher than in the previous year. Cheese output in the first quarter of 1987 was 46 thousand tons, up 9 per cent on the corresponding period in 1986. Production during the period July 1986-March 1987 was 149 thousand tons, up 1.6 per cent on the 1985/86 level of 148 thousand tons. The forecast for 1986/87 (July/June) was 175 thousand tons, which would be 2.8 per cent up on the level of 170 thousand tons in 1985/86. Of this Cheddar would be 122 thousand tons (1.2 per cent down on the 1985/86 level) and non-Cheddar 53 thousand tons (13.5 per cent more than the level of 1985/86). New Zealand cheese output in 1986 at 111.9 thousand tons was some 17 thousand tons less than in 1985, representing a 7 per cent decline. Production in 1986/87 was forecast to decline further.

113. Relative gains were recorded in 1986 cheese output in Argentina (+ 19.7 per cent), Bulgaria (+ 8 per cent), Finland (+ 5.1 per cent), Hungary (+ 0.1 per cent), Japan (+ 15.7 per cent), Norway (+ 5.8 per cent), Poland (+ 1.8 per cent), Romania (+ 2.5 per cent), South Africa (+ 4.7 per cent), Switzerland (+ 2.6 per cent) and Uruguay (+ 26.3 per cent). However, declines were shown by Egypt (- 1.0 per cent) and Sweden (- 7.4 per cent).

114. In Austria, cheese manufacture declined by 7 per cent in 1986. In the United States, output at 2.39 million tons in 1986 was 4.8 per cent higher than its level in 1985. A further gain of 2 per cent was anticipated in 1987. Canadian cheese output showed a gain of 12.5 per cent, from 207.3 thousand tons in 1985 to 233.3 thousand tons in 1986. It was expected to increase further in 1987. In the USSR, production of cheese at around 825 thousand tons in 1986 was about 2 per cent higher than in 1985, and a further expansion was projected for 1987. In Democratic Republic of Germany, cheese output in 1986 at around 225 thousand tons remained unchanged from its level in the previous year, as it remained unchanged in Czechoslovakia at around 194 thousand tons. In Mexico, cheese production in 1986 increased by 40 per cent over the previous year and was projected to increase by another 12 per cent in 1987. In Brazil, however, the level at around 52 thousand tons remained unchanged from the previous year's level.

#### Consumption

115. Global consumption of cheese in 1986 was about 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 for a further improvement in world demand for cheese, especially the speciality type cheeses.

116. Cheese consumption in the EC, which had increased by 2 per cent in 1985 to a level of 3.86 million tons, increased by another 4.6 per cent to a level of 4.04 million tons in 1986. It was forecast to rise by another 1.2 per cent in 1987 to reach a level of 4.09 million tons. Consumption also rose in Finland (+ 13.0 per cent), Hungary (+ 3.6 per cent), Japan (+ 5.1 per cent), Norway (+ 4.2 per cent), Poland (+ 4.3 per cent), South Africa (+ 9.8 per cent), Switzerland (+ 1.9 per cent). It, however, declined in Sweden (- 0.1 per cent) and Uruguay (- 14.3 per cent). Consumption of cheese in Australia in 1986 increased by 2.5 per cent to reach a level of 168 thousand tons, whereas in New Zealand it showed a decline of 7 per cent, receding from a level of 121 thousand tons in 1985 to 112 thousand tons in 1986.

117. Overall consumption also decreased in Austria from 83 thousand tons in 1985 to 78 thousand tons in 1986. However, both in the case of Canada and the United States substantial increases in consumption were achieved. In Canada, consumption increased from 207 thousand tons in 1985 to 233 thousand tons in 1986, showing an increase of 12.5 per cent over the year. In the United States, cheese consumption rose by 4.8 per cent from 2,279 thousand tons in 1985 to 2,389 thousand tons in 1986.

118. Consumption also increased in the USSR, from 809 thousand tons in 1985 to 825 thousand tons in 1986, or by 1.9 per cent. A further increase was anticipated for 1987. In the Democratic Republic of Germany and Czechoslovakia it remained stable respectively at the levels of 225 thousand tons and 194 thousand tons.

### Trade

119. World exports of cheese declined for a second consecutive year in 1986 and were estimated to be some 865 thousand tons. Due to a slackening of import demand in the Near East, overall trade in cheese in 1986 decreased by about 1 per cent compared to the level a year earlier. The decrease was mainly due to smaller imports by OPEC countries and other developing countries. However, towards the end of 1986, import demand was showing signs of improvement as Iran was again buying Feta cheese and Brazil was in the market to import cheese. Prospects of 1987 were for a better cheese market, but supplies remained plentiful and competition keen.

120. The EC exports of cheese at 380 thousand tons in 1986 were at least 1 per cent below those of last year. The main destinations were the United States, Canada, Japan and certain 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 were allowed for certain 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 change 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.

121. Deliveries by New Zealand increased by 18.7 per cent, from 87.5 thousand tons in 1985 to 103.9 thousand tons in 1986, the main outlet being Japan. New Zealand continued to invoke Article 7:2 for exports of low-quality cheese. Since 1983, New Zealand had notified sales of 9,646 tons up to 1986 under this provision to a range of countries. Australian exports of cheese in 1986 at 60.8 thousand tons were 17 per cent less than in the preceding year when they totalled 73.6 thousand tons. Exports in 1986/87 were forecast at about 59 thousand tons, comprising 53 thousand tons of Cheddar and 6,500 tons of non-Cheddar cheeses.

122. Exports from Switzerland declined by nearly 2 per cent in 1986 to 64.2 thousand tons. It was forecast that exports would decrease by another 1 to 2 per cent in 1987. The decline in exports in the first quarter of 1987 amounted to 3.4 per cent from 14.8 thousand to 14.3 thousand tons and were expected to fall by 4 per cent in the second quarter. Finland's exports at 33.1 thousand tons in 1986 were 11 per cent smaller than their level in 1985. Prospects for increased exports in 1987 were limited due to ceilings under bilateral agreements both with the Community and the United States.

123. According to figures available for other participants, exports of cheese were higher from Argentina (+ 45.0 per cent), Norway (+ 0.5 per cent) and Uruguay (+ 213.0 per cent), but were lower from Bulgaria (- 32.3 per cent), Hungary (- 20.8 per cent), Romania (- 38.0 per cent), South Africa (- 35.8 per cent) and Sweden (- 27.4 per cent). Exports from Poland remained unchanged. Exports from all the participants aggregated some 717 thousand tons in 1986, thus showing around 5 per cent overall decline compared to the level in 1985.

124. Cheese exports from the United States decreased to a level of 12.4 thousand tons in 1986 from 15.7 thousand tons in 1985, a decline of about 21 per cent. 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) but no sales had been concluded by August 1987. Canadian exports of cheese also decreased between 1985 to 1986 from 10.5 thousand tons to 10.1 thousand tons or by 4 per cent; as they declined from Austria by 15 per cent, from 42.5 thousand tons to 36 thousand tons in 1986.

125. On the import side, the United States purchased a total of 132 thousand tons of cheese in 1986, as compared to 137 thousand tons in 1985. The bulk of the imports were from the EC, New Zealand and Finland. The EC imports at 104 thousand tons in 1986, mostly from Switzerland, were 7.2 per cent smaller than in the previous year. Similarly, the Japanese imports of cheese in 1986 were 1 per cent smaller than in 1985, the main suppliers being the EC, New Zealand and Australia. In Switzerland, cheese imports were, however, 6 per cent higher in 1986 compared to their level in 1985 when they totalled 21.3 thousand tons, and there was a further increase of 8 per cent for the first half of 1987 compared to the same period one year earlier.

#### Stocks

126. 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 were normally not subject to wide variations due to a strong domestic demand; nonetheless, they increased in 1986 as a result of less than anticipated growth in demand and a drop in EC's exports. Private stocks on 1 October 1986 were 131 thousand tons, some 15 thousand tons more than a year earlier. On 11 June 1987 stocks in private storage amounted to 103 thousand tons, comprising mainly Italian-type cheeses.

127. In Australia, stocks on 1 April 1987 added up to 97 thousand tons, some 3.6 per cent less than one year earlier. New Zealand stocks declined even more by 14 per cent amounting to 70 thousand tons in April 1987. Cheese stocks declined or changed very little in most other participating countries, and were near their levels of the previous year.

128. In the United States cheese stocks on 1 July 1987 were estimated to be at a level of 340 thousand tons, 25 per cent less than one year earlier. Canadian cheese stocks were also reported to have declined by 12 per cent from 1986 to 1987.

### International prices

129. 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.

130. Market prices for cheese continued to vary according to types of cheeses and markets 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, but between US\$1,100 and US\$1,200 per ton f.o.b. during the second quarter of 1987 showing that demand for a number of cheeses was again firming up following increased purchases by Brazil and Iran.

### Milk Powders

#### Skimmed Milk Powder

#### Production

131. 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.

132. In the EC, production increased by about 11 per cent in 1986 to a level of 2.10 million tons. 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. However, production of skimmed milk powder in the first quarter of 1987 decreased by 21 per cent in relation to the first quarter of 1986 and reached 385 thousand tons.

133. In New Zealand, production in 1986 amounted to 154 thousand tons, a decrease of 21.7 per cent in relation to 1985. Production decreased sharply (by 32 per cent) in the first quarter of 1987. In Australia, production in 1986 decreased by 8.2 per cent to 123 thousand tons; this decrease continued in the first quarter of 1987 at a slower rate. Production of skimmed milk powder was estimated at 125 thousand tons in 1986/87, a marginal increase compared with the 1985/86 output of 124.8 thousand tons. Production of skimmed milk powder by other participants followed varying trends in 1986; output increased in Japan and Finland, and declined in Poland, Sweden, Switzerland and Hungary.

134. In the United States, output decreased by 6.7 per cent in 1986, reaching 588 thousand tons. This decrease continued in the first half of 1987 at a faster rate, and production declined by 21 per cent to 181 thousand tons compared to 355 thousand tons in the first six months of 1986. In Canada, production in 1986 totalled 104 thousand tons, an increase of 6.7 per cent in relation to 1985. Production in the USSR continued to increase in 1986, reaching 825 thousand tons.

135. World production of skimmed milk powder was expected to decrease substantially in 1987 as the EC and the United States both reduced milk output. In the EC, production of skimmed milk powder was expected to fall from 2.1 million tons in 1986 to 1.7 million tons in 1987 or by 20 per cent. In the United States, production was expected to amount to 470 thousand tons in 1987, a decline of 20 per cent over 1986. In New Zealand, output in 1987 was expected to be lower than in 1986.

### Consumption

136. World consumption of skimmed milk powder decreased in 1986. In the EC total internal consumption had declined to the level of 1,581 thousand tons in 1986, a decrease by 6 per cent in relation to 1985. Human consumption was estimated to have declined to 171 thousand tons, i.e. 125 thousand tons less than in 1985. Consumption for animal feed - the major outlet for skimmed milk powder in the Community - increased by about 27 thousand tons in 1986, reaching 1.41 million tons. During the first quarter of 1987, total domestic consumption was 347 thousand tons, as against 369 thousand tons in the first quarter of 1986. In Japan, domestic consumption totalled 267 thousand tons in 1986, i.e. 12 thousand tons more than in 1985; 196 thousand tons was used for human consumption. In Finland and Hungary most of the skimmed milk powder consumed in 1986 was used for animal feed. In the United States, total consumption of skimmed milk powder increased by 6 thousand tons in 1986, to a level of 365 thousand tons.

137. 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, to promote either its use as animal feed or for processing into compound feed "pig-and-poultry" 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.

138. 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

139. 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 13.8 per cent in 1986, totalling 264 thousand tons of which 97 thousand tons was delivered as food aid. Exports increased in the first quarter of 1987, reaching 46 thousand tons, as against 39 thousand tons in the corresponding quarter of 1986.

140. Exports by New Zealand decreased by 7.5 per cent in 1986 to reach 160 thousand tons; during the first quarter of 1987 exports amounted to 31.3 thousand tons, as against 24.5 thousand tons in the corresponding quarter of 1986. The main destinations were countries in South East and Eastern Asia and Brazil. Exports from Australia decreased by 17.5 per cent in 1986 to the level of 74.4 thousand tons; they declined during the first quarter of 1987 to 20.8 thousand tons as against 24.2 thousand tons in the corresponding quarter of 1986.

141. Exports from Poland decreased sharply (by 26.2 per cent) in 1986 to reach 26.4 thousand tons; the main destinations were Algeria, Japan, Bangladesh and New Zealand.

142. Exports by the United States rose by 13.8 per cent in 1986 to reach 347 thousand tons; approximately 43 per cent of the shipments - about 148 thousand tons - were 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 were 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 Exports Incentive Program adopted in February 1987, the United States offered some 370 thousand tons of non-fat dry milk and whole milk powder to certain developing countries. However, no significant sales had been made by August 1987. Exports from Canada increased in 1986 by 9 per cent to 66 thousand tons. The principal destinations of Canadian exports were Mexico and Peru.

143. On the import side, purchases by Japan declined by 12.5 per cent in 1986 to 91 thousand tons. Much of the powder imported - 71.7 thousand tons - was for use as animal feed. At the beginning of 1987 imports continued to decline and showed a fall of 9.2 per cent in the first quarter. The principal origins of supplies in 1986 were New Zealand (19.6 thousand tons), Australia (16.5 thousand tons) and the EC (12.4 thousand tons).

144. 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 butter oil. 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.

145. World exports of skimmed milk powder (including food aid) were expected to increase in 1987. Total exports by the United States could continue to increase and reach 375 thousand tons in 1987. Foreign donations were likely to continue to be large in 1987 and the Commodity Credit Corporation was expected to make more government-to-government direct export sales.

#### Food aid

146. 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 other developed countries accounted for approximately one sixth of world exports of dairy products, partly reflecting the persistent excess of supply over commercial demand. Food aid deliveries both from the EC and the United States decreased in 1986. As regards skimmed milk powder, foreign donations by the United States amounted to 148 thousand tons as against 222 thousand tons in 1985, the main beneficiaries being Mexico and Brazil. 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.

147. The EC food aid programme for the year 1986 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 3 thousand tons and the World Food Programme (22 thousand tons). Food aid deliveries by the EC amounted to 97 thousand tons in 1986, as against 124 thousand tons in 1985. The 1987 food-aid programme of the Community provided for a maximum of 94 thousand tons of skimmed milk powder, the same as in 1986. During the first three months of 1987 food aid deliveries by the EC amounted to 16 thousand tons in relation to 30 thousand tons delivered in the corresponding period of 1986.

148. 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	74,400	4,200	800	400	6.0	0.9	0.5
Austria	15,736	...	...	718	...	...	4.6	...	...
Canada	70,000	60,580	66,100	28,000 <sup>a/</sup>	...	...	40.0	...	...
EC	307,000	309,000	264,000	167,000	124,000	97,000	54.4	40.1	36.7
Switzerland	700	8,800	8,400	700	1,200	700	100.0	13.6	8.3
United States	264,517	304,883	347,100	180,533	221,928	148,000	68.3	72.8	42.6
TOTAL	733,153	...	...	381,151	...	...	52.3	...	...
	<u>Whole Milk Powder</u>								
Australia	27,300	31,700	38,000	600	40	70	2.2	0.1	0.2
Austria	26,441	...	...	-	...	...	-	...	...
Switzerland	3,100	3,000	3,000	2,700	2,600	2,600	87.1	86.7	86.7
TOTAL	56,841	...	...	3,300	...	...	5.8	...	...
	<u>Anhydrous Milk Fat</u>								
EC	129,000	153,000	120,000	49,000	28,000	28,000	38.0	18.3	23.3

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

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

### Stocks

149. Total stocks of skimmed milk powder in the EC, North America and Oceania of approximately 1.15 million tons at 1 January 1987 were up by 3.3 per cent from one year earlier. Total stocks of skimmed milk powder held by other countries showed divergent trends between 1 January 1986 and 1 January 1987. 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 accounted for by the increase in public stocks in the EC.

150. Total stocks of skimmed milk powder in the EC, North America and Oceania of approximately 1.06 million tons at 1 April 1987 were down by 14 per cent from one year earlier. Stocks increased in the EC between 1 April 1986 and 1 April 1987 while they decreased sharply in North America and Oceania. Public stocks in the EC totalled 765 thousand tons on 1 April 1987, as compared to 646 thousand tons on 1 April 1986.

151. After the measures taken in December 1986 concerning milk production, the European Community, in March 1987, took important measures concerning the management of the European dairy products market. With regard to skimmed milk powder the measures were:

- Intervention purchases of skimmed milk powder were suspended each year between 1 September and 28 February of the following year, i.e. during six months.
- During the rest of the year, intervention purchases might be suspended if the quantities taken in after 1 March 1987 exceeded 100,000 tons.
- The Commission might suspend temporarily intervention on skimmed milk powder in exceptional circumstances.

152. Stocks on 30 July 1987 aggregated 775 thousand tons in public store. From 1 March up to 31 August 1987, only 40 thousand tons of skimmed milk powder was taken into the intervention stocks, since under the new EC regulations the intervention had to be suspended once the total reached a quantity of 100,000 tons. 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.

153. On 1 April 1987, United States stocks amounted to 235 thousand tons, down by 48 per cent in relation to one year earlier, and also in New Zealand, Australia and Canada stocks of skimmed milk powder were substantially below their level of one year earlier. The decline in the United States and New Zealand stocks in 1986 had partially offset the larger EC stocks. Stocks were expected to be further reduced by the end of 1987.

### International prices

154. During the annual review of the minimum export prices in October 1986, the Committee of the Protocol Regarding Certain Milk Powders decided 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. At its June 1987 session, the Committee reviewed the level of minimum export prices of milk powders at the request of one participant, taking into account the evolution of the situation of the international market. It was decided to raise the minimum export price of skimmed milk powder from US\$680 to US\$765 per ton f.o.b. as from 25 June 1987.

155. 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. Prices continued to firm in the first quarter of 1987, and were fluctuating between US\$750 and US\$900 per ton f.o.b. During the second quarter of 1987, prices had fluctuated between US\$800 and US\$900 per ton f.o.b. Thus, the market for skimmed milk powder tended to strengthen and the supply situation was tight with an expectation that prices would continue to rise throughout 1987.

### Whole Milk Powder

#### Production

156. Aggregate output of whole milk powder which was more closely related to specific demand than some other dairy products again increased slightly in 1986 in relation to 1985. Output in the EC declined by 2 per cent in 1986, reaching 712 thousand tons. In the first quarter of 1987, however, production showed a substantial increase of 28 per cent, and reached 182 thousand tons as compared to 142 thousand tons in the first quarter of 1986.

157. In New Zealand production rose by 28.2 per cent in 1986 to 189.5 thousand tons. In the first quarter of 1987, production declined by 23.6 per cent to 49.6 thousand tons. In Australia, output increased by 29.6 per cent in 1986 and for the 1986/87 season was forecast to rise by about 24.8 per cent from 52.1 thousand tons to 65 thousand tons, in response to an increase in export orders. In Finland, production decreased by 9 per cent in 1986; this decline continued in the first quarter of 1987 at a faster rate. In Poland and Switzerland production remained relatively stable in 1986.

158. In Austria, production remained stable in 1986 at around 21 thousand tons. In the United States output progressed by 1.8 per cent in 1986 to 55.1 thousand tons.

### Trade

159. Total exports of whole milk powder by the main exporter participants increased by about 5 per cent in 1986. In the first quarter of 1987 total exports of the same participants continued to increase at a faster rate of about 20 per cent. The EC remained the leading exporter of whole milk powder, exporting 478 thousand tons in 1986, i.e. 1.2 per cent less than in 1985. In the first quarter of 1987, however, exports increased substantially by 44 per cent to 143 thousand tons.

160. Exports from New Zealand, the world's second largest exporter, increased by 23.4 per cent in 1986 to 166.1 thousand tons. However, they decreased to 36.4 thousand tons in the first quarter of 1987 as compared to 50.1 thousand tons exported in the first quarter of 1986. The main outlets were South and East Asia, Central America, Brazil and the USSR. Australian exports increased by 20 per cent in 1986 to 38 thousand tons. Exports in 1986/87 were estimated at 49 thousand tons as against 40.7 thousand tons in 1985/86.

161. Exports from Finland, which went exclusively to the USSR, decreased by 4 per cent in 1986 to 31.7 thousand tons. Due to the expected decline in production in 1987, export availability was likely to be lower, around 26 thousand tons.

162. The United States exported some 20.3 thousand tons of whole milk powder in 1986, almost exclusively to Brazil, as compared to 40.6 thousand tons in 1985.

### Stocks

163. Stocks of whole milk powder at 1 April 1987 were higher in Australia and lower in New Zealand and Finland in relation to their level at 1 April 1986. As exports were made on order, traditionally, stocks of whole milk powder remained low and statistical information was incomplete.

### International prices

164. During the annual review of the minimum export prices in October 1986, the Committee of the Protocol Regarding Certain Milk Powders decided 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. At its June 1987 session, the Committee reviewed the level of minimum export prices of milk powders at the request of one participant, taking into account the evolution of the situation of the international market. It decided to raise the minimum export price of whole milk powder from US\$880 to US\$900 per ton f.o.b. as from 25 June 1987.

165. 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. In the first quarter of 1987, prices fluctuated between US\$900 and US\$1,000 per ton f.o.b. In the second quarter of 1987, prices ranged between US\$950 and US\$1,050 per ton f.o.b. Thus, the market for whole milk powder remained firm and the supply situation was tight and prices were likely to increase further.

#### Buttermilk Powder

166. In New Zealand output of buttermilk powder decreased while exports increased in 1986. In Australia, production and exports decreased in 1986. Stocks at 1 April 1987 were lower in New Zealand and higher in Australia as compared to their levels at 1 April 1986. EC production of buttermilk powder amounted to 35 thousand tons in 1985 as compared to 40 thousand tons in 1984.

167. During the annual review 1986 of the minimum export prices, the Committee of the Protocol Regarding Certain Milk Powders decided 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. At its June 1987 session, the Committee reviewed the level of minimum export prices of milk powders at the request of one participant, taking into account the evolution of the situation of the international market. It was decided to raise the minimum export price of buttermilk powder from US\$680 to US\$765 per ton f.o.b. as from 25 June 1987, i.e., the same as the minimum price for skimmed milk powder.

#### Other Dairy Products

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

168. 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 and may cover a variety of milk concentrates including lactose.

169. The European Communities remained the main producer of whey powder, and Community production including whey concentrate and other whey products, amounted to 760 thousand tons in 1986, almost 2 per cent more than in 1985. Production of whey powder and concentrated whey declined in other European countries in 1986. Switzerland experienced a further decline of 13 per cent in its production of whey powder which for 1986 did not reach 3 thousand tons.

170. 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 64 thousand tons. On the contrary, United States production of whey powder which had shown a strong recovery in 1985, remained at the same level in 1986, reaching 447 thousand tons.

171. Information for the first months of 1987 indicated a further increase between 5 and 6 per cent in the Community production of whey powder. There was also an appreciable increase in the whey powder production in other European countries and the United States. The increase was linked to an increased cheese production and also to a reduced output of skimmed milk powder creating expectations of increased demand for whey powder which provided an incentive to increase the recuperation of whey in many countries. In Canada, the relatively high level of 1986 was not reached in 1987 with an expected decline of some 10 per cent.

172. Whey powder prices remained low throughout 1986, with international prices as low as US\$220 per ton at the end of the year. In European markets whey powder quotations remained depressed in the first part of 1987, but with signs of a firmer market around the middle of the year. In the United States the market was tight from February 1987 on and in May 1987 whey powder was quoted at US\$530 per ton, roughly double the level one year earlier. In light of expectations of significantly reduced supplies of skimmed milk powder coming on to the market, the world market for whey powder was expected to remain firm in 1987/88 with significantly higher prices than in previous years.

#### Concentrated milk

173. In 1986, 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 some Asian countries. 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 620 thousand tons. Prices remained steady throughout 1986 and the first part of 1987, at a level slightly below US\$2,000 per ton.

174. 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. Information for the first four months of 1987 indicated that the Community production of condensed milk might decline by another 10 per cent in 1987. While Community exports had recovered appreciably in 1985, reaching a total of 545 thousand tons, there was a decline in 1986, when exports were down by 20 per cent amounting to only 438 thousand tons.

175. In Australia, the production of condensed, concentrated and evaporated milk was again low in 1986, barely reaching 50 thousand tons. However, in spite of the decline in production, Australian exports of condensed milk amounted to 11 thousand tons in 1985/86 compared to 8 thousand tons in the previous period. 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.

176. In Canada, production of concentrated whole milk fell again in 1986, only reaching 114 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 for 1986/87 reached only 56 thousand tons following a further reduction in the special export programme. United States production of canned condensed milk declined by 10 per cent in 1986. Austrian production of condensed milk remained at its level of previous years, i.e. 14 thousand tons in 1986. 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.

177. Imports of condensed milk into developing countries had been declining over recent years. Notably there had been a strong decline in imports into some countries in Africa and Latin America, while imports into countries in Asia continued to increase. Total imports into developing countries which in 1985 had amounted to 660 thousand tons, were in 1986 only around 460 thousand tons.

#### Casein

178. 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 with a production of 6.9 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 reached 78 thousand tons in 1986, an increase of 2 per cent compared with 1985.

179. In the first part of 1987, the situation changed, with a reduced production in New Zealand and some increases in Australia and the European Communities. Some increase in casein production was also reported to have come about in Poland and the USSR. However for 1987 as a whole, an increase in exportable surpluses of casein was not expected to materialize. Increased supplies in Eastern Europe were needed to cover increasing domestic needs and Community production was expected to be relatively low during the latter part of the year due to less milk being available for the casein industry.

180. World trade in casein did not continue the upward trend of previous years in 1986, falling by some 6 per cent from 1985 and totalling less than 190 thousand tons. A further decline in casein trade was expected for 1987 as exportable supplies remained slightly reduced, following a lower production and increased domestic demand.

181. Community casein exports fell by 2 per cent from 1985 to 1986, in the latter year amounting to 90 thousand tons, while imports remained unchanged at the level of 24 thousand tons. Polish exports fell by almost a fourth and amounted to only 15.5 thousand tons. The major exception was Uruguay for which exports reached 3.5 thousand tons in 1986.

182. Australian casein exports continued to decline in 1986, amounting to some 5 thousand tons or less than half of their level in recent years, and concern was expressed as to future sales in the United States market. New Zealand casein exports showed a slight increase of less than 0.5 per cent from 1985 to 1986 and the high level of 1985 was again achieved with exports reaching 71.2 thousand tons, thus confirming New Zealand's position as the world's leading casein exporter. The expansion of New Zealand casein exports with record levels of sales of all casein products, was the result of sustained sales efforts over a wide front in all major markets. Significant developments of industry resources and manufacturing facilities enabled a higher proportion of the total casein product mix to be processed into products suitable for direct sales to end-users, offering a wide range of casein, casinate and co-precipitate products. The efforts made over recent years to improve the quality of New Zealand casein and adopt the product range to market requirements were continued. However, in 1987/88 New Zealand might not be able to maintain the same level of casein exports as in 1985 and 1986, partly because of smaller quantities available for export and partly because import demand might react, at least temporarily, to increased prices.

183. Imports of casein into Japan fell in 1986 back to a more traditional level of 23.6 thousand tons, some 4 per cent less than in 1985, with New Zealand, the European Communities and Australia providing the supplies.

184. The United States remained by far the most important outlet for casein in 1986, accounting for more than half of world imports. However, United States imports decreased from 110 thousand tons in 1985 to 100 thousand tons in 1986. In 1987, demand for casein was strong in the United States but this seemed in the first instance to have an impact on prices, which went up strongly and less on imported quantities. Exporters were expressing concerns as to a possible restriction of casein imports into the United States, as the United States dairy sector was complaining about the adverse effects casein imports had in the domestic market. A USDA study was conducted in 1986 to determine whether imports of casein tended to interfere with or rendered ineffective the United States milk price support programme. The study concluded, *inter alia*, that a 50 per cent quota on imports might reduce CCC purchases of cheese and price support programme costs by about US\$84 to US\$300 million, but consumers' expenditure would increase by US\$180 million. A 50 per cent tariff would have little impact on the cost of the price support programme, while it could increase

consumers' expenditure by about US\$66 million. The only action taken by the US Government was a change made in the tariff classification of casein, from being a chemical industry product to being a food product.

185. As a result of abundant supplies, world market prices for casein remained depressed throughout the first part of 1986. However, prices improved throughout the latter part of the year. Prices continued to increase in 1987, notably in the United States market, where edible casein was in May 1987 quoted at US\$120 per 100 lb. or approximately US\$2,600 per ton (wholesale) compared with a level of US\$2,000 a year earlier. Prices in European markets started to increase in the spring of 1987 and by the middle of the year tendencies were very strong for a further increase with spot deliveries very much in demand. There were therefore strong expectations that casein prices might be high throughout 1987/88.