

1982/83 DAIRY SEASON REVIEW

The following article briefly describes the 1982/83 dairy season, with particular emphasis on exports and the international dairy market.

NEW ZEALAND PRODUCTION

A total of 290.3 million kilograms (m.kgs) of milkfat were processed at New Zealand dairy factories in the 1982/83 season. This represents a 2.8 per cent increase on the 282.4 m.kgs processed in 1981/82 and is only 0.6 m.kg below the record output of the 1979/80 season. Total milkfat production (including domestic milk and cream consumption and wastage) increased from 307.7 m.kgs in 1981/82 to 318.6 m.kgs in 1982/83.

Production conditions were extremely favourable in the spring and early summer of the 1982/83 season and by the end of December milkfat processed for the season was up 6.7 per cent on the same period of the previous season. However, production fell away in March and early April due to drought conditions in the upper half of the North Island and, in spite of rain near the end of the season, cold weather did not allow production to recover.

A feature of the New Zealand dairy industry over the last decade has been the gradual increase in milkfat production as rising yields have more than offset a decline in the number of cows in milk. As shown in table 1, the introduction of higher quality cows into herds has resulted in milkfat production per cow averaging 146 kgs in the five seasons to May 1983 compared with 131 kgs in the previous five seasons. In the 1982/83 season the more favourable climatic conditions increased the yield per cow to 148 kgs from 144 kgs in 1981/82. Although the number of dairy cows in milk has increased slightly over the last three years in response to an increase in prices for dairy products in overseas markets, the number of cows in milk at 31 January 1983 at 2.09 million remains 0.1 million lower than ten years earlier.¹

Another feature of the New Zealand dairy industry over the last decade is the continuation of the long term decline in the number of dairy factory suppliers as farms have been amalgamated to achieve economies of scale. In 1950 there were 53,000 suppliers but at the end of 1982 the number of suppliers had fallen to an estimated 14,800. Over the same period the average herd size increased from 50 to 135 cows.

The figures given in table 2 indicate that the proportion of milkfat used in the production of butter and anhydrous milkfat (AMF) continued to decline in the 1982/83 season from 71 to 70 per cent. Meanwhile the proportion used in the production of wholemilk products other than butter, AMF and cheese increased from 14 to 15 per cent and has doubled over the last five years reflecting an increasing demand for wholemilk products.

The manufacture of dairy products over the past four seasons is shown in table 3. The major feature of the 1982/83 season when compared to the previous season was the response to a depressed world market for skim-milk powder and a rapid deterioration in the cheese market which led to production being diverted into

casein. Casein production increased by 35 per cent to 65 thousand tonnes and skim-milk powder production decreased by 23 per cent to 154 thousand tonnes. Cheese production was well down on that planned early in the season and at 114 thousand tonnes increased by only 3 thousand tonnes.

Butter production increased by 5 per cent to 232 thousand tonnes and AMF production remained at a low level due to the continued conversion to AMF of the surplus butter purchased from the United States in 1981. This process was completed by the end of the season.

The production of wholemilk powders was slightly up on the previous year and there was a small reduction in buttermilk powder production.

At the end of the season the Dairy Board's stocks of dairy products were higher than usual. In particular cheese stocks were well up on the previous year and an increase in casein stocks reflected the large increase in production which was not offset by a commensurate increase in export volumes.

TABLE 1
COWS IN MILK, PRODUCTION AND HERD SIZE

Season Ended May	Total Dairy Cattle ¹ (000)	Dairy Cows in Milk ² (000)	Total Milkfat Production (000 tonnes)	Milkfat per Cow 'at factory' (kg)	Herd Size
1973	3,288	2,190	281	122	106
1974	3,159	2,140	261	118	109
1975	3,074	2,080	273	128	112
1976	2,998	2,092	297	137	115
1977	2,930	2,074	303	143	116
1978	2,899	2,053	279	131	120
1979	2,911	2,040	301	142	123
1980	2,900	2,046	318	151	126
1981	2,969	2,027	308	147	129
1982	2,922	2,061	309	144	133
1983 ^P	3,007	2,090	319	148	135

Source: NZ Dairy Board
P = Provisional
1 As at 30 June each year
2 As at 31 January each year

TABLE 2
UTILISATION OF MILKFAT
(000 tonnes)

	Season			
	1979/80	1980/81	1981/82	1982/83 ^P
Butter (incl. AMF)	216.1	213.0	200.8	204
Cheese	40.4	32.0	41.8	43
Other whole milk products	34.4	37.0	39.8	43
Total processed by factories	290.9	282.0	282.4	290
Milk and cream consumed, fed to stock and wastage	27.1	26.1	25.3	29
TOTAL	318.0	308.1	307.1	319

Source: NZ Dairy Board
P = Provisional

1 Over the same period the total number of dairy cattle declined by almost 0.3 million to just over 3 million in June 1982.

TABLE 3
MANUFACTURE OF DAIRY PRODUCTS
(000 tonnes)

Product	Season			
	1979/80	1980/81	1981/82	1982/83 ^E
Creamery butter	217.2	204.0	221.6	232
Whey butter	3.3	2.0	2.9	3
Anhydrous milkfat	34.4	41.2	14.6	10
Frozen cream	6.1	5.0	5.3	6
Cheese	105.7	84.0	111.0	114
Condensed and evaporated milk	6.0	4.8	4.2	3
Wholemilk powder	65.8	88.8	103.2	100
Infant food	10.7	8.0	10.5	14
Skimmilk powder	168.5	181.0	198.7	154
Buttermilk powder	24.1	25.0	23.7	22
Acid casein	45.2	42.4	30.9	44
Caseinates	8.4	5.4	2.9	10
Rennet casein	12.6	11.6	13.5	11
Lactose	11.4	11.0	11.8	11
Whey powders	11.5	10.0	13.6	12

Source: N.Z. Dairy Board
E = Estimated

INTERNATIONAL DAIRY SITUATION

Milk production in the major producing countries increased by 2 per cent in 1982 following an increase of only 0.1 per cent in 1981. The United States Department of Agriculture (USDA) estimates that 1983 production will increase by 2.2 per cent to 398,114 thousand tonnes (see table 4).

The EEC and the USA are two of the world's largest milk producers. Although both the EEC and the USA have large surplus stocks of dairy products, the rate of increase in USA and EEC milk production in 1982 was higher than that of most other major milk producing nations. In the USA the 1982 increase of 2.1 per cent was a continuation of recent relatively high growth rates in milk output. In 1983 output is forecast to increase by a further 2.3 per cent due to a small increase in cow numbers and the continuation of strong gains in output per cow. Favourable prices and good feed supplies were the major factors behind the 3.4 per cent increase in EEC milk production in 1982. An increase of 2.1 per cent in EEC production is forecast for 1983.

The Soviet Union is also a major milk producer but a downward trend in production over the four years to 1981 resulted in it becoming a major importer of dairy products, especially butter, during this period. However, this trend was reversed in 1982 and milk production increased by 1.4 per cent as a result of improved feed and forage supplies. Nevertheless the Soviet Union remained a major importer of dairy products with purchases of 150 thousand tonnes of butter (see table 6). Early in 1983 the USDA was forecasting a 4.3 per cent increase in Soviet milk production in 1983 but more recent estimates are that an even larger increase is likely as improvements in feed and forage supplies continue.

Although world trade in dairy products represents only 3 per cent of the output of the major producer countries, it is of vital importance to the New Zealand economy, accounting for 21 per cent of export receipts in the year to June 1983.

The EEC is a major participant in the international trade in dairy products. In recent years it has increased milk production without a corresponding increase in

consumption within the Community and this has resulted in surplus production being stockpiled or sold on the international market at subsidised prices. The increase in production is generally attributed to the pricing policy operated by the EEC. Under its Common Agricultural Policy (CAP) prices for dairy products are set at a level which ensure an adequate income for the average producer. The average producer in the EEC has a herd of only around 20 cows thereby making it difficult to operate without income assistance. Furthermore, the prices paid to producers provide a strong incentive for efficient farmers or those with large herds to expand production. This policy has resulted in surplus production which the EEC has attempted to dispose of on the international market.

The EECs stockpiles of butter and skimmilk powder were at record levels in the mid-1970s but in 1979 world demand improved enabling the EEC to reduce both its stockpile and export subsidies as prices rose. This situation prevailed up to the end of the 1981/82 season, but in the season under review demand was adversely affected by the worldwide recession and increased competition emerged among producers for existing markets. As a result the EECs stocks of butter and skimmilk powder expanded rapidly. At the end of July 1983 EEC stocks of butter totalled 726 thousand tonnes and skimmilk powder stocks totalled 980 thousand tonnes (see table 7). This compared with stockpiles of 294 and 483 thousand tonnes respectively in the previous year.

The other major dairy producer, the United States, had also built up large stockpiles of dairy products including 610 thousand tonnes of skimmilk powder, 220 thousand tonnes of butter and 423 thousand tonnes of cheese, at the end of July. However, the US decided to try to prevent further increases in their stockpiles in 1982 by a substantial increase in foreign and domestic donations of dairy products equivalent to 3,719 thousand tonnes of milk in 1982 (or 6 per cent of US milk production) of which 3,446 thousand tonnes were distributed domestically. This was more than double that of the previous year and this trend has continued in 1983.

Although the size of the stockpiles held by the US and EEC is such that they cannot be entirely disposed of on available international markets, a fact which appears to have been accepted by both the EEC and the US, they have nevertheless had an adverse effect on international dairy prices.

Market conditions differed for the major dairy products over the season. In the United Kingdom, which remained the largest customer for New Zealand butter, prices were established in accordance with the agreement on access to that market while in other markets prices were generally maintained at previous seasons' levels with the assistance of a steady demand from the Soviet Union. The cheese market deteriorated markedly early in the season with the entry of low-priced supplies of surplus EEC cheese. The over-supply of skimmilk powder and competition from exports of Canadian surpluses resulted in falling prices. Demand and prices for wholemilk powder declined throughout the year. The market for casein remained relatively steady and the volume of New Zealand exports was maintained.

The deterioration in the international market in 1982/83 is reflected in the New Zealand dairy export price index. Over the three years to June 1982 the index increased at an average of 28 per cent per annum but rose by only 6 per cent in the year to June 1983.

TABLE 4
MILK PRODUCTION IN MAJOR PRODUCER COUNTRIES
 (000 tonnes)

	1979	1980	1981	1982 ^P	1983 ^F	% Change 1983/82
Belgium/Luxembourg	3,915	3,898	4,059	4,060	4,060	0.0
Denmark	5,225	5,117	5,037	5,215	5,325	+2.1
France	26,549	26,859	26,862	27,715	29,500	+6.4
W. Germany	23,907	24,778	24,858	25,450	26,100	+2.6
Ireland	4,908	4,859	4,803	5,160	5,270	+2.1
Italy	10,526	10,749	10,637	10,820	10,920	+0.9
Netherlands	11,587	11,785	12,147	12,770	13,150	+3.0
United Kingdom	15,915	15,958	15,857	16,650	16,750	+0.6
Greece	684	713	714	696	710	+2.0
TOTAL EEC	103,216	104,716	104,974	108,536	110,785	+2.0
Austria	3,310	3,396	3,530	3,590	3,570	-0.6
Finland	3,242	3,277	3,171	3,166	3,228	+2.0
Norway	1,875	1,946	1,965	2,017	1,964	-2.6
Portugal	549	644	815	825	835	+1.2
Spain	5,661	5,871	5,881	5,890	5,900	+0.2
Sweden	3,394	3,465	3,496	3,622	3,690	+1.9
Switzerland	3,642	3,655	3,658	3,654	3,760	+2.9
TOTAL WESTERN EUROPE	124,889	126,970	127,490	131,300	133,732	+1.9
Canada	7,552	7,855	8,005	8,280	8,125	-1.9
Mexico	6,795	6,742	6,856	6,600	6,200	-6.1
U.S.A.	55,978	58,298	60,334	61,596	63,004	+2.3
TOTAL NORTH AMERICA	70,325	72,895	75,195	76,476	77,329	+1.1
Argentina	5,344	5,301	5,274	5,520	5,450	-1.3
Brazil	10,100	10,265	10,500	10,700	11,000	+2.8
Chile	954	1,080	1,200	1,140	1,160	+1.8
Peru	625	620	630	635	644	+1.4
Venezuela	1,263	1,358	1,435	1,473	1,520	+3.2
TOTAL SOUTH AMERICA	18,286	18,624	19,039	19,469	19,774	+1.6
Czechoslovakia	5,663	5,909	5,929	5,929	5,991	+1.0
German Democratic Rep	8,198	8,321	8,202	8,038	8,150	+1.4
Hungary	2,461	2,545	2,653	2,734	2,780	+1.7
Poland	16,909	16,448	15,297	15,328	15,100	-1.5
Yugoslavia	4,157	4,342	4,349	4,450	4,550	+2.2
TOTAL EASTERN EUROPE	37,388	37,565	36,430	36,479	36,571	+0.3
Soviet Union	93,341	90,900	88,874	90,100	94,000	+4.3
South Africa	2,280	2,416	2,322	2,311	2,345	+1.5
India	12,500	13,500	14,000	14,700	15,200	+3.4
Japan	6,466	6,505	6,620	6,750	7,100	+5.2
Australia	5,804	5,562	5,324	5,343	5,323	-0.4
New Zealand	6,486	6,833	6,675	6,753	6,770	+0.3
TOTAL OTHER	126,877	125,716	123,815	125,957	130,738	+3.8
TOTAL	377,764	381,770	381,969	389,680	398,144	+2.2

Source: USDA
 P = Provisional
 F = Forecast

TABLE 5
EEC DAIRY STATISTICS

	1977	1978	1979	1980	1981	1982
Milk Production (000 tonnes)	96,186	100,599	103,216	104,716	104,974	108,536
Milk delivered to dairies (000 tonnes)	86,750	90,849	93,157	95,320	96,504	99,941
Milk yields per cow (kg)	3,851	4,000	4,055	4,089	4,127	4,292

TABLE 6
USSR DAIRY STATISTICS

	1976	1977	1978	1979	1980	1981	1982
No. of Cows (000)	41,917	41,987	42,592	43,000	43,310	43,389	43,600
Milk Yield (kg/cow)	2,179	2,294	2,260	2,207	2,143	2,080	2,130
Milk Production (million tonnes)	89.7	94.9	94.7	93.3	90.9	88.9	90.1
Imports: Butter (000 tonnes)	9.6	75.7	38.9	174.2	249.0	215.0	150.0

Source: Agra Europe
Commonwealth Secretariat
U.S.D.A.

TABLE 7
STOCKS OF DAIRY PRODUCTS IN MAIN EXPORTING COUNTRIES
(000 tonnes)

As at July	1975	1976	1977	1978	1979	1980	1981	1982	1983
SMP									
EEC	963.2	1,360.0	1,185.4	994.7	597.2	398.8	427.9	483.1	980.3
USA	200.2	218.6	278.1	318.4	244.2	248.8	332.5	522.4	610.0
Canada	94.0	166.3	94.9	32.6	23.6	35.3	42.6	60.8	28.2*
Australia	57.2	37.5	7.0	5.6	9.7	9.3	15.5	10.4	16.6
New Zealand	182.5	214.0	129.0	64.0	90.0	76.0	80.2	130.0	99.0
Butter									
EEC	324.9	466.1	512.7	582.4	636.3	475.2	287.9	293.9	726.0
USA	45.2	36.7	89.4	127.9	114.1	134.2	230.2	245.1	220.0
Canada	26.3	37.6	22.3	32.4	30.3	21.1	20.5	35.5	36.5*
Australia	28.9	10.6	17.5	21.7	9.2	6.2	11.3	15.3	24.2
New Zealand	38.1	30.8	23.9	23.3	32.1	29.4	20.0	29.0	30.0

Source: Agra Europe F.A.O. OECD
* April

UNITED KINGDOM ACCESS

Since the United Kingdom joined the EEC in 1973 the access levels for New Zealand butter and cheese exports have been reduced substantially. In 1973 165.8 thousand tonnes of New Zealand butter were allowed into the United Kingdom but by 1980 the quota had been reduced to 115 thousand tonnes. In 1980 an agreement was reached in which the EEC would reduce the import levy on New Zealand butter and in return New Zealand would accept a reduction in its import quota. As a result quotas for 1981 and 1982 were set at 94 thousand tonnes and 92 thousand tonnes respectively. A quota of 87 thousand tonnes was agreed in principle by the EEC Agricultural Commission late in 1982 but final ratification was blocked by France and Ireland until an EEC ban on subsidised sales of butter to the Soviet Union was lifted. For the first three months of 1983 New Zealand butter was allowed into the United Kingdom on the basis of one-twelfth of the 87 thousand tonne quota per month with the threat of a total ban from 1 April. In mid-March the Commission decided to reopen sales of butter to the Soviet Union and the French and Irish vetoes were dropped. Although the 1983 quota is 5 thousand tonnes down on the 1982 level the levy has been adjusted to maintain the return on sales.

The post-1983 quotas are currently under consideration. New Zealand has indicated that the current quota of 87 thousand tonnes is regarded as irreducible and that a five year extension of the quota would be desirable rather than a yearly renegotiation. It has argued that any reduction in the quota would force New Zealand to accept lower prices on other markets. In turn this would result in higher EEC export subsidies to offset the reduction in prices in these markets, which might damage the EEC more than a continuation of

access of New Zealand butter to the UK. While the EEC has wanted to reduce imports, it has indicated that imports of New Zealand butter should continue if New Zealand and the EEC can co-operate in stabilising world dairy prices.

EXPORT RECEIPTS

Reflecting world market conditions export receipts for dairy products increased by only 8.5 per cent over the year to June 1983. During the previous three years export receipts increased by an average of 34 per cent per year. Dairy export receipts for the last four years are shown in table 8. It should be noted that the data shown in the table does not relate directly to shipments made during the period but rather to foreign currency proceeds received through the banking system in the period stated.

The United Kingdom is still the largest market for New Zealand dairy products but it accounted for only 20 per cent of total receipts in 1982/83. Since 1970 when 67 per cent of dairy receipts were from the United Kingdom, the proportion has fallen steadily as access has been reduced. Receipts in 1982/83, at \$319 million, were down \$32 million on 1981/82. Although in recent years quota reductions have been offset by reductions in the import levy, export receipts in 1982/83 were affected by subsidised 'Christmas' sales of EEC butter.

Japan was the second largest market for dairy products in terms of export receipts in 1982/83. As well as being the largest market for cheese it is a major buyer of casein and milkpowders. Other major buyers of New Zealand dairy produce are the USA and the Soviet Union. The value of sales to other countries such as Indonesia, Malaysia, Venezuela and Singapore has increased rapidly over the last four years.

Butter receipts decreased by 20 per cent to \$408.7 million in 1982/83. The decline in receipts was largely due to the reduced returns from the United Kingdom and the altered timing of sales related to the purchase of the surplus butter from the US.

Receipts for casein increased by 49 per cent to \$215.8 million over the year reflecting a small increase in export volumes and an increase in prices in New Zealand dollar terms. Sales to the USA accounted for 56 per cent of receipts and increased by 59 per cent in 1982/83 with Japan being the second largest market.

Cheese receipts fell by 3 per cent in the year ended June 1983, as an increase in prices (in New Zealand dollar terms) was more than offset by a fall in export volumes. Japan remained the largest market, accounting for 37 per cent of receipts, followed by the United Kingdom and the USA.

Milkpowder receipts increased by 35 per cent to \$635.3 million in the 1982/83 June year. In spite of difficult market conditions, wholemilk powder export volumes were maintained and prices increased slightly in New Zealand dollar terms. Skimmilk powder export volumes increased with the assistance of a higher level of stockfood sales although prices declined in an over-supplied market.

Receipts for other milk products decreased by 4 per cent to \$137.4 million in 1982/83. Included in this category are AMF, ghee and cream. Export volumes of AMF and ghee fell but more favourable prices resulted in receipts increasing by 2 per cent. As in the previous year, export volumes were only around 60 per cent of historical levels due to the marketing of AMF converted from the United States butter surplus. Cream receipts decreased from \$12.0 million to \$8.8 million.

TABLE 8
OVERSEAS EXCHANGE TRANSACTIONS
EXPORT RECEIPTS: DAIRY PRODUCTS
(*\$ million*)

	<i>Years ended June</i>			
	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>
United Kingdom	232.1	341.5	350.9	319.2
Japan	99.3	120.8	161.2	214.6
U.S.A.	109.4	137.3	186.2	195.9
U.S.S.R.	41.9	48.0	162.4	118.4
Indonesia	35.7	64.7	60.8	91.8
Malaysia	26.2	54.1	51.2	67.7
Venezuela	13.8	16.0	11.3	60.5
Singapore	14.0	25.2	25.6	59.5
Peru	17.5	38.4	44.5	54.4
Philippines	38.1	47.8	39.2	48.0
Australia	13.1	26.3	29.5	30.7
Taiwan	10.9	16.9	22.9	30.7
Thailand	12.8	22.7	41.4	27.6
Kuwait	1.6	0.6	8.3	19.1
Hong Kong	9.0	25.8	22.5	18.5
Mexico	12.7	23.6	41.0	15.8
West Germany	7.6	21.1	21.0	15.2
China	5.7	4.2	8.4	14.0
Iraq	14.2	16.1	11.4	12.4
Saudi Arabia	2.5	5.8	11.5	11.1
Other	92.5	116.9	130.1	138.6
TOTAL	810.6	1,173.8	1,441.3	1,563.7
Of which:				
Butter	299.0	431.1	511.1	408.7
Casein	119.0	125.7	144.5	215.8
Cheese	87.6	126.5	171.1	166.5
Milk powders	222.8	359.9	471.5	635.3
Other Milk Products	82.2	130.6	143.1	137.4

PRODUCER RETURNS

The Dairy Industry Stabilisation Scheme was introduced in the 1975/76 season with the aim of stabilising prices to farmers of the two components of milk; milkfat and solids non-fat (SNF) (protein, sugar, etc.). At the beginning of each season the Dairy Products Prices Authority sets basic prices for both milkfat and SNF from which is derived a basic advance payout to farmers for milk supplied to dairy factories in terms of cents per kg of milkfat. Changes in these basic prices are normally restricted to a range 10 per cent up or 5 per cent down on that of the previous season. The Dairy Board uses these basic prices to calculate prices at which it will buy products from the dairy companies. The Board operates two separate trading accounts, the Milkfat Trading Account and the SNF Trading Account, which reflect the profit or loss at the end of each season on milkfat and SNF. Up to 50 per cent of the profit in each account can be distributed to farmers as an end of season surplus payment and profits may be distributed from one account even if the other makes a loss. The surplus payment mechanism thus allows prices to farmers to rise by more than the 10 per cent limit on the combined basic prices.

The surplus in the New Zealand Dairy Board's trading accounts increased by only \$3 million (or 1 per cent) to an estimated \$240 million for the 1982/83 season, whereas in the previous season the surplus increased by \$43 million (or 22 per cent). The surplus in the milkfat account increased from \$108 million to \$130 million but the SNF account surplus fell from \$129 million to \$110 million.

At the beginning of the 1982/83 season the Dairy Products Prices Authority set a milkfat price of 224 cents/kg and a price of 94 cents/kg for solids non-fat. The total payment of 318 cents/kg for milkfat at the farm remained unchanged throughout the season. The Dairy Board estimates that after half the surplus in the trading account has been distributed the payout for the 1982/83 season will total 360 cents/kg. The total payout for the 1981/82 season was 339.6 cents/kg.

For the 1983/84 season the price for milkfat is 240 c/kg and the price for solids non-fat 100 c/kg, giving a total advance payment of 340 c/kg. The Government supplementary minimum price for 1983/84 is 325 c/kg, unchanged from the previous season.

Average income per factory supply dairy farm over the last four seasons is shown in table 9. Gross income

TABLE 9
AVERAGE INCOME PER FACTORY SUPPLY DAIRY FARM

	<i>(Dairy Board Survey)</i>				
	<i>(Dollars)</i>				
	<i>1978/79</i>	<i>1979/80</i>	<i>1980/81</i>	<i>1981/82</i>	<i>1982/83^E</i>
Gross income	37,384	44,947	53,726	66,752	76,300
Expenditure	24,043	31,205	38,538	48,562	55,200
Net farm income	13,341	13,742	15,188	18,190	21,100
Dairy Farmers Terms of exchange (Base 1975/76 = 1000)	903	864	877	911 ^P	880

Source: NZ Dairy Board
P = Provisional
E = Estimate

per farm increased by an estimated 14 per cent to \$76,300 in 1982 as a result of the increased production and the higher value of milkfat. Expenditure increased by 13.5 per cent to an estimated \$55,200 and net income was up 16 per cent at \$21,100. This represents a marginal increase in net income in real terms.

The general reduction in the rate of inflation in New Zealand resulted in dairy farm input costs rising by an estimated 10.4 per cent during the year compared to a rise of 19.4 per cent the previous year. However, the small increase in output prices over the 1982/83 season resulted in dairy farmers' terms of exchange (the ratio of prices received to prices paid, base: 1975/76 = 1000) falling by an estimated 3.4 per cent to 880.

CONCLUSION AND OUTLOOK

After three seasons of relatively buoyant international markets the 1982/83 dairy season was a difficult one for New Zealand dairy exports. This was reflected in a much lower rate of increase in export receipts and higher than normal stockpiles for some dairy products at the end of the season.

The 1983/84 season offers no improvement. World prices for dairy products have dropped sharply under the impact of increased EEC export subsidies and the possibility of increased foreign disposals by the USA. The presence is an obstacle to any improvement in prices of the EEC and US dairy surpluses. The recovery in world economic activity currently underway is still expected to be weak by historical standards and be of little benefit to the international dairy products trade in 1983/84.

The long term outlook for dairy prices will be greatly influenced by what happens to the EEC and US stockpiles. In this respect there have been some indications by the US and the EEC of a desire to reduce milk production and the size of their stockpiles. A new dairy bill currently under consideration in the US is designed to reduce the US dairy herd. The bill provides for gradual reductions in the support price for milk if government purchases of excess production exceed predetermined levels, and incentives for farmers not to sell a proportion of milk output. For its part, the EEC Commission has recently released a set of proposals designed to reduce the cost of the CAP. The proposals include a 'super-levy' on dairy producers but also recommend the abolition of consumer subsidies, further extension of protection against food imports from third countries and the negotiation of long-term contracts for the export of surplus agricultural production. While it appears that New Zealand imports of butter into the EEC will continue if the EEC and New Zealand can co-operate in the stabilisation of dairy prices, the proposals have to be agreed to by member states and the outcome is unclear at this stage.

Unless the EEC can curb the trend of increasing milk production its surplus production is likely to adversely affect world markets in the foreseeable future. In addition the New Zealand Dairy Board has recently expressed its concern at the effect of large American foreign donations and cut-price sales of dairy products although it has accepted that some donations are gifts and do not displace commercial sales. The announcement of large sales of surplus American butter

and cheese to Egypt on concessionary terms in August 1983 was seen by the EEC as displacing its exports to Egypt and was the subject of a complaint to the International Dairy Council, a body set up under the General Agreement on Tariffs and Trade. It is essential that a major dispute over agricultural trade between the EEC and the USA be avoided as such a dispute would be likely to seriously injure New Zealand's interests.

The current recovery in Soviet milk production will also adversely affect the international dairy market, at least in the current season. Butter production in the Soviet Union is expected to increase by 12 to 15 per cent in 1983, and butter imports may fall by 50 thousand tonnes to around 100 thousand tonnes. Although New Zealand has a long term agreement on butter exports to the Soviet Union, exports are unlikely to be maintained at the higher levels of the past two seasons and this will have some effect on export prices if butter is diverted to other markets.

In the past New Zealand dairy farmers have shown they can be efficient producers of dairy products without receiving direct income support as do their counterparts in the EEC and the US. Although the Government introduced a supplementary minimum price scheme for milkfat in 1978 the Government guaranteed minimum prices in each season have been well below the prices received by farmers except in the first year of the scheme (1978/79) when \$17.4 million was paid out to dairy farmers.

The short term market outlook is such that any increase in production, over and above that gained by improved management practices, is likely to be unprofitable. Consequently the Dairy Board has indicated that the industry must consider limiting the number of farmers switching to dairy production and thereby indicate to other countries its willingness to curb production when world markets are over-supplied.

In another move designed in part to improve the New Zealand dairy industry's efficiency the Government has restricted the Dairy Board's access to low cost Reserve Bank finance, largely used to finance the Board's stocks of dairy products. This facility was introduced almost fifty years ago when interest rates generally were at low levels and although the general level of interest rates has since increased, the rate charged the Dairy Board remained unchanged. Under new arrangements Dairy Board access to Reserve Bank credit is limited to a maximum of \$750 million in the form of a subordinated loan to be repaid over an extended period with some flexibility to take account of market conditions for dairy produce. Dairy Board funding requirements above this level will be obtained from private lendings. While the change in the Board's financing arrangements will have some adverse effect on the profitability of the dairy industry due to the higher cost of credit obtained in the open market it will alleviate some of the distortions of the implicit subsidy and help New Zealand maintain its international standing as an efficient dairy producer.

Although past experience has shown that the New Zealand dairy industry is capable of rapidly adapting to the changing market-place, the next two years will be a testing period in which the New Zealand dairy producer will have to increase efficiency to maintain profitability. Meanwhile the longer term outlook for the producer will depend on production restraint in the EEC and US and a sustained recovery in the world economy.

GENERAL ECONOMIC INDICATORS

Articles which comment on developments in the domestic economy are published regularly in the *Bulletin*. A wide range of economic statistics are quoted in these reports, but the normal statistical tables in the *Bulletin* contain only information relating to the financial sector and to overseas exchange transactions.

To help fill this gap, a new statistical table covering a number of the most important general economic indicators has been compiled and, as from this issue of the *Bulletin*, will be updated and presented monthly. Most of the statistics are published elsewhere (for example, by the Department of

Statistics or the Department of Labour) but it is hoped that as well as providing accompanying data for articles on the domestic economy, the new table will be a convenient source of regular statistical information for subscribers to the *Bulletin*.

The statistics are presented in their basic level form, together with annual percentage changes. Other possible manipulations of the data such as seasonal adjustment or presentation of some series in ratio form are avoided for space reasons and in order to allow maximum flexibility for different uses. Further explanatory information on the statistics is given in footnotes to the table.