Explanatory note

1. The present note has been prepared by the secretariat in accordance with Article IV:1 of the Arrangement and Rule 29 of the Rules of Procedure, and with the aim of facilitating the work of the Council and the Committees at their meetings in March 1988.

2. In preparing the note, the secretariat based itself mainly on replies to questionnaires, other information submitted by participants and observers as well as various information arising from the operation of the Protocol Regarding Certain Milk Powders, the Protocol Regarding Milk Fat and the Protocol Regarding Certain Cheeses. Furthermore, the secretariat used supplementary information available to it from various national and international sources, notably documentation from the FAO, the IDF, the UN/Economic Commission for Europe, the OECD, the Commonwealth Secretariat, the Commission of the European Communities, Agriculture Canada and the United States Department of Agriculture.

3. The note provides information on production, consumption, trade, stocks, and prices for milk and principal dairy products and covers developments up to and including 1987, and the outlook for 1988. The note should be read in conjunction with the statistical information circulated in the following documents:

DPC/W/75 - Milk Deliveries and Production - Statistical Note by the Secretariat
DPC/F/W/36 - Committee of the Protocol Regarding Milk Fat - Summary Tables
DPC/C/W/35 - Committee of the Protocol Regarding Certain Cheeses - Summary Tables
DPC/P/W/34 - Committee of the Protocol Regarding Certain Milk Powders - Summary Tables
4. Delegations wishing to suggest modifications, corrections, or to provide additional information are invited to make relevant submissions to the secretariat, preferably in writing as soon as possible. Such submissions might cover both the present note, and the statistical information mentioned in paragraph 3 above. It should be noted that the drafting of the present note was completed on 12 February 1988.

**TABLE 1**

Levels of Minimum Export Prices

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

<table>
<thead>
<tr>
<th>Pilot products</th>
<th>Effective since</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skimmed milk powder</td>
<td>425</td>
</tr>
<tr>
<td>Whole milk powder</td>
<td>725</td>
</tr>
<tr>
<td>Buttermilk powder</td>
<td>425</td>
</tr>
<tr>
<td>Anhydrous milk fat</td>
<td>1,100</td>
</tr>
<tr>
<td>Butter</td>
<td>925</td>
</tr>
<tr>
<td>Certain cheeses</td>
<td>800</td>
</tr>
</tbody>
</table>

The minimum export prices are fixed for pilot products defined in the Arrangement taking account, in particular, of the current market situation, dairy prices in producing participants, the need to ensure equitable prices to consumers, and the desirability of maintaining a minimum return to the most efficient producers in order to ensure stability of supply over the longer term. Note should be taken of the fact that new minimum prices for skimmed milk powder, buttermilk powder, whole milk powder and certain cheeses became effective on 23 September 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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</tr>
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<td>Butter and anhydrous milk fat</td>
<td>24</td>
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<tr>
<td>Cheese</td>
<td>29</td>
</tr>
<tr>
<td>Milk powders</td>
<td>31</td>
</tr>
<tr>
<td>Other dairy products</td>
<td>38</td>
</tr>
</tbody>
</table>
Overview of the Situation

Some highlights of the economic situation in general

1. World merchandise trade continued to grow in 1987 accelerating to an annual rate of 4 per cent in terms of volume, a rate of growth even higher than that of the previous year. The value of merchandise exports reached a new record level of US$2,450 billion in 1987. Import demand of developed countries remained the strongest force in world trade expansion, even though its growth slowed down. World production continued to grow at the rate of recent years. However, at the end of 1987, it was still difficult to judge what impact the crisis in the financial and capital markets might have on production and trade in 1988.

2. The trade performance of developing countries which had been disappointing during recent years, improved in 1987. There was a sharp turnaround in the import demand of the developing areas in 1987, resulting in an increase in line with the average expansion of world merchandise trade volume. Petroleum prices strengthened early in the year and there were signs that the post-1979 price decline was bottoming out for a number of primary products. Major price increases were recorded throughout 1987, notably when expressed in US dollars as the latter currency was again being depreciated. However, debt problems continued to adversely affect imports of many developing countries but developments in 1987 gave rise to hope for alleviation in the near future.

3. There was a notable resumption of world trade in agricultural products in 1987 when agricultural exports rose by 4 per cent compared with 1986. This was the strongest gain on a volume basis since 1981. A variety of factors contributed to the increase. Grain imports increased for the USSR following a shortfall in domestic supplies and for China to make up for a shift in domestic production from cereals towards livestock products, notably meat. There was also a strong increase in import demand for products such as wool, rubber and coffee. Sizable export subsidies continued to affect world agricultural trade, notably the trade in cereals, dairy products, sugar and meat. World agricultural production fell by 3 per cent from 1986 to 1987, partly as a result of deliberate efforts to contain production of grains and milk and partly because of unfavourable climatic conditions adversely affecting production, both quantitatively and qualitatively in some areas.

4. There was only little change in the employment situation in 1987. The rate of unemployment remained high in Western Europe. 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. Inflation rates remained moderate throughout the early part of 1987 and many developing countries had been successful in curbing inflation in 1986 and early 1987. However, later in 1987, there were signs indicating that the situation might change and that inflation might cause problems to 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. - World milk production declined by almost 1 per cent from 1986 to 1987, and the upward trend which had lasted for twenty years was halted. Efforts made in many countries to contain milk production were yielding results as hoped for and in addition unfavourable climatic conditions had adverse effects on milk production in several regions.

- The decline in world milk supplies was mainly due to a 5 per cent decline in Community milk deliveries in 1987, but there were also significant reductions in milk deliveries in New Zealand, India and the United States. Further expansion in deliveries in the USSR only partly outweighed declines elsewhere.

- The immediate result of reduced milk deliveries was a spectacular reduction in intervention stocks of butter and skimmed milk powder, notably in the European Communities and the United States. Increased exports also helped in reducing surplus stocks.

- Food aid in terms of dairy products was adversely affected by the decline in supplies and reduction of surplus stocks and was expected to remain low in 1988 if not further reduced.

- There was an appreciable recovery in international trade in cheese and milk powders in 1987, and prices firmed up throughout the year. Whole milk powder was to an increasing extent replacing condensed milk, and international trade in the latter fell again in 1987.

Dairy policies

6. Efforts to contain milk production and deliveries were pursued in 1987 by most participants in the Arrangement. Also other countries, notably Austria, Canada and the United States, continued to take measures to control milk supplies. A wide range of measures have been applied for some years now, often in rather complex combinations. In some countries, measures aiming at controlling directly the quantity of milk brought to the market were tightened in 1987; in others, milk delivery quotas were only moderately increased. In general, various measures applied in order to encourage improvements in product quality and to adapt the product range to prevalent trends were continued.

7. Various measures related to milk prices remained important elements in dairy policies in 1987. Further efforts were made to contain public expenditure on dairy price support. In some countries, support prices, target prices and advance payments were significantly reduced in order to discourage a further increase in milk production, or as a necessary
adaptation to depressed export returns. In other countries, increases in price support were moderate, merely compensating for increased costs. Quota systems were made effective through the application of two-price systems, penalty payments on production in excess of quotas and levies on production collected to provide funds for market intervention and to cover losses on exports of surpluses.

8. Efforts were also continued in many countries to encourage or facilitate structural changes in the dairy industry, although in the United States the dairy termination scheme was discontinued in October 1987. The objectives of measures affecting the structure of the industry might differ from one country to another. While in some countries the aim was to raise productivity and efficiency in the industry, in others it could be to preserve the current structure, for instance by restricting herd size and thereby facilitating a limitation of total milk deliveries.

9. It remained, however, the stated aim of dairy policies in some countries to increase the degree of self-sufficiency of milk and dairy products. This was for instance the case of the USSR. In line with general aims of improving nutritional standards and diversifying agriculture in developing countries, high priorities continued to be given to production, marketing and consumption of milk and dairy products in agricultural and development plans. Imports of high yielding breeding stock during recent years and the introduction of better feeding practices have resulted in increasing milk production in developing countries such as for instance Colombia, Mexico and Venezuela.

Milk and dairy production

10. World milk production which had been expanding more or less continuously over a couple of decades, declined by 0.8 per cent from 1986 to 1987, amounting to some 517 million tons (including sheep, goat and buffalo milk). It was notably cow's milk production that was reduced in 1987, but this type of milk nevertheless accounted for nearly 90 per cent of the total, amounting to 464 million tons.

11. The decline in milk production in 1987 was mainly a result of reduced production in the European Communities, where milk deliveries fell by 5.7 per cent. Milk deliveries also declined in other Western European countries, in Japan and in the United States. The main reason for the production decline in Western Europe and North America and Japan was a number of production and price policy measures taken to contain milk production and deliveries and to reduce burdensome surpluses.

12. New Zealand milk deliveries were strongly reduced because of drought, and low export returns on dairy products might also have discouraged milk production. An increase in Australian milk production in 1987, due to exceptionally favourable climatic conditions in the major producing area did not outweigh the strong decline in New Zealand and consequently there was a decline in the milk production of Oceania as a whole of around 7 per cent.
13. There were appreciable recoveries in State procurements of milk in Poland and Hungary in 1987 compared to 1986, resulting in a slight increase for Eastern Europe as a whole.

14. Milk deliveries in South America increased moderately, following greater priority given by governments to stimulate dairy developments and measures applied to improve the profitability of dairy farming.

15. Milk production was adversely affected by unfavourable climatic conditions in certain regions in Africa and Asia. The expansion of recent years in India was halted and milk production for Asia as a whole fell by 1.5 million tons or almost 2 per cent from 1986 to 1987.

16. In the USSR, milk production continued to expand, but at a much slower rate than in recent years, probably less than 1 per cent.

17. World milk production was expected to increase again in 1988, probably at a rate of 0.5 to 1 per cent. While milk deliveries were expected to be further reduced in the European Communities, remaining more or less unchanged in other European countries, Japan and Canada; United States milk production was expected to increase and might, together with expected recoveries in New Zealand and India, more than outweigh a decline in Community milk deliveries. Furthermore, milk production was expected to increase further in the USSR and in a number of developing countries.

18. World butter production fell by 400 thousand tons from 1986 to 1987, then reaching a total of 7.4 million tons, almost down to its average level in 1981-83. Although the decline of 16 per cent in Community production was responsible for most of the reduction in world production, the butter production was significantly lower in all regions, except in the USSR. These developments reflected a reduced availability of milk for processing and a low profitability of butter production. It was expected that butter production would continue to decline in 1988 as the use of milk for other purposes would be more profitable and markets for other dairy products would be able to absorb greater quantities.

19. World cheese production continued its upward trend in 1987, totalling 13.7 million tons, an increase of 1.5 per cent compared to 1986. The trend was very similar in all regions, but with somewhat greater variations from one country to another. A reduced cheese production in New Zealand was attributed to the strong reduction in supplies of milk. In most countries cheese production seemed to have been encouraged by a generally favourable market outlook for cheese. World cheese production was expected to continue to expand in 1988.

20. The upward trend of recent years for skimmed milk powder production was halted in 1987, mainly as a result of reduced butter production and consequently less skimmed milk becoming available for drying. World production fell by more than 10 per cent from 1986 to 1987. Major producers like the European Communities, New Zealand, Canada and the United States experienced declines of 20 to 25 per cent. World production of
skimmed milk powder was expected to decline further, but less steeply in 1988, following a continued decline in butter production. Tighter supplies of skimmed milk powder stimulated production of whey powder notably in the European Communities and the United States, in 1987.

21. World production of whole milk powder continued to expand in 1987, reaching 2.2 million tons, about 9 per cent more than in 1986. Production increased in all regions, but most strongly in the European Communities, where the increase was of the order of 16 per cent. Reduced supplies of milk for processing resulted in a reduced production in New Zealand, and there was also smaller production in some European countries outside the Community. World production of whole milk powder was expected to expand further in 1988, not least because import demand for milk powder tended to remain strong early in 1988, giving a significant incentive to expand production.

22. Condensed and evaporated milk appeared to be increasingly replaced by whole milk powder in the market, and world production has declined over recent years, amounting to 4.5 million tons in 1987. A recovery was reported for Australian production and a further growth in USSR production. However, Community production fell by 8.5 per cent and similar declines were reported for Canada and the United States.

23. World casein production continued to decline in 1987, as a decline in New Zealand production was only partly outweighed by increased Community casein production. World supplies of casein were again expected to decline slightly in 1988.

Consumption

24. World consumption of milk and fresh milk products increased at an annual rate of about 1 per cent over recent years. For a number of countries, consumption of fresh milk followed variations in supplies of milk. In per capita terms it remained stable at about 46 kgs. with a wide difference between developed and developing countries.

25. Butter consumption showed very little change on average. An increase in the disappearance of butter in the Benelux countries and the Federal Republic of Germany was outweighed by declines elsewhere. The increased disappearance in some Community countries may be related to use of butter for animal feed and human consumption has most likely remained static or declined slightly.

26. The upward trend in cheese consumption was reconfirmed in 1987, with further advances in nearly all countries for which information was available. World per capita cheese consumption has been increasing at an average annual rate of 2 per cent since the early eighties, and may continue to increase at that rate. Per capita cheese consumption showed great variation from one country to another, it being particularly high in some countries of Western Europe and in North America, and the increase in consumption seemed to be strongest in these high level consumption countries. The general upward trend was expected to continue in 1988.
27. In 1987, world consumption of skimmed milk powder was maintained at its level of the previous year. It was expected to fall in 1988 reflecting lower supplies. Reduced supplies of skimmed milk powder would only, to a limited extent, be replaced by whole milk powder. Consumption of whole milk powder increased strongly in 1987 and was expected to develop further in 1988.

Trade

28. The world market for butter and anhydrous milk fat remained fragile throughout 1987. World butter exports (including ghee) which in 1986 had fallen to 700 thousand tons increased strongly to around 950 thousand tons in 1987. This was mainly due to huge Community exports to the USSR at very low prices and under derogation from the price provisions of the Arrangement. There was at the same time an appreciable recovery in world exports of anhydrous milk fat partly as a result of great exports by New Zealand to Brazil at a price below the agreed minimum export price and under derogation from the price provisions of the Arrangement. Butter exports by other participants in the Arrangement recovered appreciably, such as those of Finland, Norway and Romania, while exports of Australia and Sweden were low. United States butter exports remained low in 1987, while those of the German Democratic Republic expanded further, reaching some 60 thousand tons. For 1988, a decline was expected for exports of butter and anhydrous milk fat, but export figures would most likely be above the low figures of 1986, as a result of further deliveries taking place of butter and anhydrous milk fat sold at discount prices under derogation from the price provisions of the Arrangement.

29. World exports of cheese recovered appreciably in 1987, following stronger import demand by OPEC countries and other developing countries such as Brazil. Community cheese exports which had been very low in 1986 regained their average level of the years 1981-83, and New Zealand exports again exceeded 100 thousand tons in 1987, being one third above their average level of 1981-83. Canadian exports and those of the German Democratic Republic continued to expand, with cheese exports of the latter having reached almost 50 thousand tons in 1987. United States exports declined further. The tendencies observed for 1987 seemed to continue into 1988 and cheese exports were expected to expand slightly in the near future.

30. There was a recovery in skimmed milk powder exports in 1987 when they exceeded 1.2 million tons, a level comparable to exports in 1985, and 3 per cent up on 1986. Import demand in some developing countries remained strong, as was the case for Mexico, Brazil, Peru and India. This particular demand was to a large extent met by continued heavy shipments from the United States, in the form of food aid or sales by the Commodity Credit Corporation. The market situation also permitted Community exports to recover and stocks were reduced. In light of a reduction in production and reduced stocks, skimmed milk powder exports were expected to be substantially reduced in 1988.
31. Whole milk powder trade continued its upwards trend in 1987, exceeding some 900 thousand tons, with the European Communities accounting for the bulk of increased exports, holding two thirds of the world market. Whole milk powder exports were expected to grow further in 1988, however most likely at a more modest rate than in 1987.

Food aid

32. Reduced supplies and declining surplus stocks adversely affected the amount of dairy products being available for donations under food-aid programmes. The volume of dairy products provided as food aid, notably by the European Communities and the United States (the major donators) was further reduced in 1987, and was expected to be lowered once more in 1988. The increase in prices would at the same time aggravate expenses and make the financing of food aid in dairy products more difficult.

Stocks

33. Reduced milk supplies and larger exports of dairy products had rather drastic impacts on stocks notably of butter and skimmed milk powder in 1987. Community intervention stocks both of butter and skimmed milk powder fell by one third during 1987. Also New Zealand stocks of butter and skimmed milk powder fell in 1987, and 1988 started with much lower dairy stocks than previous years. Some other countries had experienced difficulties in reducing their stocks notably of butter in 1987, and total butter stocks held by some participants in the Arrangement were still in need of further reduction at the outset of 1988. United States dairy stocks were very low at the beginning of 1988, amounting to around 60 thousand tons each of butter and skimmed milk powder. Continued efforts made notably by the European Communities were expected to reduce butter stocks further in 1988, and the market situation might entail a further reduction in stocks of skimmed milk powder.

International prices

34. The market for butter and anhydrous milk fat remained fragile throughout 1987, with market prices remaining at or closely above the minimum export price of US$1,000 and US$1,200 per ton f.o.b. respectively, and certain offers for the sale of butter had reportedly been made at prices lower than that. Furthermore, substantial quantities of old butter and butter oil made from old butter were sold at prices below the agreed minimum by derogation according to Article 7:1 of the Protocol Regarding Milk Fat. Towards the end of 1987, the situation seemed to be improving and sales of fresh butter were reported to have been made at prices ranging from US$1,000 to US$1,200 per ton f.o.b. Reduced supplies and carry-over stocks were expected to result in an improvement in prices, notably for fresh butter in 1988, while some old butter might still have to be disposed of at low prices.

35. Cheese prices increased throughout 1987 with quotations for Cheddar cheese remaining well above the agreed minimum export prices. The Committee of the Protocol Regarding Certain Cheeses raised the minimum
export price for certain cheeses from US$1,030 to US$1,120 with effect from 23 September 1987. Quotations for most types of cheese remained firm at the beginning of 1988 reflecting a persisting strong import demand for cheese.

36. International prices for milk powder showed steady improvement throughout 1987. Prices at which sales were concluded showed increases of US$200 to US$350 per ton for skimmed milk powder and of US$150 to US$300 per ton for whole milk powder. Quotations remained well above the agreed minima and no sales, even of powder for feed purposes, were reported to have been made at prices below the agreed minima. The Committee of the Protocol Regarding Certain Powders raised the minimum export prices for skimmed milk powder and buttermilk powder from US$680 to US$765 per ton f.o.b. with effect from 25 June 1987 and again to US$825 per ton f.o.b. with effect from 23 September 1987. Simultaneously, minimum export prices for whole milk powder were increased first from US$880 to US$900 and later to US$950 per ton f.o.b. Early in 1988, good qualities for human consumption of skimmed milk powder and of whole milk powder were reported to be traded at prices of US$1,200 and US$1,550 per ton f.o.b., respectively, and the market continued to show firming tendencies.

37. The prices for other dairy products presented a varied picture. Prices for condensed milk hardly changed in 1987. Whey powder prices firmed throughout the early part of the year, but fell slightly towards the end of 1987, notably in the United States, which constituted the major outlet. A persisting tight supply situation for casein entailed a continuous price hike throughout 1987 and into 1988, approaching a level of US$150 per 100 lb. or US$3,230 per ton, 50 per cent higher than one year earlier.
<table>
<thead>
<tr>
<th>Product</th>
<th>1986</th>
<th>1987</th>
<th>1988</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>January-March</td>
<td>April-June</td>
<td>July-September</td>
</tr>
<tr>
<td>Skimmed milk powder</td>
<td>812-850</td>
<td>650-740</td>
<td>740-800</td>
</tr>
<tr>
<td>Whole milk powder</td>
<td>990-1,050</td>
<td>900-1,050</td>
<td>930-1,000</td>
</tr>
<tr>
<td>Anhydrous milk fat(^a)</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
</tr>
<tr>
<td>Butter(^b)</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Cheddar cheese</td>
<td>1,100-1,380</td>
<td>1,100-1,500</td>
<td>1,050-1,300</td>
</tr>
</tbody>
</table>

\(^a\) In 1986 and 1987, some old butter and anhydrous milk fat were sold at prices lower than the ranges indicated by derogation under Article 7:1 of the Protocol Regarding Milk Fat.

\(^b\) Some sales of cheese below normal export quality made according to Article 7:2 of the Protocol Regarding Certain Cheeses have been made at lower prices than the range indicated.
GRAPH 1
INTERNATIONAL PRICES OF DAIRY PRODUCTS 1980-1987
(US$ per metric ton f.o.b.)

SKIMMED MILK POWDER

INTERNATIONAL PRICES
MINIMUM PRICES

WHOLE MILK POWDER

INTERNATIONAL PRICES
MINIMUM PRICES

ANHYDROUS MILK FAT

INTERNATIONAL PRICES
MINIMUM PRICES

BUTTER

INTERNATIONAL PRICES
MINIMUM PRICES

CHEESE

INTERNATIONAL PRICES
MINIMUM PRICES

1/ See notes to Table 2.
Milk Production and Dairy Policies

38. World milk production (including buffalo, sheep and goat milk) at 517 million tons in 1987 was less than 1 per cent lower than in 1986, showing for the first time an interruption of a long-term rising trend. Cow's milk production, which accounted for 90 per cent of the total, amounted to 464 million tons, representing a slight decline in 1987. Buffalo milk output, on the other hand, increased perceptibly due mainly to some increases in certain Asian countries, and particularly in India. However, buffalo milk accounted for only 7 per cent of the world milk production with sheep and goats' milk making up the balance of 3 per cent. It was worth noting that the reduction in the overall production was mainly a result of reduced production in the European Communities, the United States, New Zealand and Japan where milk deliveries were low because of a number of production and price policy measures taken to contain milk production and to reduce the existing burdensome dairy surpluses. New Zealand's milk deliveries were also sharply reduced due to drought and low export returns on dairy products. Australian milk production, however, increased in 1987 due to exceptionally favourable weather conditions. Production was generally higher in the USSR and other East European countries. Milk deliveries in South America were moderately higher, following greater priority given by governments to stimulate dairy development and measures applied to improve the profitability of dairy farming. On the other hand, milk production was adversely affected in certain regions of Asia and Africa by unfavourable climatic conditions.

39. Forecasts for 1988 suggested an increase from 0.5 to 1 per cent in world production of milk. Milk deliveries were expected to be further reduced in the European Communities and to remain more or less unchanged in other European countries, Japan and Canada. United States milk production was expected to increase somewhat which, together with some recovery in New Zealand and India, might offset the decline in the Community's milk deliveries. Furthermore, milk production was expected to increase in the USSR and in a number of developing countries.

40. Milk deliveries in the EC (including Spain and Portugal), totalled 101 million tons in 1987, some 5.7 per cent below the level of last year, partly a result of a fall of 6 per cent in the overall dairy cow numbers and unfavourable weather conditions in certain Northern EC member countries. The sharpest reduction was in the Netherlands, followed by the Federal Republic of Germany, Denmark, the United Kingdom, Belgium/Luxembourg, France and Ireland. A further reduction in the overall milk deliveries was forecast for 1988 due to the implementation of policy measures aimed at reducing milk quotas and an increase in penalties with a super-levy of 100 per cent on deliveries in excess of quotas. The aim was to reduce milk deliveries by 7 per cent in 1987/88 and a further 2.5 per cent in 1988/89.
TABLE 3

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

<table>
<thead>
<tr>
<th></th>
<th>Milk Production/ Deliveries (million tons)</th>
<th>Percentage change from previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Production/ Deliveries</td>
</tr>
<tr>
<td>EC-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>(b) 106.9</td>
<td>+ 1.0</td>
</tr>
<tr>
<td>1987</td>
<td>(b) 101.0</td>
<td>- 5.7</td>
</tr>
<tr>
<td>1988</td>
<td>(b) 97.1</td>
<td>- 3.9</td>
</tr>
<tr>
<td>USSR</td>
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<td></td>
</tr>
<tr>
<td>1986</td>
<td>(a) 102.17</td>
<td>+ 2.3</td>
</tr>
<tr>
<td>1987</td>
<td>(a) 103.20</td>
<td>+ 1.0</td>
</tr>
<tr>
<td>1988</td>
<td>(a) 104.90</td>
<td>+ 1.6</td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>(a) 65.35</td>
<td>+ 0.7</td>
</tr>
<tr>
<td>1987</td>
<td>(a) 64.50</td>
<td>- 2.3</td>
</tr>
<tr>
<td>1988</td>
<td>(a) 65.30</td>
<td>+ 1.2</td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>(a) 15.70</td>
<td>- 4.5</td>
</tr>
<tr>
<td>1987</td>
<td>(a) 15.40</td>
<td>- 2.0</td>
</tr>
<tr>
<td>1988</td>
<td>(a) 15.00</td>
<td>- 2.6</td>
</tr>
<tr>
<td>New Zealand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>(b) 7.54</td>
<td>- 1.2</td>
</tr>
<tr>
<td>1987</td>
<td>(b) 6.63</td>
<td>- 12.1</td>
</tr>
<tr>
<td>1988</td>
<td>(b) 7.11</td>
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<tr>
<td>Canada</td>
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<td></td>
</tr>
<tr>
<td>1986</td>
<td>(a) 7.47</td>
<td>- 0.5</td>
</tr>
<tr>
<td>1987</td>
<td>(a) 7.50</td>
<td>+ 0.4</td>
</tr>
<tr>
<td>1988</td>
<td>(a) 7.54</td>
<td>+ 0.5</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>(b) 7.45</td>
<td>+ 1.0</td>
</tr>
<tr>
<td>1987</td>
<td>(b) 7.38</td>
<td>- 1.0</td>
</tr>
<tr>
<td>1988</td>
<td>(b) 7.40</td>
<td>+ 0.3</td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>(b) 6.21</td>
<td>- 0.5</td>
</tr>
<tr>
<td>1987</td>
<td>(b) 6.34</td>
<td>+ 2.2</td>
</tr>
<tr>
<td>1988</td>
<td>(b) 6.37</td>
<td>+ 0.5</td>
</tr>
</tbody>
</table>
41. The 1987/88 farm price package, adopted in July 1987, left the target price for milk unchanged at ECU 27.84/100 kgs. No change was made in the intervention prices applicable to butter, skimmed milk powder and cheese. The price ratio between fats and solids non-fat thus remained at 48.2/51.8. The co-responsibility levy was maintained at 2 per cent of the target price. The additional levy payable by producers on purchases of cows' milk on quantities exceeding quotas was set at 100 per cent of the target price for milk.

42. On 30 September 1987, the Commission made certain proposals concerning the operation of the additional levy system designed to control milk production.

43. In its report the Commission observed that the existing quota system had been an efficient means of halting increases in production and causing decreases in deliveries. It should therefore be continued after the determination of the present five 12-month periods, subject to the following:

   (i) in order to take into consideration the difficulties for the dairies arising from the seasonality of milk production, it was proposed to extend the fifth period by six months, ending on 30 September 1989. The Community reserve would be changed accordingly;

   (ii) the compensation paid for the additional 1.5 per cent quota to be suspended was ECU 10/100 kgs. (the same amount for the suspension of 4 per cent in 1987/89) during the first 12 months of the extended fifth period. It was proposed to reduce it to ECU 8/100 kgs. during the last six months of this period;

   (iii) the super-levy remained at 100 per cent of the target price;

   (iv) no change in the modified intervention system was proposed at the present time.

44. After the termination of the present extended quota system, the Commission proposed a transitional period which would extend the system by two additional 12-month periods, starting on 1 October 1989 and ending on 30 September 1991.

45. The modifications proposed during this period were to be as follows:

   (i) the suspended quotas were consolidated into permanent quota reductions. The compensation would amount to ECU 7/100 kgs. in the first and ECU 6/100 kgs. in the second period for producers whose deliveries did not exceed their reduced reference quantities. For producers whose deliveries went beyond that level, the compensation would be reduced accordingly;

   (ii) the super-levy of 100 per cent of the target price was maintained, but was to be kept under review;
(iii) national reserves of 2 per cent of the global guaranteed quantities would be established via linear general reduction of quota and/or generated through suppression of unused quotas and/or by taking over a part of reference quantities transferred between producers;

(iv) no further transfers from direct sales to deliveries would in principle be contemplated and the guaranteed quantity for direct sales would be reduced to the level of actual direct sales in the third period (1986/87);

(v) the extended period would be considered as a transitional period towards the attainment of market equilibrium, at the end of which the Commission intended to move to a more flexible quota system. The Commission would examine this question further and at the proper time would bring forward detailed proposals for abolishing the link between the quota and the holding.

46. On the basis of present prospects, the Commission believed that market equilibrium in the milk sector would be achieved by the end of the transitional period. Thereafter, the Commission also believed that the quota system would continue in the milk sector but, once market equilibrium was reached, opportunity would be provided for greater specialization in the sector through the application of a more flexible system.

47. In Finland, milk production and deliveries in 1987 were 3.8 per cent lower at 2,695 million litres due to a severe winter frost and excessive rains in the summer. The downward trend was likely to continue in the near future and the forecast for 1988 was a further reduction in milk deliveries ranging between 2,620-2,660 million litres. While dairy cow numbers had been slightly reduced, yields per cow had continued to increase despite the unfavourable weather conditions. The two-tier pricing system adopted in 1985 continued to operate successfully. Penalties for farmers exceeding production quotas were increased from FIM 1.60/litre to FIM 2.00/litre in 1986. The Farm Closure Act, which was enacted in 1974 to provide for a "farm closure" pension to eligible farmers aged 55 years or more, who agreed to cease production and to sell their farm, was revised in 1986 to allow the same farmers to retain their farms and return to production after six years of cessation.

48. Norwegian deliveries (including goat milk) increased by 1 per cent in 1987 to a level of 1.90 million tons, mainly as a result of some relaxation in the application of the quota system. It was, however, expected that deliveries would decrease somewhat in 1988 due to a tightening of quota limits.

49. Milk deliveries in Sweden were 0.8 per cent lower to a level of 3.39 million tons in 1987 compared to their level in 1986, mainly as a result of the two-price system introduced on a three-year trial basis for the period July 1985 to June 1988. A further small decrease was anticipated for 1988. While productivity showed some increase, the number of cows declined in 1987 by 4 per cent. Farmers participating in the
voluntary two-price system were given a full home market price for a quota equal to 92 per cent of the highest 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. Farmers not taking 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. The two-price system in this way was intended to discourage surplus production and its effects in practice had been stronger than was initially expected.

50. In Switzerland, the strict quota system reduced the deliveries of milk to about 2.94 million tons in 1987, showing a drop of 3.5 per cent over the previous year. In June 1986, the overall milk quota was decided to be reduced in two stages by 75 thousand tons or by 2.5 per cent. The first stage involving a reduction of 43 thousand tons was implemented in 1986/87, but the second reduction was left to the milk producers to implement by their own devices. Premiums were paid for non-marketing of milk and for processing of milk into cheese which had a relatively high price in the domestic and international markets. The basic price for milk, which was raised by 5 centimes to 97 centimes/kg. in July 1986, was again increased as from 1 February 1988 by 5 centimes to SwF 1.02/kg. Cheese and butter prices were consequently raised and import charges for cheese were raised by 50 to 60 centimes/kg. The reduction in milk deliveries appeared to be more than the drop in actual production due to greater retention of milk on the farm used for feeding purposes in response to a strict quota system.

51. Adverse weather conditions resulted in a strong decline in milk deliveries in New Zealand of some 12 per cent in 1986/87. The output of all dairy products except whole milk powder had consequently been reduced. The farm gate price for milk (basic milk fat and solids non-fat price) which in the middle of 1986 had been lowered to 2.25 dollars per kg. was later raised to 3.20 dollars per kg. For 1987/88 the farm gate price had been fixed at 3.10 dollars per kg. Producer prices for milk were determined directly by export market realizations. Fundamentally therefore, the level of milk production in New Zealand continued to be determined by the export performance of the dairy industry relative to other alternative uses of land and pastures, with short-term sharp variations because of the climatic conditions. Although there were no subsidies or other regulations which could be manipulated to control production, a number of steps to influence milk production had been taken recently such as a supply moratorium and a milk limitation scheme, applied in the 1986/87 season, resulting in contracts to reduce production by 5,300 tons of milk fat or 1.5 per cent of 1985/86 output. The payment for this "non-production" was $1.20/kg. milk fat. For the current season, a "butter realization differential" scheme had been introduced. Under this scheme, payments to dairy companies by the New Zealand Dairy Board would, for butter and butter oil exports beyond a base production level, be based on marginal rather than average market realizations. This was done as a policy thrust to ensure that market signals were passed on to the milk producers. Production was forecast to recover considerably in 1987/88, but was not expected to surpass the 1985/86 record level.
52. In Australia, milk deliveries in 1987 totalled 6.34 million tons as compared to 6.20 million tons in 1986, largely due to exceptionally favourable weather conditions in Victoria, the major dairy State during March–June. Dairy cow numbers were expected to continue to decline, but production per cow was projected to increase through genetic and management improvements. The dairy policy introduced for 1986/87 aimed at the development of a more efficient market-oriented dairy industry. 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. Milk production in 1988 was expected to be slightly higher to reach a level of 6.37 million tons, provided the weather conditions remained as favourable as anticipated.

53. Japanese milk production in 1987 at 7.38 million tons was 1 per cent less than in 1986 due mainly to the producers response to a cut in delivery quotas initiated by the producers association and to the governments programme to subsidize accelerated cow cullings. It was forecast to recover somewhat in 1988, but still to a lower level of 7.40 million tons. The South African production of milk continued its downtrend in 1987, affecting the output of all dairy products, except cheese. Forecasts for 1988 were for stability or a small increase.

54. In Argentina, the price per kg. of fat was increased by 25 per cent in the beginning of 1986 and this increase was confirmed for another year when the price convention between producers and the industry was extended 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. In 1987, deliveries were likely to be even higher than in 1986 despite a smaller milking herd and unfavourable weather conditions in the major dairy region. Production of milk in Uruguay had recently shown some recovery, but the quantities were still below the average level of 1981-83.

55. In Bulgaria, where milk production had been low in 1985, there was some recovery in State procurements in 1986 when they totalled 2.61 million tons. In 1987, however, due to adverse weather conditions, milk and dairy production was generally lower than in the previous year. Hungarian production of milk appeared to have increased in 1987 by 1 per cent even though the dairy herd number remained unchanged at 1.7 million head. The bulk of dairy production covered the growing home demand, except for some special kinds of cheeses which were exported. In 1988, production of milk was likely to drop due to a drop in the cow numbers. The Polish milk production declined by 5 per cent 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. Some recovery was registered in 1987, in spite of a continued decline in the cow numbers, mainly due to the Government's raising of milk support prices.
56. In Romania, the unitary system of contracting for the purchase of agricultural products from agricultural production co-operatives, their members and private producers was continued. The system defined the tasks and liabilities of the socialist production units concerning delivery of agricultural products from co-operative farmers and private producers, assuring reasonable and stable prices for the products delivered. Production of milk in 1986 at 4.66 million tons was 3 per cent higher than in 1985. There was further increase in 1987 due to increasing cow numbers and growing productivity.

57. In Yugoslavia, where small farmers were reported to be giving up milk production, milk deliveries fell by 3 per cent in 1986 compared to their level in 1985. In 1987, however, deliveries were reckoned to be slightly lower to a level of 4.62 million tons. Milk deliveries were reported to be higher in 1987 in both the Democratic Republic of Germany and Czechoslovakia, due to an improvement in milk yields.

58. In the USSR, milk output for 1987 was estimated at 103.2 million tons, 1 per cent above 1986. Cow numbers continued to decline as more emphasis was being placed on increased milk yields. According to the Twelfth Five Year Plan, milk deliveries to the State by collective and State farms should be increased to 106-110 million tons by 1990, which meant annual rates of increase between 1.5 and 2.5 per cent. Production in excess of delivery plans might be sold freely and at higher prices. In 1988, production was expected to continue to increase, although the lower average quality of winter feeding could somewhat reduce the growth rate.

59. In the United States, the overall milk output in 1986 was only slightly higher than its level in 1985. 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 application of the Dairy Termination Programme (DTP) from April 1986 to October 1987, and a reduction of the milk support price by 2.3 per cent (from US$11.35/cwt. to US$11.10/cwt.) in October 1987 adversely affected milk output. A further cut in the national support price was made effective 1 January 1988, resulting in a price of US$10.60 per cwt., and CCC purchase prices for butter and non-fat dry milk were also reduced. In 1987, milk production was about 1.4 per cent below the level of a year earlier at 65.35 million tons. However, production was projected to rise in 1988 to 65.30 million tons, 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.

60. Canadian milk deliveries in 1987 at 7.50 million tons were marginally up on the level of the previous year, despite a reduction in the number of milk producers and 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. The Canadian Dairy Commission's target support price for industrial milk for 1987/88 was fixed at Can$46.30 to Can$47.00, compared to Can$43.60 in 1986/87. Milk deliveries in 1988 were projected to increase to 7.54 million tons.

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. In 1987, however, due to a severe drought and a shortage of feedgrains in most areas milk production was drastically reduced. China's production of milk rose by 11 per cent in 1986 to a level of 5.5 million tons, as a result of increased cow numbers and more emphasis in national plans on the nutritional value of milk consumption. There was again a sharp increase in 1987 and further rapid growth was anticipated in 1988 as the industry responded to rising demand. 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. A further growth of 10 per cent was forecast for 1987 when the level would reach 8.8 million tons. 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 to a level 9.8 million tons in 1986 due to a drought and a price freeze imposed by the Government as part of its economic package. In 1987, however, production recovered to a level of 10.8 million tons when weather conditions became more favourable.

Consumption

62. World consumption of liquid milk over the last ten years seemed to have increased at an average annual rate of 1 per cent. In per capita terms, however, it had remained rather stable at nearly 46 kgs. throughout this period. For obvious reasons, glaring variations existed between countries and regions in the per capita intake of milk. On the one end of the spectrum were developed countries, with as much as 160 kgs. of liquid milk consumption; but the intake was as low as 2.5 kgs. in certain developing countries. However, while consumption levels were gradually increasing in developing countries with growing urbanization and population/income increase, milk intake was getting saturated in developed countries either on health grounds or due to the availability of a wide variety of substitute drinks. Demand for animal feed purposes was also slackening due to the availability of cheaper concentrate feeds on the market.
63. In developed countries, consumers were turning away from whole milk to semi-skimmed types of milk. A 1 to 2 per cent rise in consumption of partially skimmed milk was reported by the following countries: Austria, Denmark, Finland, France, the Federal Republic of Germany, Italy 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 purposes. In countries like Belgium, the Netherlands, Norway and Sweden, a sharp increase was registered for partly skimmed milk. Per capita consumption of milk increased in East European countries, particularly in Czechoslovakia, the German Democratic Republic (+2 per cent) and in Hungary (+1 per cent).
This increase had been enhanced by the introduction of various types of semi-skimmed milk. The Chernobyl accident had at least temporarily adverse effects on the consumption of fresh milk in many European countries in the early part of 1986, but the confidence in fresh milk as a safe and healthy element of nutrition was soon restored.

64. The generally favourable developments in the consumption of dairy products in the United States also benefited whole milk sales. As a result of intense promotion campaigns, declining retail prices and an economic recovery, the demand for low fat milk had generally increased. It was estimated that the overall gain for 1988 would be around 1 per cent. 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. A growth of 6 per cent is projected for 1988. Consumption of low fat milk increased in 1987 but only slightly.

65. The principal area of growth in consumption was Asia, both developed and developing countries. Japan expected the trend of slowly increasing consumption to continue. The Government was subsidizing a campaign to promote milk consumption and had introduced a school milk subsidy. In 1987, consumption had increased by 3 per cent, but it was expected to increase by 2.5 per cent in 1988. Thailand maintained a Government-sponsored promotion campaign specifically aimed at adolescents. Consumption had increased steadily in recent years in Indonesia and China, although the absolute levels were still very low. Of the 7.9 million litres of milk produced daily in India, 45 per cent was consumed in the form of liquid milk, the rest was used for ghee, butter, yoghurt, sweet meats and soft cheeses. Per capita milk consumption had steadily increased.

66. In the USSR, the consumer milk prices were kept stable with the help of subsidies. In 1986 the retail price of liquid milk was only a little more than half of the total cost of production and marketing. Prices of milk and other dairy products had remained virtually unchanged for twenty-five years. As a result, demand had remained strong, sometimes exceeding available supplies.
The Situation for Individual Dairy Products

Butter and Anhydrous Milk Fat

Butter

Production

67. World production of butter and butter oil in 1987 fell to 7.4 million tons, which was 5 per cent down on the level of 1986. The outlook for 1988 was for an additional 1 per cent decline. Butter output dropped sharply in the EC in 1987 to 1.85 million tons (by about 16 per cent), as milk supplies declined and the opportunity to sell butter into intervention was restricted. For 1988, EC butter output was expected to continue to decline as milk supplies were reduced.

68. In Oceania also butter production was expected to decline in 1987/88, by 7 per cent in New Zealand and by 10 per cent in Australia to 93 thousand tons (including butter oil). In the Nordic countries, butter output was expected to be slightly lower in Finland and Sweden and slightly higher in Norway. In Eastern Europe, production increased in 1987, mainly because of the recovery in Polish output.

69. In the United States butter production at 495 thousand tons in 1987 was down by 9 per cent due mostly to the drop in milk output. For 1988, butter output was expected to remain relatively stable. Canadian butter production might rise in 1987/88.

70. USSR production rose by 2.4 per cent, reaching a level of 1.72 million tons in 1987 and was expected to continue to increase in 1988. In the developing countries production was estimated to have decreased by 2 per cent in 1987.

Consumption

71. World butter consumption was basically static in 1987 and prospects for 1988 confirmed a stagnant trend. World per capita consumption of butter has been steady at 2.7-2.8 kgs. over the past ten years.

72. In the EC, butter from intervention storage has been available since 1972 at around 50 per cent of the intervention price for non-profit making organizations and for the armed forces. Member States may also subsidize butter for social security cases. Added to this was the scheme for school milk where the Community contributed financially to national schemes. Measures under the milk co-responsibility regime continued in 1987, providing funds for subsidized butter to be used in pastry products, ice-cream and sugar confectionery. A scheme for butter sold for cooking was introduced in 1985 and continued into 1986 and 1987. The EC sold under special programmes 278 thousand tons in 1985 and 343 thousand tons in 1986. Total consumption of butter continued to increase in 1987.

73. In Switzerland, where a number of measures fairly similar to those of the EC had been taken to promote butter consumption in the domestic market, the product was being sold at prices considerably below cost, mainly with
the help of subsidies. However, domestic consumption of butter continued
to decline in 1987. In the Nordic countries, butter consumption remained
unchanged in 1987. In Poland, butter consumption continued to recover, but
there were little changes in other countries in Eastern Europe.

74. In New Zealand, domestic consumption of butter remained stable at
around 39-40 thousand tons a year; it was expected that it would remain
stable. In Australia, domestic sales of butter/butter oil were expected to
decrease marginally in 1987/88.

75. In North America, butter consumption increased slightly in 1987 but
was projected to remain unchanged in 1988. In the USSR, consumption rose
in 1987; this trend was expected to continue in 1988.

Trade

76. The international market for butter and anhydrous milk fat remained
fragile in 1987, and significant quantities were 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 a hope
for improvement in the butter market in 1988.

77. EC exports of butter to third countries which had decreased in 1985
and 1986, showed a substantial increase in 1987, the main destination being
the USSR. The EC sold 500 thousand tons of butter (10 months' old) to the
USSR with deliveries to be completed in the first half of 1988.

78. Exports by New Zealand increased in 1987. 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 76 thousand
tons in 1987 and 74 thousand tons in 1988. Other important outlets were
Iran and the USSR. Australian exports of butter/butter oil were expected
to reach 55 thousand tons in 1987/88 as against exports of 35 thousand tons
in 1986/87. The increase in exports was due to improved prospects for
sales during 1988, including a significant sale to the USSR.

79. United States exports of butter in 1986 and 1987 were lower than in
past years by some 50 per cent. Forecast of exports for 1988 was a decline
of another 40 per cent to a level of 15 thousand tons of butter and butter
oil. Under the Dairy Export Incentive Program, adopted in February 1987,
the United States offered some 140 thousand tons of fresh butter to a large
number of countries. However, no significant sales had been made under
this programme. Due to the reduction in stocks, the United States was not
expected to play an important role in the export markets in the near
future.

80. Imports of butter by the EC, which in 1986 aggregated 85 thousand
tons, were estimated to have declined in 1987. New Zealand remained the
main source of the Community imports. Imports into Switzerland increased
in 1987. In Poland, butter production had not corresponded with the
overall domestic requirements; thus huge quantities had to be imported in
1986 (39 thousand tons) and in 1987 (43 thousand tons) while imports in
1985 had been nil. The main source of these imports was the EC.
81. The USSR, where consumption of milk and dairy products rose faster than production, remained by far the largest net importer. At approximately 3 million tons of milk equivalent, its imports accounted for over a tenth of world imports in 1987. However, most of the USSR's purchases were old butter disposed by the EC at low prices which were nearly equivalent to those of the cheapest vegetable oils available in international markets. In 1987, 500 thousand tons of old butter (over 18 months) was bought from the EC as compared to a total of 125 thousand tons in 1986 (Table 4).

Stocks

82. Total stocks of butter in the EC, North America and Oceania on 1 October 1987, at 1.4 million tons, were about 19 per cent lower than a year earlier and stocks continued to decline in the fourth quarter of 1987. World stocks at the end of 1987 were down nearly half a million tons with a further drop expected for 1988.

83. Aggregate stocks of butter in the EC (public and private) having reached a peak of 1.48 million tons on 1 October 1986 receded to 1.2 million tons on 1 October 1987. Aggregate stocks were reduced to 750 thousand tons at the end of 1987, almost half their level at the beginning of the year. Stocks continued to decline and at the end of January 1988 public stocks amounted to 570 thousand tons. A special two-year stocks disposal programme designed to dispose of 1 million tons of butter was introduced in 1987. In addition, the Commission exercised its authority to suspend intervention buying of butter once quantities offered exceeded 180 thousand tons as from 1 March 1987. This quantity was reached and permanent intervention was therefore suspended as from 29 June. Thereafter a tender system for buying butter into intervention was operated. By the end of 1987, the objectives of the disposal programme were well on target and the results of the new tender system had been very positive. It was expected that stocks would continue to decline throughout 1988.

84. New Zealand stocks decreased to 46 thousand tons on 1 October 1987 as compared to 83 thousand tons on 1 October 1986. The sale of 50 thousand tons of butter oil to Brazil under derogation had largely removed excess inventories of old stocks. It was expected that stocks would continue to decline. Australian butter stocks had on 1 October 1987 increased to 29 thousand tons as compared to 11 thousand tons on 1 October 1986. However, due to improved prospects for sales during 1988 coupled with a reduction in production, stocks of butter/butter oil were expected to decline to 15 thousand tons at the end of the 1987/88 season. In Poland stocks of butter which had been low in 1986 recovered and in October 1987 reached a level of 26 thousand tons. In Finland, butter stocks at 20 thousand tons on 1 October 1987 were 11 per cent higher than a year earlier and indications were that they would increase further due to declining exports.
TABLE 4
Imports of Butter into USSR by Origin
('000 metric tons)

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<td>Total</td>
<td>189.46</td>
<td>198.02</td>
<td>276.04</td>
<td>194.34</td>
<td></td>
</tr>
<tr>
<td>of which from</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>16.67</td>
<td>0.49</td>
<td>16.72</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>15.75</td>
<td>25.70</td>
<td>19.79</td>
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<tr>
<td>Netherlands</td>
<td>14.71</td>
<td>29.14</td>
<td>34.80</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>25.08</td>
<td>48.77</td>
<td>94.14</td>
<td>15.20</td>
<td></td>
</tr>
<tr>
<td>Total EC countries</td>
<td>72.22</td>
<td>104.10</td>
<td>165.45</td>
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</tr>
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<td>Hungary</td>
<td>3.48</td>
<td>5.16</td>
<td>1.76</td>
<td>0.72</td>
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<td>Uruguay</td>
<td>3.37</td>
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<tr>
<td>New Zealand</td>
<td>48.71</td>
<td>-</td>
<td>35.98</td>
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<tr>
<td>Others (unspecified</td>
<td>44.38</td>
<td>72.55</td>
<td>63.47</td>
<td>145.31</td>
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</tr>
<tr>
<td>origins)</td>
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85. In the United States, support purchases of butter had been reduced to a negligible level with the much improved balance restored to the domestic market. Uncommitted public stocks of butter had been reduced to an historically low level, reaching 36 thousand tons on 31 December 1987 against 99 thousand tons on 31 December 1986. Canadian stocks also decreased sharply to 9.5 thousand tons at the end of 1987 as compared to 17.5 thousand tons at the beginning of the year.

International prices

86. The minimum export price of butter, since 5 June 1985, had been kept at US$1,000 per ton f.o.b.

87. In the past few years international prices of butter had declined continuously because of slack demand and butter stocks remained high. In 1986 and 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 situation, therefore, the traditional suppliers to this market could export at below the minimum prices in 1987 (DPC/F/48). The Committee agreed on 15 December 1987 that shipment relating to traditional sales of butter contracted and notified up to 31 December 1987 by traditional suppliers in terms of paragraph 4 of the Decision of 31 May 1985 and which could not be effected before the end of 1987 would be deemed to be consistent with the Decision of 2 June 1987 if such shipments are finalized in early 1988 (DPC/F/53). In accordance with the Decision of 2 June 1987 and the agreement of 15 December 1987, New Zealand and Australia had concluded contracts for the sale of butter to the USSR at prices below the agreed minimum.

88. International prices for fresh butter remained at or slightly above the minimum export price in 1986 and throughout 1987, although some sales of fresh butter during the fourth quarter of 1987 were reported to have been effected at prices up to US$1,200 per ton f.o.b. Reduced supplies of butter were expected to result in an improvement in prices in 1988.

Anhydrous Milk Fat

Production and trade

89. Output and exports of anhydrous milk fat of the EC and New Zealand were higher in 1987 than in the previous year, these two participants being the major exporters of this product. However, Australian production and exports of anhydrous milk fat decreased in 1987. Production and trade of other participants were negligible.
Food aid

90. The 1987 Community food-aid programme provided for a maximum of 27.3 thousand tons of butter oil. Actual food-aid deliveries during the first nine months of 1987, amounted to 18 thousand tons in relation to 16 thousand tons delivered in the corresponding period of 1986. During 1987, transactions notified by the United States to the FAO Consultative Sub-Committee on Surplus Disposal amounted to some 14 thousand tons of butter and butter oil.

International prices

91. International prices of anhydrous milk fat continued to weaken throughout 1986 and 1987. Export prices remained close to the agreed minimum export price of US$1,200 per ton f.o.b. which had remained unchanged since 5 June 1985. 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. Deliveries had been completed at the end of 1987.

92. 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 necessary steps to ensure that the minimum prices were observed and that efforts were further pursued to this effect.

Cheese

Production

93. World output of cheese at 13.7 million tons in 1987 was 1.5 per cent more than in 1986 and another 1.5 per cent gain was forecast for 1988. In the EC, cheese production in 1987 was estimated at 4.27 million tons, an increase by 2.5 per cent over 1986. This partially reflected the increase in domestic consumption and also the application of a modified system of intervention on skimmed milk powder and butter. Larger quantities of milk had been diverted into the production of cheeses. A further expansion was projected for 1988.

94. In Australia, production of cheese was expected to total 180 thousand tons in 1987/88, i.e. 1.4 per cent more than the level of the previous season. In New Zealand, production in the 1986/87 season fell by 11 per cent to 113 thousand tons, reflecting the nature of the production cycle. A recovery to the previous season's level of around 128 thousand tons was, however, expected in the current 1987/88 season. Relative gains were recorded in 1987 in most other participating countries.

95. In 1987, the United States increased cheese production by only 1 per cent to about 2.41 million tons, as milk supplies declined. A larger growth was forecast for 1988. Production in Canada was estimated to be up
8 per cent in 1987 in response to rising domestic and export demand. A further expansion was projected for 1988. In the USSR, production of cheese at 835 thousand tons in 1986 was 3 per cent higher than in 1985; estimated output in 1987 showed an increase of the same order. A further increase was projected for 1988. Production of cheese in developing countries changed only very little in 1987.

Consumption

96. Cheese consumption for the major producing countries continued to expand, up nearly 5 per cent in 1986 and another 3 per cent in 1987. Only a 1 per cent increase was expected in 1988, as United States consumption might not change very much and growth in European countries was expected to be limited.

97. World per capita cheese consumption was moving up strongly, showing an average annual increase of over 2 per cent since the early eighties, and may continue to increase at that rate. The overall average of 6.5 kgs. for 1987 concealed, however, a wide range of consumption levels. Per capita consumption was particularly high in the EC and in other countries of Western Europe (around 12 kgs.) and in North America (around 9 kgs.); the increase in consumption seemed to be the strongest in these high level consumption countries.

Trade

98. World exports of cheese declined somewhat in 1986 and recovered appreciably in 1987, following stronger import demand by OPEC countries and other developing countries such as Brazil. The outlook for 1988 was for exports to expand slightly over their 1987 level. Western Europe and New Zealand were the major players on the international cheese market, accounting for over 75 per cent of exports.

99. Community cheese exports which had decreased by 8 per cent in 1986 recovered in 1987 and increased to some 410 thousand tons, thus regaining their level of 1985. New Zealand exports again exceeded 100 thousand tons in 1987, being one third above their average level of 1981-83, the main outlet remaining Japan. New Zealand continued to invoke Article 7:2 for exports of cheese below normal export quality. For 1983-1987, New Zealand notified sales of almost 11 thousand tons under this provision to a range of countries. Australian exports of cheese were forecast to increase by 13 per cent in 1987/88 to some 65 thousand tons. In the fourth quarter of 1987, Australia notified its intention to conclude export sales under derogation of small quantities of aged cheese in accordance with Article 7:2 of the Protocol.

100. Exports by Switzerland showed a marked decline of 9.7 per cent in the first nine months of 1987. Exports for the whole year 1987 decreased as compared to their level of 1986. Exports of Finland, which had decreased by 11 per cent in 1986 to 33 thousand tons, recovered in 1987.
101. Cheese exports from the United States increased somewhat in 1987 but remained at a low level of around 16 thousand tons of which one third was exported as food aid. Under the Dairy Export Incentive Program adopted in February 1987, 73 thousand tons of cheese was offered to a number of countries but no sales had been concluded by the end of 1987. Canadian exports of cheese appeared to have recovered in 1987 while exports from Austria remained relatively stable. Exports from the German Democratic Republic continued to expand and reached almost 50 thousand tons in 1987.

102. On the import side, the United States purchases remained relatively stable in 1987, at around 130 thousand tons. The bulk of the imports was from the EC, New Zealand and Finland. The EC imports at around 100 thousand tons in 1987, mostly from Switzerland, were slightly smaller than in the previous year. Japanese imports of cheese in 1987 were substantially higher than in 1986, the main suppliers being the EC, New Zealand and Australia. Demand for cheese was constantly increasing and had in the past ten years almost doubled. This trend was likely to continue. In Switzerland, imports of cheese increased substantially in 1987, in spite of some problems relating to bacterial contamination towards the end of the year.

Stocks

103. Cheese stocks, on 1 January 1988, were lower than one year earlier and were expected to decline further throughout 1988. The decrease was mainly due to the fall in stocks held by the United States which decreased to 210 thousand tons on 1 January 1988 as compared to 358 thousand tons one year earlier.

International prices

104. During its annual review of the minimum export prices in September 1987, the Committee of the Protocol Regarding Certain Cheeses raised the minimum export price for certain cheeses from US$1,030 to US$1,120 per ton f.o.b. effective from 23 September 1987.

105. Market prices for cheese continued to vary according to types of cheeses and markets throughout 1987. Cheddar cheese prices strengthened in 1987 and fluctuated between US$1,200 and US$1,400 during the fourth quarter, thus remaining well above the agreed minimum export price. With little change envisaged in supplies available for export in 1988, prices were expected to continue to firm in the coming months.

Milk Powders

Skimmed Milk Powder and Buttermilk Powder

Production

106. World production of skimmed milk powder in 1987 (4.2 million tons) was 11.5 per cent lower than in 1986 when it had increased by 4.6 per cent. Thus, the upward trend of recent years for skimmed milk powder production
was halted in 1987, mainly as a result of reduced butter production and consequently less skimmed milk becoming available for drying. Much of the decline can be attributed to the EC efforts to reduce milk output and surplus stocks. Changes in the EC production level were very important because it accounted for nearly half the world production. The United States and New Zealand also sharply curtailed skimmed milk powder output as milk supplies declined. For 1988, skimmed milk powder production by major producers might decrease by another 3 or 4 per cent as the EC continued to limit production.

107. In the EC, production of skimmed milk powder decreased sharply in 1987 (by some 24 per cent) to around 1.6 million tons as a result of measures taken to reduce milk production. For 1988, output of skimmed milk powder might continue to decline. In New Zealand, where production of skimmed milk powder during 1986/87 had been reduced by nearly 20 per cent, some recovery was expected in the current 1987/88 season on the assumption of improved climatic conditions. Buttermilk powder production declined in 1987. In Australia, estimated production of skimmed milk powder/buttermilk powder in 1987/88 was 117 thousand tons as against 137 thousand tons in 1986/87. Skimmed milk powder production decreased from 128.5 thousand tons to 109 thousand tons, whereas buttermilk powder production fell from 8.4 thousand tons to 8 thousand tons. Production of skimmed milk powder by other participants followed varying trends in 1987.

108. In the United States, output decreased substantially (by 21 per cent) in 1987, reaching 465 thousand tons. Canadian production also experienced a sharp decline in 1987. Production in the USSR continued to increase in 1987, reaching 500 thousand tons.

Consumption

109. World consumption of skimmed milk powder remained relatively stable in 1987 after having decreased in 1986. It was expected to fall again in 1988, reflecting the tighter supply situation for milk powders. In the EC, total domestic consumption which had declined in 1986 recovered in 1987. In Japan and in the United States consumption remained relatively stable in 1987.

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

Trade

111. World exports of skimmed milk powder (including food aid) recovered appreciably in 1987 and at around 1.2 million tons were 3 per cent up on 1986. Import demand in some developing countries remained strong, as was
the case for Mexico, Brazil, Peru and India. The United States continued to be a major exporter of this commodity. Although a sizable proportion of United States shipments continued to be food aid, direct export sales have also been made by the Commodity Credit Corporation. The EC which had problems in exporting skimmed milk powder in 1986 following the Chernobyl accident, rebounded to more normal levels in 1987 and stocks were reduced. The outlook for skimmed milk powder world trade in 1988 was for a sizable drop as production and stocks were reduced.

112. A considerable increase took place in the exports of skimmed milk powder by the EC (including food aid) when they totalled 290 thousand tons in the first three quarters of 1987 from 194 thousand tons in the same period of 1986, i.e., a rise of 50 per cent. Exports for the whole year 1987 registered a substantial increase over 1986. This marked a positive improvement in the situation of the EC which had previously experienced a considerable drop in its share of the world market from 60 per cent in 1980 to 26 per cent in 1986.

113. Skimmed milk powder exports by New Zealand which had decreased by 7.5 per cent in 1986 continued to drop in 1987. The main destinations were countries in South East and Eastern Asia and Brazil. Buttermilk powder exports continued to increase in 1987. Australian exports of skimmed milk powder/buttermilk powder totalled 90 thousand tons in 1986/87; they were forecast at about 77 thousand tons in 1987/88, a decrease of 14.5 per cent, of which skimmed milk powder would be 72 thousand tons and buttermilk powder would be 5 thousand tons. Both New Zealand and Australia had committed their entire export availability for the remainder of 1987/88.

114. Exports by the United States continued to increase in 1987; approximately 40 per cent of the shipments were made as food aid. The Commodity Credit Corporation continued to sell substantial quantities of skimmed milk powder to Mexico and Brazil. Under the Dairy Export Incentive Program adopted in February 1987, the United States offered some 370 thousand tons of non-fat dry milk and whole milk powder to certain developing countries. However, no significant sales had been made by the end of 1987. The outlook for 1988 was for a decline in total exports as stocks were reduced to negligible levels. In Canada, exports of skimmed milk powder should fall slightly in 1987/88, as Canadian marketing programs had succeeded in creating new domestic outlets which were absorbing a growing volume of skimmed milk powder.

115. On the import side, purchases by Japan declined in 1987. Much of the powder imported was for use as animal feed. The principal sources of supplies were New Zealand, Australia and the EC.

116. Import demand in some developing countries remained strong. Mexico had maintained imports of dairy products at a high level, in spite of a sharp fall in foreign exchange earnings and larger domestic output. Imports of skimmed milk powder into Mexico reached some 150 thousand tons in 1987 as against 161 thousand tons in 1986, 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 in 1986, reaching some 156 thousand tons, the principal suppliers being the United States, the EC and New Zealand. However, total imports in 1987 declined to about 85 thousand tons as milk production recovered and higher retail milk prices limited consumption.

Food aid

117. Food-aid deliveries of dairy products consisted mainly of skimmed milk powder and anhydrous milk fat (Table 5). The decline in surpluses has been affecting the availability of milk products provided under food-aid programmes. In recent years, food aid had accounted for about 10 per cent of total exports of dairy products, most of it coming from the United States and the EC. The reduction in food-aid shipments by the United States has been the result of lower supply. As regards skimmed milk powder, foreign donations by the United States amounted to 148 thousand tons in 1986, a decrease of 33 per cent over 1985. Foreign donations continued to decrease in 1987 but still remained at high levels. However, sharply reduced uncommitted stocks currently on hand would most likely strongly curtail foreign donations in 1988.

118. The EC has since the early 1980's cut the share of milk products in favour of larger supplies of vegetable foods, notably cereals. Annual allocations of skimmed milk powder were reduced from 150 thousand tons at the beginning of the decade to 94 thousand tons in 1986 and in 1987, and those of butter oil from 45 thousand tons to 27.3 thousand tons. During the first nine months of 1987, food-aid deliveries by the EC amounted to 79 thousand tons of skimmed milk powder in relation to 60 thousand tons delivered in the corresponding period of 1986.

Stocks

119. Total stocks of skimmed milk powder in the EC, North America and Oceania of approximately 886 thousand tons at 1 October 1987 were down by 30 per cent from one year earlier. At the end of 1987, world stocks of skimmed milk powder were substantially lower than at the end of 1986. The decrease in stocks recorded at the end of 1987 was primarily accounted for by the sharp decrease in stocks in the United States and an appreciable drop in FC stocks. The tight market situation might entail a further reduction in world stocks of skimmed milk powder in 1988.

120. In March 1987, the EC introduced limitations on intervention purchases of butter and of skimmed milk powder. Offers of skimmed milk powder to public intervention decreased very sharply in 1987. Consequently, the threshold of 100 thousand tons set by the Council to temporarily suspend such purchases was not reached during the summer of 1987. Intervention being automatically suspended from 1 September to 1 March, the result was
## TABLE 5
Share of Food Aid in Total Exports for Selected Countries

<table>
<thead>
<tr>
<th>Participating countries</th>
<th>Total exports</th>
<th>Food aid</th>
<th>Food aid/Total exports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metric tons</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skimmed Milk Powder</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>90,200</td>
<td>74,400</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>60,580</td>
<td>66,100</td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>306,300</td>
<td>264,000</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>8,800</td>
<td>8,400</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>304,883</td>
<td>347,100</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>770,763</td>
<td>760,000</td>
<td></td>
</tr>
<tr>
<td><strong>Whole Milk Powder</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>31,700</td>
<td>38,000</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>3,000</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>34,700</td>
<td>41,000</td>
<td></td>
</tr>
<tr>
<td><strong>Anhydrous Milk Fat</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>24,000</td>
<td>23,800</td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>153,000</td>
<td>120,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>177,000</td>
<td>143,800</td>
<td></td>
</tr>
</tbody>
</table>
that skimmed milk powder intervention in 1987 was limited, at most to 55 thousand tons, a quantity that was less than one tenth of the amount purchased in 1986. Community public stocks at the end of October 1987 totalled 646 thousand tons, a decrease of 16 per cent as compared to their level at the end of 1986. They continued to decrease rapidly and totalled only 350 thousand tons at the end of January 1988. With further declines in production scheduled for 1988, EC stocks were likely to go down still further and were projected to amount to only 100 thousand tons in September 1988.

121. In Oceania, stocks registered substantial decreases in 1987. Surplus skimmed milk powder stocks in the United States had been all but eliminated and the outlook for 1988 was for a sharp reduction in exports.

International prices


123. International prices of skimmed milk powder showed a steady improvement throughout 1987 and world demand remained strong. As available supplies for export became more restricted in the EC, New Zealand and the United States in the spring, prices rose rapidly. In the fall of 1987, prices took another upsurge and fluctuated between US$950 and US$1,250 per ton f.o.b. in the fourth quarter as compared to the range of US$750-US$900 per ton f.o.b. in the first quarter of the year. The international skimmed milk powder market was feeling the effects of the tightening supply situation. In early 1988, good qualities for human consumption of skimmed milk powder were reported to be traded at prices of US$1,200 per ton f.o.b. The market was expected to continue to show firming tendencies in the coming months.

Whole Milk Powder

Production

124. Aggregate output of whole milk powder, closely related to specific demand, continued to expand in 1987, reaching 2.2 million tons, about 9 per cent more than in 1986. Production increased in all regions, but most strongly in the EC. Reduced supplies of milk for processing resulted in a reduced production in New Zealand, and there was also smaller production in some European countries outside the Community. World production of whole milk powder was expected to expand further in 1988 as demand remained strong, giving a significant incentive to expand production.

125. Output in the EC showed an increase of the order of 16 per cent in 1987 and was estimated at around 830 thousand tons. This increase in the production of whole milk powder was, however, nearly offset by an equal
decline in the production of condensed milk due to the growing tendency on the part of its traditional importers to manufacture their own condensed milk. In New Zealand, production of whole milk powder decreased in calendar year 1987 but some increase was expected in the 1987/88 season. In Australia, production was forecast to increase by 7.2 per cent in 1987/88 to 70 thousand tons, as against 65.3 thousand tons in 1986/87, in response to the continuing trend in international market demand. Production in Finland was estimated at 26 thousand tons in 1987 in relation to 31 thousand tons in 1986.

Trade

126. Whole milk powder exports continued their upward trend in 1987 and exceeded some 900 thousand tons reflecting a strong import demand. They were expected to grow further in 1988, however most likely at a more modest rate than in 1987. Exports by the EC showed an appreciable increase (of about 40 per cent) to reach some 650 thousand tons, well above two thirds of the world exports. This, however, should be seen against the background of a drop in exports of condensed milk.

127. Exports from New Zealand, the world's second largest exporter, increased by 23.4 per cent in 1986 to 166 thousand tons but decreased somewhat in 1987 due to limited supplies of milk for processing. The main outlets were South and East Asia, Central America, Brazil and the USSR. Australian exports of whole milk powder in 1987/88 were forecast at 57 thousand tons as against 51.5 thousand tons in 1986/87. Due to continued strong demand, both New Zealand and Australia had committed their entire export availability for the remainder of 1987/88. Exports from Finland, which went exclusively to the USSR, amounted to some 26 thousand tons in 1987, a decrease by 18 per cent due to the decline in production.

International prices


129. International prices of whole milk powder showed a steady improvement throughout 1987. In the first quarter of 1987, export prices ranged between US$900 and US$1,000 per ton f.o.b. but started to improve from April on, and in the fourth quarter of 1987 ranging between US$1,050 and US$1,300 per ton f.o.b. Early in 1988, whole milk powder was reported to be traded at prices around US$1,550 per ton f.o.b. Thus, the market remained firm, the supply situation was tight and prices were likely to increase further.
Other Dairy Products

Whey in powder or block or concentrate

130. The demand for whey and whey products for use as food and feed ingredients and in pharmaceutical applications remained strong in 1987, providing incentives to expand production in several countries. World production of whey powder and products increased by 4 per cent from 1986 to 1987, exceeding 2 million tons. This figure should be considered to be merely a rough estimate as statistics were incomplete, and might include a variety of milk concentrates, including lactose.

131. Community production increased by another 5 per cent in 1987 compared to 1986, and was rapidly approaching 800 thousand tons, thus accounting for 40 per cent of world production. There was also a further increase in United States production of 4 per cent, amounting to 465 thousand tons in 1987. Swiss whey powder production rose by one fifth from 1986 to 1987, but domestic consumption increased even more and carry-over stocks were reduced. There was a further decline in production of whey concentrates in Canada, and only minor changes for other countries. World production of whey powder was expected to increase at a moderate rate in 1988, depending on developments in production of cheese and casein.

132. Whey powder prices increased strongly in 1987, first in the United States and later in European markets. In the United States prices reached a peak of US$660 per ton in October 1987 but fell to around US$550 per ton towards the end of the year compared to US$220 at the end of 1986. In Europe, whey powder prices continued to increase also in early 1988. In light of expectations of significantly reduced supplies of skimmed milk powder coming on to the market and further expansion in demand for whey as a food ingredient, the world market for whey powder was expected to remain firm in 1988 with significantly higher prices than in previous years.

Concentrated milk

133. World production of condensed milk declined further in 1987, amounting to less than 4.5 million tons. A persisting downwards trend in the production of condensed milk in Western Europe and North America was only to a limited extent outweighed by further increases in the USSR, India and some other developing countries. Condensed milk was to an increasing extent being replaced by instant milk powder, demand for condensed milk was declining and the processing industry was adjusting to changes in the market. The production of condensed milk was consequently expected to be reduced further in 1988.

134. After having reached a peak of nearly 1 million tons in 1985, world trade in condensed milk declined rapidly reaching only a bit more than half of that level in 1987, or some 525 thousand tons. Imports into developing countries had been declining since 1985 and those into OPEC countries for a longer period. Imports into OPEC countries amounted to 180 thousand tons in 1987, less than half their average level in 1982-84. A further decline was expected to come about in 1988.
135. Condensed milk prices remained unchanged throughout 1987, with wholesale prices in Europe and North America ranging from US$1,200 to US$1,500 per ton canned product.

Casein

136. The downward trend in world casein production persisted in 1987, and total production fell to 233 thousand tons, 1 per cent less than in the previous year. A decline in New Zealand production was only partly outweighed by increased Community production and there were only minor changes in production in other countries.

137. Community production of casein was not expected to increase further in 1988 and might even decline slightly. Reduced milk production and a lower butter production resulted in less skimmed milk being available for processing. This resulted in stronger competition about supplies of raw material. Furthermore, the Community production subsidy on casein was reduced in October 1987 and Community casein producers were facing substantially increased production costs. New Zealand production of casein, which in 1986/87 was severely influenced by reduced milk supplies, was recovering appreciably in 1987/88, when it was expected to reach the average level of recent years, namely 65 thousand tons. World production in 1988 was however expected to reach only 230 thousand tons, that is to say there would be a further decline of the same size as last year.

138. Stocks of casein were very low at the end of 1987 and supplies depended almost entirely on current production early in 1988. World exports which in 1987 were maintained at the level of the previous year of around 160 thousand tons were expected to decline in 1988, with reduced supplies both to the United States and the Community markets.

139. The market situation which throughout 1987 was characterized by tight supplies and firming prices, was expected to continue in 1988. The reduction in October 1987 of Community producer subsidies for casein and the depreciation of the United States dollar also contributed to higher prices in international markets. At the beginning of 1988 casein quotations had reached a level of almost US$150 per 100 lb. or US$3,230 per ton, which was 50 per cent higher than a year earlier, and prices were expected to remain firm throughout 1988.