# **AGRICULTURE**

#### **OVERALL TRENDS**

The agricultural sector which recovered remarkably in 1990 recorded a mixed performance during 1991. Unfavourable weather conditions coupled with intensified civil disturbances in the Northern and Eastern provinces contributed to a setback in the production of certain crops in this sector. However, in 1991, tea and sugar production reached record levels ever achieved in the country. Of the minor food crops, big onion and sesame seed production recorded improved performance compared to the previous year. Meanwhile, paddy, rubber and coconut production declined by 6 per cent, 8 per cent and 14 per cent, respectively over the previous year. A number of minor export crops too recorded reduced production compared to the previous year.

### MAJOR EXPORT CROPS

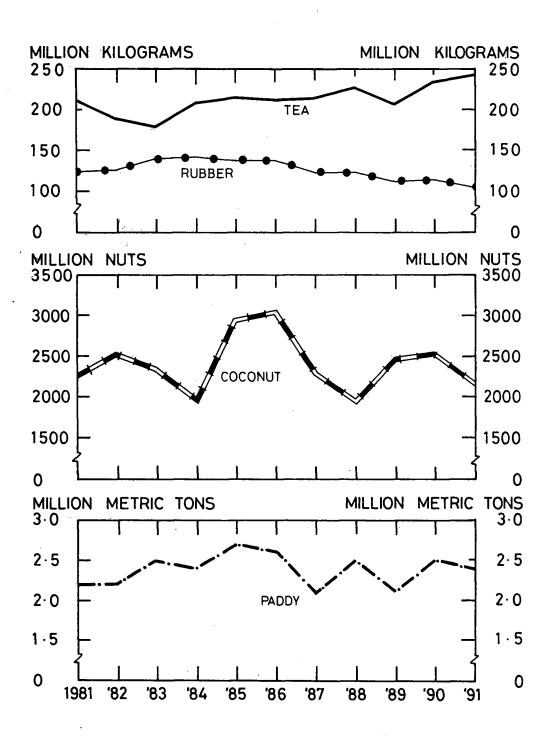
#### Tea

Tea production in 1991 surpassed the peak production level of 233 million kgs. recorded in 1990 by 3 per cent to reach 241 million kgs. The increased production which came entirely from the smallholdings of the low elevational areas was largely attributed to the favourable weather conditions that prevailed during most parts of the year. The output of low grown tea which recorded an increase of 27 per cent in 1990 posted a further 11 per cent growth to reach 116 million kgs. in 1991. High and medium grown tea production declined by 4 per cent and 1 per cent, respectively to 73 million kgs. and 51 million kgs. The CTC (cut, tear and curl) tea production which rose by 35 per cent in 1990 recorded a further increase of 14 per cent to 6.5 million kgs. in 1991, accounting for nearly 3 per cent of the total tea production.

The increase in tea production was reflected entirely in the private sector, which expanded by 8 per cent to 102 million kgs. in 1991. The combined output (including tea manufactured with bought leaf) of the two state sector plantation corporations - the Janatha Estate Development Board (JEDB) and the Sri Lanka State Plantations Corporation (SLSPC) - remained at the same level of 139 million kgs. recorded in the previous year. Tea production in the private sector which recorded a steady increase over the recent years expanded its share to 42 per cent of total production in 1991, from 40 per cent in the previous year. When green leaf produced by the private sector and processed in the factories of the two state plantation corporations is included, the share of private sector tea production rose from 49 per cent to 50 per cent. Between the two corporations, tea production of the estates managed by the SLSPCs had increased by 2 per cent to 68 million kgs. while that of the JEDBs had declined by 2 per cent to 71 million kgs. in 1991.

Fertilizer issues to the tea sector which increased by 5 per cent to 134,125 metric tons in 1990, declined by 12 per cent to 117,888 metric tons in 1991. The fertilizer issues to the state sector estates and the private sector estates dropped by 9 per cent and 15 per

# **PRODUCTION OF PRINCIPAL AGRICULTURAL CROPS**



Central Bank of Sri Lanka.

TABLE 1.9
Statistics on Tea Sector 1989-1991

	Item	Unit	1989	1990(a)	1991(b)
1.	Production 1.1 High grown	Mn. Kgs.	207.0 74.1	233.2 76.1	240.7 73.2
	<ul><li>1.2 Medium grown</li><li>1.3 Low grown</li></ul>	a a	50.0 82.9	51.9 105.1	51.3 116.2
2.	Registered extent under tea	'000 Hectares	221	222	222
3.	Fertilizer issues	'000 Mt.tons	127.9	134.1	117.9
4.	Replanting	Hectares	1,551	1,586	1,773
5.	Prices 5.1 Colombo net 5.2 Export f.o.b.	Rs./Kg.	52.16 66.91	65.72 91.78	57.13 84.12
6.	Cost of Production		49.70	57.65	58.41
7.	Exports	Mn. Kgs.	204.2	216.0	212.4
8.	Export earnings	Rs. Mn. (SDR Mn.)	13,663.9 (296)	19,823.3 (364)	17,866.8 (316)
9.	Value added as % of GDP (c)	(32.7 (611.7)	4.5	4.4	3.1

<sup>(</sup>a) Revised.

(b) Provisional.

(c) In growing and processing only.

Sources: Sri Lanka Tea Board;

National Fertilizer Secretariat; Central Bank of Sri Lanka.

cent, respectively. Fertilizer application in the JEDB and the SLSPC plantations which declined by 11 per cent and 19 per cent in 1990 recorded further decreases of 11 per cent and 7 per cent, respectively in 1991. Depressed tea prices during the latter half of 1991 appear to have discouraged fertilizer application especially on privately owned tea lands. The average yield in the plantations managed by the JEDBs declined by 4 per cent to 1,260 kgs. per hectare in 1991, while that of the SLSPCs increased by 4 per cent to 1,188 kgs. per hectare.

The total registered area under tea in 1991 was 221,691 hectares. This was 67 hectares less than the extent reported in the previous year. The extent under tea in plantations belonging to the private sector declined by 116 hectares to 113,398 hectares. In the case of state sector plantations, the extent under the JEDB declined by 10 hectares to 56,882 hectares while that of the SLSPCs increased by 59 hectares to 51,411 hectares in 1991. Meanwhile, the extent under bearing in the plantations owned by the JEDBs declined marginally to 52,114 hectares, while that of the SLSPCs also declined by 2 per cent to 44,846 hectares during the year.

The total extent replanted recorded an increase of 12 per cent to 1,773 hectares in 1991. The extent replanted by the JEDBs and the SLSPCs increased by 22 per cent and 17 per cent to 745 hectares and 716 hectares, respectively, while the area replanted by the private sector declined by 14 per cent to 312 hectares in 1991. Meanwhile, the extent brought under new planting which increased by 49 per cent in 1990 expanded by a further 14 per cent to 1,999 hectares in 1991. The increase came entirely from the private

sector with a newly planted area of 1,897 hectares in 1991 which was an increase of 15 per cent over the previous year. The extent newly planted by both the JEDBs and the SLSPCs declined by 4 per cent and 3 per cent to 43 hectares and 59 hectares, respectively.

Subsidy rates which were in operation for replanting and new planting activities in the different elevations remained unchanged in 1991. The total amount of subsidy disbursed for new planting and replanting increased by Rs. 2 million to Rs. 81 million in 1991. As the infilling subsidy scheme proved to be unsatisfactory, the scheme was suspended with effect from 1st January, 1991. The total amount of subsidies disbursed under the Tea Factory Development Subsidy Scheme increased from Rs. 22 million in 1990 to Rs. 71 million in 1991.

The major activities carried out by the Tea Smallholder Development Project assisted by the Asian Development Bank (ADB) in 1991 included new planting, replanting, private tea factory modernization and the development of the existing and new commercial Vegetatively Propagated nurseries.

The average cost of production (COP) of made tea in 1991 has been estimated at Rs. 58.41 per kg. This was an increase of 1 per cent over the COP of the previous year.

Tea prices at the Colombo Auctions which enjoyed high prices since 1989 took a downward movement after June 1991. The lower prices of tea in 1991 compared to the prices of 1990 were attributed to the reduced demand on account of the absence of former USSR and the Eastern European countries from the Colombo Auctions as well as reduced purchases by Egypt and Iraq as a result of the UN economic sanctions enforced against her. Two years of successful crops in most of the tea producing countries also contributed to depress tea prices. The average gross price of all teas at the Colombo Auctions decreased significantly by 18 per cent to Rs. 58.27 per kg. in 1991 from Rs. 70.92 per kg. in 1990. The average export (f.o.b.) price of tea also declined by 8 per cent to Rs. 84.12 per kg. in 1991.

The ad-valorem sales tax was reduced from 50 per cent to 40 per cent with effect from 1st November, 1991, with a view to helping the factory owners and the small holders. The export duty on tea was reduced by 50 cents per kg. while the tea cess was reduced by Rs. 1.50 per kg. to Rs. 2.00 per kg. with effect from 31st July, 1991.

A decision was taken to allow the JEDB and the SLSPC to sell up to 10 per cent of their production directly to buyers without going through the Colombo Auctions with effect from 4th August, 1991 with a view to minimising delays in overcoming liquidity problems of the two institutions.

Sri Lanka maintained her position as the world's largest exporter of tea, during 1991, for the second consecutive year.

#### Rubber

In 1991, rubber production provisionally estimated at 104 million kgs., reflected a 8 per cent decline over the previous year. This was the lowest level of production recorded since 1962. The decrease in production which was reflected both in the public and private sectors was mainly due to a lower average yield realised during the year. Unfavourable weather conditions that prevailed in the South West zone during the months of September to November resulting in a lesser number of tapping days and the reduced

fertilizer usage may have contributed to a lower average yield. Dearth of rubber tappers primarily in the private sector was also a cause for the reduced number of tapping days.

The output of all grades of rubber, except crepe rubber and other grades, declined in 1991. Sheet rubber production which accounted for about 49 per cent of the total output decreased by 12 per cent to 51.3 million kgs. The output of technically specified rubber fell by 32 per cent to 6.8 million kgs. while that of the other grades increased by 8 per cent to 7.2 million kgs. The production of crepe rubber rose marginally by 2 per cent to 38.6 million kgs. when compared with the production of the previous year.

The output of private sector estates including smallholdings which accounted for 65 per cent of the total rubber production dropped considerably by 10 per cent to 67.3 million kgs. in 1991. The combined output (including rubber manufactured with bought latex) of the estates managed by the JEDB and the SLSPC decreased by 5 per cent to 37.1 million kgs.

TABLE 1.10 Statistics on Rubber Sector 1989-1991

	item	Unit	1989	1990(a)	1991(b)
1.	Production	Mn. Kgs.	110.7	113.1	103.9
2.	Area 2.1 Under cultivation 2.2 Under tapping	Mn. Kgs. 110.7 113.  '000 Hectares 199.6 199.6 147.3 146.  Kgs./Hectare 752 773  '000 Mt. tons 22.6 22.  Hectares 6,147 5,202  Rs./Kg. 36.18 35. 22.63 22.  15.06 17.  Mn. Kgs. 86.0 86.  21.0 23.  Rs. Mn. (SDR Mn.) 3,112.1 3,080. (57)	199.0 146.3	198.5 147.0	
3.	Yield	Kgs./Hectare	752	773	706
4.	Fertilizer issues	'000 Mt. tons	22.6	22.2	13.7
5.	Replanting	Hectares	6,147	5,202	5,206
6.	Prices 6.1 Export f.o.b. 6.2 Colombo RSS 1	Rs./Kg.		35.50 22.93	34.55 23.59
7.	Cost of production (c)		15.06	17.92	19.11
8.	Exports	Mn. Kgs.	86.0	86.8	76.4
9.	Domestic consumption		21.0	23.6	26.8
10.	Export earnings		•	3,080.2 (57)	2,641.2 (47)
11.	Value added as % of GDP (d)		1.6	1.1	0.9

Sources:

Rubber Control Department; National Fertilizer Secretariat;

Central Bank of Sri Lanka.

(b) Provisional.

(c) Weighted average cost of production of private sector estates and smallholdings.

(d) In growing and processing only.

<sup>(</sup>a) Revised.

Although the extent under tapping increased marginally, the average yield in the public sector as well as in the private sector declined. The average yield estimated at 706 kgs. per hectare in 1991 was 9 per cent lower than that of the previous year. The average yield in the estates managed by the JEDB and the SLSPC fell by 11 per cent and 4 per cent, respectively to 890 kgs. per hectare and 855 kgs. per hectare. The average yield in the private sector also dropped by 10 per cent to 635 kgs. per hectare compared to 1990.

In continuation of the trend experienced in the past few years, the total extent registered under rubber declined marginally by 597 hectares to 198,451 hectares in 1991. Area belonging to the public sector reported a decrease of 1 per cent or 606 hectares while that under the private sector increased marginally by 9 hectares to 138,851 hectares in 1991. The extent under tapping increased marginally to 147,048 hectares during the year. The overall increase in the extent under tapping amounted to 723 hectares in 1991. However, the extent under tapping in the smallholder sector fell marginally from 105,413 hectares in 1990 to 105,109 hectares in 1991. Poor prices fetched in all categories of rubber till October, 1991 appear to have discouraged the tapping activities in marginal rubber lands.

The total quantity of fertilizer issued to the rubber sector decreased by 8,565 metric tons or 38 per cent to 13,681 metric tons in 1991. Fertilizer application in the plantations managed by the JEDB and SLSPC which accounted for 41 per cent of the total fertilizer usage declined by 36 per cent to 5,660 metric tons in 1991. Meanwhile, fertilizer issues to the private sector, fell substantially by 40 per cent to 8,021 metric tons in 1991.

The total extent replanted increased marginally by 4 hectares to 5,206 hectares mainly on account of a 15 per cent increase in the extent replanted by the state sector in 1991. The area replanted by the JEDB increased substantially by 34 per cent to 1,012 hectares while that of the SLSPCs dropped by 23 hectares or 3 per cent to 841 hectares in 1991. Under the Second World Bank Assisted Small Holder Rubber Rehabilitation Programme, 3,353 hectares were replanted in 1991 as against 3,584 hectares in 1990 while the area newly planted with rubber under this project increased by 46 per cent to 1,512 hectares. This resulted in an increase of 5 per cent of the total extent planted under the above programme. The total amount of subsidy disbursed fell from Rs. 148 million in 1990 to Rs. 142 million in 1991, which was 4 per cent less than the target envisaged for 1991.

New planting activities which suffered a setback in 1990, showed a remarkable recovery in 1991. The extent newly planted with rubber increased substantially by 32 per cent to 1,713 hectares during 1991 mainly due to the progress recorded in the private sector. The extent newly planted by the private sector rose significantly from 1,039 hectares in 1990 to 1,512 hectares in 1991. The area newly planted with rubber by the SLSPC increased by 17 per cent from 152 hectares in 1990 to 178 hectares in 1991, while that of JEDBs dropped by 83 hectares or 78 per cent to 23 hectares.

According to the Rubber Control Department (RCD), the cost of production (COP) of rubber in the private sector including smallholdings is estimated to have increased by 7 per cent, from Rs. 17.92 per kg. in 1990 to Rs. 19.11 per kg. in 1991. The COP at the corporate level of the rubber plantations managed by the SLSPC dropped by 5 per cent to Rs. 30.64 per kg. while that of JEDBs rose by 2 per cent to Rs. 30.11 per kg. during 1991. The SLSPC was able to reduce its negative producer margin from Rs. 8.03 per kg. in 1990 to Rs. 6.79 per kg. in 1991. Meanwhile, the negative producer margin of the JEDBs increased from Rs. 3.34 per kg. in 1990 to Rs. 4.75 per kg. in 1991.

Increased supply of natural rubber and less active demand by the major rubber consuming countries consequent to the global recession depressed the market conditions in all international auction centres. Consequently, international rubber prices experienced a declining trend throughout the year recording the lowest level for the past five years. The average export (f.o.b.) price of all grades of rubber recorded a decrease of 3 per cent, from Rs. 35.50 per kg. in 1990 to Rs. 34.55 per kg. in 1991. However, the average prices of all grades of sheet rubber at the Colombo Auctions were higher in 1991 compared to 1990. The average prices of RSS I and RSS 2 at the Colombo Auctions rose by 3 per cent and 7 per cent to Rs. 23.59 per kg. and Rs. 22.89 per kg. respectively, while that of latex crepe IX dropped by 10 per cent to Rs. 25.42 per kg. in 1991.

Average local prices of all categories of rubber have improved considerably after the revision of export duty. The rubber export duty was revised with effect from 1st October, 1991 by removing Re. 1.00 per kg. of fixed duty at the threshold price of Rs. 21.00 per kg. to ensure a better producer margin to smallholders. The percentage of duty chargeable after the threshold price of Rs. 21.00 per kg. of f.o.b. prices on the sliding scales of duties was also reduced from 50 per cent to 30 per cent by the changes announced in the duty structure.

According to provisional estimates made by the RCD, domestic consumption of rubber recorded a substantial increase of 14 per cent, from 23.6 million kgs. in 1990 to 26.8 million kgs. in 1991 accounting for about 26 per cent of the total production during the year. Significant improvements in production of the rubber based manufacturing sector was the major contributory factor for the higher level of local consumption of rubber.

The rubber factory modernisation subsidy scheme continued in 1991 as well. Under this programme, one third of the cost of approved items of machinery is borne by the RCD in the form of a grant from the Rubber Cess Fund. The subsidies disbursed under this programme in 1991 amounted to Rs. 5.3 million indicating an increase of 2 per cent over the previous year. The processing of centrifuged latex showed a substantial progress recording an increase of 7,203 metric tons in 1991 compared to 6,697 metric tons in 1990. This expansion could be attributed to the increase in the subsidies disbursed for the development of the centrifuged latex industry.

### Coconut

Coconut production which recorded an increase of 2 per cent to reach 2,532 million nuts in 1990 declined substantially by 14 per cent to 2,184 million nuts in 1991. The decrease in coconut production could be attributed to the reduced fertilizer application in 1990 and the lagged effect of the prolonged drought conditions that prevailed during the previous year in the major coconut growing areas, especially in the coconut triangle and the Hambantota district.

The fall in nut production had its negative effects on the production of both desiccated coconut (DC) and coconut oil in 1991. The nut equivalent of DC production fell by 11 per cent, from 376 million nuts in 1990 to 335 million nuts in 1991. Meanwhile, the nut equivalent of coconut oil production dropped by 56 per cent to 260 million nuts. The share of coconut oil production declined from 24 per cent in 1990 to 12 per cent of the

**TABLE 1.11** Statistics on Coconut Sector 1989 - 1991

Item	Unit	1989	1990 (a)	1991(b)
1. Production (c)	Mn.nuts	2,484	2,532	2,184
1.1 Desiccated coconut	Mn.nuts (d)	319	376	335
1.2 Coconut oil	Mn.nuts (d)	597	598	260
1.3 Copra (e)	Mn.nuts (d)	41	36	36
1.4 Fresh nut exports	Mn.nuts	16	22	23
1.5 Domestic nut consumption(f)	Mn.nuts	1,477	1,530	1,530
2. Average export price f.o.b.(g)	Rs./nut	3.36	3.63	4.82
3. Fertilizer issues	'000 Mt.tons	38.5	23.6	28.8
4. Cost of production	Rs./nut	0.85	1.11	1.70
5. Replanting/Underplanting (h)	Hectares	1,933	2,724	2,057
6. New planting (h)	Hectares	1,757	1,120	1,009
7. Export earnings	Rs.Mn.	2,865	2,783	2,619
7.1 Kernel products (g)	(SDR Mn.) Rs.Mn.	(62) 1,920	(51) 1,843	(46) 1,769
7.2 Other products	(SDR Mn.) Rs.Mn.	(42) 945	(34) 941	(31) 850
8. Value added as % of GDP (i)	(SDR Mn.)	(20) 2.8	(17) 1.9	(15) 2.1

Sources: Coconut Cultivation Board;

Coconut Development Authority:

National Fertilizer Secretariat: Central Bank of Sri Lanka.

(a) Revised.

(b) Provisional.

- (c) Estimated (breakdown does not add upto total production due to adjustment for changes in copra
- (d) In nut equivalent converted at 1 Mt.ton DC = 6,800 nuts
  - 1 Mt.ton Oil = 8,000 nuts and
  - 1 Mt.ton Copra = 4,925 nuts

(e) Exports only.

- (f) Estimated on the basis of per capita household consumption of 90 nuts per year. Excludes industrial use.
- (g) Three major coconut kernel products only.
- (h) This excludes planting activities undertaken on holdings less than 0.4 hectares in size owing to lack of detailed data.
- (i) In producing and processing only.

total production in 1991. The nut equivalent of copra exports recorded a marginal increase from 35.7 million nuts in 1990 to 36.0 million nuts in 1991. The volume of fresh nut exports rose by 3 per cent to 23 million nuts in 1991.

Planting activities carried out under various subsidy schemes experienced a setback in 1991. The extent of coconut lands rehabilitated in 1991 decreased by 25 per cent to 3,082 hectares. The total subsidy paid on this account declined by 28 per cent to Rs.7.3 million. The extent under planted fell by 24 per cent to 2,057 hectares while the total subsidy paid for this purpose dropped from Rs. 22.0 million in 1990 to Rs. 19.2 million in 1991. The area newly planted with coconut (except small holdings below 0.4 hectares) also declined by 10 per cent to 1,009 hectares, while the subsidy paid in this regard decreased substantially by 29 per cent to Rs. 9.0 million in 1991. The amount of subsidy disbursed to small holdings (below 0.4 hectares) amounted to Rs. 5.4 million in 1991 compared to Rs. 4.8 million in the previous year.

Inter-cropping of coconut lands with other crops showed mixed results in 1991. The area of coconut land inter-cropped with pasture increased substantially by 35 per cent to 27 hectares, while the extent inter-cropped with pepper fell by 26 per cent to 81 hectares in 1991. Area inter-cropped with coffee recorded a more than two-fold increase from 18 hectares in 1990 to 40 hectares in 1991.

According to the National Fertilizer Secretariat, fertilizer issues to the coconut sector which decreased by 39 per cent in 1990 increased substantially by 22 per cent, from 23,600 metric tons in 1990 to 28,800 metric tons in 1991 in response to favourable market prices that prevailed for coconuts during the year. In 1991, the Coconut Cultivation Board (CCB) maintained 33 fertilizer stores and distributed 2,831 metric tons of fertilizer indicating a 6 per cent increase compared to 2,676 metric tons issued in 1990. During the year, the CCB issued 1.3 million seedlings to cultivators as against 1.2 million in 1990.

The Stabilization Fund for Coconut continued to provide assistance for the upliftment of the coconut sector in 1991. Assistance amounting to approximately Rs. 2.8 million was released to the CCB for the rehabilitation of drought affected coconut lands in the Kurunegala, Puttalam and Hambantota Districts during the year.

The domestic market prices of fresh coconut as well as coconut oil increased in 1991 on account of the short supply of fresh nuts. The average fresh coconut prices at the Colombo Market rose by 57 per cent to Rs.3.22 per nut during the year. International prices of all coconut products, except fresh nuts, recorded significant increases during 1991. Consequently, the average export f.o.b. price of the three major coconut kernel products moved up by 33 per cent, from Rs. 3.63 per nut in 1990 to Rs. 4.82 per nut in 1991. The average cost of production in 1991 estimated at Rs.1.70 per nut showed a significant increase of 53 per cent as compared with Rs.1.11 per nut reported in 1990 mainly due to increased wage costs and higher fertilizer prices.

Under the DC Mill Development Fund, 17 desiccated coconut factories were identified and Rs. 605 million was paid for the modernisation of these factories in 1991. A new schedule of products was introduced for levying a cess with effect from 1st September, 1991 for the development of the coconut industry. In addition, the tax free threshold for the levy of export duty was revised upwards from Rs. 20,000/- to Rs. 25,000/- per metric ton of coconut oil with effect from 12th November, 1991.

### OTHER AGRICULTURAL PRODUCTS

#### **Minor Export Crops**

Minor export crops consist of a wide range of economically important spice and beverage crops which are produced mainly for export. However, the contribution of each crop to total export earnings is relatively small when compared with the three major agricultural export crops, viz. tea, rubber and coconut. Most of these crops are mainly grown as mixed crops in home gardens and in smallholdings. Therefore, it is difficult to

obtain accurate data regarding the extent under these crops as well as their production. However, given the fact that the bulk of the production of these crops is exported, the export volumes are used as a proxy for production.

On the basis of export data, the performance of the minor export crop sector was rather mixed but on the whole better than in the previous year. Substantial increases in the export volume of pepper and nutmeg and mace indicated that the production of these crops moved up substantially in 1991. The volume of pepper and nutmeg and mace exports increased by 58 per cent and 80 per cent, respectively, to 2,074 metric tons and 486 metric tons in 1991. The export volume of cinnamon at 7,889 metric tons showed a considerable growth of 21 per cent over the previous year. The quantity of coffee exported recorded a more than two-fold increase, from 1,244 metric tons in 1990 to 2,660 metric tons in 1991. In contrast, the export volume of cloves, cardamom, cocoa and cashew nuts declined in 1991 indicating decreases in production. Cloves (55 per cent) and cocoa (55 per cent) reported marked decreases in export volume. The export volume of cardamom which declined by 73 per cent in 1990 recorded a further 35 per cent decrease in 1991. Restrictions imposed on planting activites in high elevational areas including the Knuckles range appear to have adversely affected the cardamom production. According to the Department of Export Agriculture the expansion in coffee and cinnamon production could be attributed to the favourable weather conditions as well as the increased application of fertilizer in response to the incentives provided through the Fertilizer Block Demonstration Programme.

Fertilizer issues to the minor export crop sector which increased by 36 per cent in 1990 recorded a further rise of 46 per cent amounting to 11,100 metric tons in 1991. The increase in fertilizer issues to the minor export crop sector, in spite of the removal of the fertilizer subsidy in 1990, could be attributed to the implementation of the Fertilizer Block Demonstration Programme which promotes and encourages the application of fertilizer with regard to four selected crops viz. pepper, coffee, cocoa and cinnamon. Under this programme, the quantity of fertilizer issued by the Department of Export Agriculture increased from 2,284 metric tons in 1990 to 4,114 metric tons in 1991.

According to the data provided by the Department of Export Agriculture, the extent under important minor export crops rose by 2 per cent to 65,817 hectares during 1991. The extent under pepper which rose by 9 per cent in 1990 recorded a further increase of 9 per cent to 9,964 hectares in 1991. The extent under coffee at 10,649 hectares also showed a marginal increase during the year under review.

The performance of replanting and new planting activities of minor export crops under the Export Agriculture Crop Assistance Scheme (EAC) recorded mixed results in 1991. The total extent replanted with cinnamon at 58 hectares recorded a more than two-fold increase while that of cocoa and cardamom declined by 43 per cent and 26 per cent, respectively. Under the EAC the total extent newly planted increased marginally to 986 hectares in 1991. The extent rehabilitated in respect of cinnamon and cocoa recorded an increase of 8 per cent from 516 hectares in 1990 to 560 hectares in 1991. The total amount of subsidy paid under the EAC increased by 15 per cent to Rs. 17 million in 1991.

The Mid Country Perennial Crops Development Project (PERCRODEP) which was initiated in 1989 with the assistance of the Asian Development Bank in the districts of Kegalle, Kandy, Matale, Badulla and Moneragala continued its operations in 1991. This

project intends to promote commercial production and improve marketing facilities of perennial crops which include most of the important minor export crops, viz. pepper, nutmeg, cocoa, coffee and cardamoms.

## **Paddy**

Paddy production provisionally estimated by the Department of Census and Statistics at 2.39 million metric tons (114 million of bushels of paddy) in 1991 was 6 per cent less than the previous year. The fall in production was reflected in both Maha, 1990/91 and Yala, 1991 seasons. Reduced extents sown and harvested on account of the escalation of civil disturbances in the Northern and Eastern provinces contributed to the poor paddy production performance.

Paddy production in Maha, 1990/91, estimated at 1.55 million metric tons (74 million bushels) was 6 per cent lower than the production in the previous Maha season. The drop in production in Maha season was in spite of an increase in the average yield and was mainly due to a reduction in the extent sown and harvested. The Kurunegala district which accounted for more than 16 per cent of the total production recorded the highest absolute level of production in the Maha season amounting to 249,000 metric tons.

Paddy production in Yala, 1991 estimated at 0.84 million metric tons (40 million bushels) was a decrease of 6 per cent over that of the preceding Yala season. The drop in output was mainly on account of a 7 per cent decline in average yield as well as a marginal drop in the extent harvested compared to the previous Yala season. Kurunegala, Polonnaruwa, Ampara and Hambantota districts accounted for over 50 per cent of the total production in the season.

The annual average yield per hectare in 1991 estimated at 3,398 kgs. was 2 per cent less than the average yield of the previous year. The average yield in Maha, 1990/91 increased by 2 per cent to 3,620 kgs. per hectare compared to the previous Maha season. In contrast, the average yield in the Yala season dropped by 7 per cent to 3,048 kgs. per hectare compared to the previous Yala season. Mahaweli 'H' area recorded the highest average yield of 5,594 kgs. per hectare in Maha, 1990/91 placing the Uda Walawe area which recorded the highest average yield for the past five Maha seasons, in the second place. However, the Uda Walawe area recorded the highest average yield in the Yala season for the sixth consecutive year. The average yield during the 1990/91 Maha season in both the major and minor irrigated areas increased by 6 per cent each over the previous Maha season, while the average yield of the rainfed areas increased by 4 per cent. In contrast, the average yields in the major and minor irrigated and rainfed areas in Yala, 1991 recorded decreases of 7 per cent, 8 per cent and 11 per cent, respectively, when compared with those of the previous Yala season.

The total gross extent sown with paddy which increased by 18 per cent in 1990, declined by 5 per cent to 816,647 hectares in 1991. The gross extent sown in both the Maha, 1990/91 and Yala, 1991 declined by 6 per cent and 3 per cent, respectively, to 500,509 hectares and 316,138 hectares.

The total gross extent harvested which increased by 20 per cent in 1990, declined by 5 per cent in 1991 to 790,664 hectares. The gross extent harvested during Maha, 1990/91 decreased by 7 per cent to 482,748 hectares while that of Yala declined marginally to 307,916 hectares. The degree of crop failure, which was 2 per cent of the gross extent

**TABLE 1.12** Statistics on Paddy Sector 1990-1991

ertilizer issues (c) credit granted iress extent harvested rield per hectare (d) let extent harvested	Unit		1990(a)		1991(b)			
item	Onic	Maha	Yala	Total	Maha	Yala	Total	
Gross extent sown	'000 Hectares	531	326	857	501	316	817	
Fertilizer issues (c)	'000 Mt.tons	98	46	144	70	n.a.	n.a.	
Credit granted	Rs.Million	206	155	361	512	222	734	
Gress extent harvested	'000 Hectares	519	309	828	483	308	791	
Yield per hectare (d)	Kgs.	3,564	3,266	3,453	3,620	3,048	3,398	
Net extent harvested	'000 Hectares	462	273	735	429	274	703	
Production	'000 Mt.tons	1,647	891	2,538	1,554	835	2,389	
·	('000 Bushels)	(78,968)	(42,701)	(121,669)	(74,485)	(39,986)	(114,471)	
Purchases under GPS (e)	'000 Mt.tons	31(f)		31(f)	44	-	44	
Rice Imports	'000 Mt.tons	``	- 1	172	- ]	-	133	
(Paddy equivalent)	('000 Mt.tons)	(-)	(-)	(246)	(-)	(-)	(190)	

Sources: Department of Census and Statistics:

Department of Agriculture:

Ministry of Agricultural Development and Research;

Paddy Marketing Board; Customs, Sri Lanka;

Central Bank of Sri Lanka.

- (a) Revised.
- (b) Provisional.
- (c) The fertilizer issues during cultivation year and calender year are invariably different. Cultivation year comprises Maha (September/October-March/April) and Yala (April/May-August/September).
- (d) Yield per hectare for Maha and Yala are calculated using data from the Department of Census and Statistics which are based on crop cutting surveys while total yield is calculated by dividing total production by the net extent harvested.
- (e) Maha paddy harvest is purchased during the period from January to July, while Yala harvest is purchased during the period from August to December.
- (f) Includes paddy purchased by the PMB above the GPS from 23rd March, 1990 to 7th May, 1990.

sown in Maha, 1989/90 increased to 4 per cent during Maha, 1990/91 while the crop failure in Yala, 1991 was 3 per cent as compared with 5 per cent in the Yala, 1990.

According to the National Fertilizer Secretariat, fertilizer issues to the paddy sector in 1991 has risen by 9 per cent to 176,100 metric tons over the issues in the previous year. The increase in the issue of fertilizer is attributed to the provision of fertilizer on credit to paddy farmers through the Agricultural Trust Fund which began operations in 1991.

Paddy purchases by the Paddy Marketing Board (PMB) during 1991 totalled 44,368 metric tons accounting for less than 2 per cent of the production. Compared to the previous year, purchases by the PMB increased by 42 per cent in 1991. The guaranteed price of paddy was revised upwards from Rs. 110 per bushel to Rs. 136 per bushel in March, 1991.

Credit granted to the paddy sector under the New Comprehensive Rural Credit Scheme recorded more than a two-fold increase to Rs. 734 million in 1991 compared to the previous year. The Agricultural Trust Fund (ATF) which commenced granting loans to paddy farmers for the first time in Maha, 1990/91 had granted loans to the tune of Rs. 58 million in both the Maha, 1990/91 season and Yala, 1991. The loans were given in kind in the form of seed paddy and fertilizers. The recovery rates of the loans granted during the 1990/91 Maha and 1991 Yala season were 74 per cent and 72 per cent, respectively.

## Sugar

Sugar production which was 57,165 metric tons in 1990 increased by 16 per cent to record the highest ever production level of 66,440 metric tons in 1991. As in the previous year, the Kantale, Sevenagala and Pelwatte factories contributed to the improved performance during 1991. The Kantale factory which reported an increase in output for the third consecutive year reported a further rise of 8 per cent to reach 2,544 metric tons in 1991. The Pelwatte factory which recorded an increase of 16 per cent in production during 1990 registered a substantial growth of 33 per cent to 43,968 metric tons in 1991. The output of the Sevanagala factory which recorded a growth of 8 per cent during 1990 reported a further expansion of 9 per cent to 10,554 metric tons in 1991. The production of the Hingurana factory which declined by 15 per cent during the previous year dropped by a further 23 per cent to 9,374 metric tons during 1991. The Pelwatte factory which accounted for 58 per cent of the total sugar production of the country in 1990 increased it's share to 66 per cent during 1991.

Increased quantity of cane crushed as well as an improvement in the recovery rate contributed to the increased production at Pelwatte. At Kantale the output increased, despite a reduction in the quantity of cane crushed, mainly on account of the improved recovery rate achieved during the year. However, at Sevenagala the production increased, despite a drop in the recovery rate, as a result of increased availability of cane for crushing during the year. The average sugar recovery rate of all four factories improved from 7.52 per cent in 1990 to 7.76 per cent in 1991. The recovery rates in all four factories except Sevanagala improved in 1991 compared to the previous year. Sevenagala which recorded the highest recovery rate of 8.95 per cent in 1990 witnessed a decline in the rate to 8.63 per cent during 1991. However, in spite of this drop, Sevanagala posted the best recovery rate during 1991 as well.

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**TABLE 1.13** Statistics on Sugar Production 1990-1991

item	Unit				Kantale Sugar Sevanagala Factory Factory				Total		
		1990	1991(b)	1990	1991(b)	1990	1991(b)	1990	1991(b)	1990	1991(b)
Total area under cane (with ratoons) (a)	Hectares	2,438	2,396	1,509	1,988	1,978	2,847	4,568	5,707	10,534	12,499
2. Area harvested (a)	Hectares	1,998	1,812	1,042	928	1,091	1,335	3,983	4,372	8,114	8,447
3. Cane harvested (a)	Mt.tons	120,401	89,044	35,808	34,893	107,072	121,701	189,903	238,085	453,184	483,723
4. Average yield (a)	Mt.tons/ Hectare	60.21	49.15	34.36	37.60	98.00	91.00	48.75	54.45	55.85	57.27
5. Private cane purchased	Mt.tons	55,865	45;896	13	6	1,244	661	249,464	326,083	306,586	372,646
Sugar production     (without sweepings)	Mt.tons	12,140	9,374	2,364	2,544	9,641	10,554	33,020	43,968	57,165	66,440
7. Sugar recovery rate	%	6.89	6.94	6.70	7.31	8.95	8.63	7.52	7.79	7.52	7.75

(a) Includes nucleus estates and the allottees.(b) Provisional.

Sources: Sri Lanka Sugar Co. Ltd.; Pelwatte Sugar Co. Ltd.

In 1991, the total extent under sugar cane (including ratoonings) managed by the four sugar companies together with their allottees increased by 23 per cent to 12,900 hectares. The area under sugar cane cultivation of the Sevanagala, Kantale and Pelwatte factories increased substantially by 44 per cent, 32 per cent and 25 per cent, respectively to 2,847 hectares, 1,988 hectares and 5,707 hectares in 1991. However, the extent under sugar cane of the Hingurana factory dropped by 2 per cent to 2,396 hectares during the year.

The total extent under sugar cane harvested by the four companies increased by 4 per cent to 8,447 hectares in 1991. The extent harvested by Sevenagala and Pelwatte factories increased by 22 per cent and 10 per cent, respectively to 1,335 hectares and 4,372 hectares. The extent harvested by Kantale and Hingurana factories declined by 11 per cent and 9 per cent to 928 hectares and 1,812 hectares, respectively.

The total quantity of cane harvested, at the four factories increased by 7 per cent to 483,723 metric tons in 1991. The Pelwatte factory which accounted for nearly half this quantity, recorded a substantial increase of 25 per cent, reaching 238,085 metric tons while the quantity harvested at Sevanagala factory increased by 14 per cent to 121,701 metric tons. The quantity of cane harvested at the Hingurana and Kantale factories declined by 26 per cent and 3 per cent to 89,044 and 34,893 metric tons, respectively.

The quantity of cane supplied by private cultivators to the factories which recorded a 63 per cent increase in 1990, marked a further rise of 22 per cent amounting to 372,646 metric tons during 1991. Quantities of cane purchased by the Hingurana, Kantale and Sevanagala factories dropped in 1991 compared to the previous year. The cane purchases by Pelwatte factory increased by 31 per cent to 326,083 metric tons during the year. Of the total cane purchased by the four factories, Pelwatte accounted for 88 per cent during 1991.

Sri Lanka Sugar Company Limited, successor to the former Sri Lanka Sugar Corporation, was converted into three separate companies; the Sevenagala Sugar Company Ltd., Kantale Sugar Company Ltd. and the Hingurana Sugar Company Ltd. from 1st January, 1991.

### **Minor Food Crops**

The majority of the minor food crops are cultivated in home gardens and in small scattered plots under rainfed conditions. As a result, the production of these crops are highly dependant on the vagaries of weather. Therefore, the collection of reliable data on the extent and production of these crops is difficult. Hence, the performance of minor food crops is based on highly tentative estimates.

According to data provided by the Ministry of Agricultural Development and Research, the production performance of minor food crops in 1991 was rather mixed. Sesame seed and big onion production recorded considerable increases during 1991. The growth in sesame seed production was a result of higher average yield achieved, in spite of a 14 per cent drop in the extent cultivated in 1991. In contrast, the expansion in the output of big onion was mainly attributed to a considerable increase in the extent under cultivation despite a drop in the average yield during the year.

Meanwhile, significant decreases were recorded in the production of soyabeans, black gram and maize. The decline in the production of soyabeans and maize was the

combined result of a reduction in the extent cultivated and lower yields. The reduced output of black gram was mainly due to reduced extent under cultivation, despite an increase in the average yield.

In the category of high value minor food crops, notable production decreases were observed in the case of chillies, red onions and potato. The decline in the output of chillies was due both to a reduced average yield and lesser extent under cultivation. The production of red onion recorded a decrease due to a substantial drop in the extent under cultivation despite an increase in the annual average yield. Reduction in the extent of red onion cultivation was largely attributed to a short supply of seed material on account of civil disturbances in the Northern and Eastern provinces. Production of potato which recorded a 10 per cent decrease in the previous year dropped again in 1991. This was due to a substantial decrease in the extent under cultivation despite an increase in the annual average yield. The drop in the extent under cultivation of potato was attributed to the non-availability of seed potato due to an infection of the soils in the Nuwara Eliya District.

TABLE 1.14
Floor Price Scheme for Subsidiary Food Crops

(Rs.per kg.)

Сгор	From 1st January, 1991 To 31st December, 1991
Maize	5.25
Kurakkan	5.00
Groundnut (with shell)	8.15
Soyabean	7.30
Sesame seed	
Black	8.00
White	9.90
Chillies (dried)	<b>!</b>
Chillies I	32.00
Chillies II	30.00
Cowpea	9.00
Greengram	12.00
Blackgram	7.50

Source: Ministry of Agricultural Development and Research.

According to the National Fertilizer Secretariat, fertilizer issues to the minor food crops sector increased by 10 per cent to 50,700 metric tons in 1991.

The floor price scheme operated by the Paddy Marketing Board (PMB) was in operation in respect of 9 selected minor food crops during 1991 as well. The floor price of maize was increased by Re. 1.00 per kg while the other prices remained at the same level as in the previous year.

The purchase of maize by the PMB dropped by 90 per cent to 93 metric tons in 1991, while the purchase of green gram more than doubled to 414 metric tons. Meanwhile, the purchase of dried chillies by the Co-operative Wholesale Establishment (CWE) increased from 2 metric tons in 1990 to 1,296 metric tons in 1991, while the purchase of big onions

recorded a twelve-fold increase to 1,119 metric tons. The purchase of green gram by the CWE increased by 98 per cent to 2,189 metric tons in 1991. Consequent to the drop in the production of chillies, the CWE imported 8,350 metric tons of dried chillies during 1991, which was more than a two-fold increase compared to the previous year. The import of big onions by the CWE also increased by 55 per cent to 48,689 metric tons in 1991 due to a reduction in the production of red onions.

### FISH AND LIVESTOCK

The Ministry of Fisheries and Aquatic Resources has provisionally estimated fish production in 1991 at 198,063 metric tons indicating an increase of 12 per cent when compared with a 14 per cent drop recorded during the previous year. This recovery in fish production could be attributed to the improvement of the security situation in the Eastern province as well as the substantial increase in subsidy payments under the various subsidy schemes for fishery development activities. Fish production of the coastal fishery sub-sector which accounted for 80 per cent of the total fish production increased by 19 per cent, from 134,132 metric tons in 1990 to 159,151 metric tons in 1991. In contrast, the fish production of the inland fishery sub-sector declined by 24 per cent to 23,832 metric tons in 1991. Production in the off-shore and deep sea sub-sector rose by 29 per cent to 15,080 metric tons. As in the past, the private sector continued to dominate the fishery sector accounting for the largest share of total fish production. The total fish supply of the Ceylon Fisheries Corporation (CFC) in 1991 estimated at 1,936 metric tons showed a 6 per cent decrease over the supply of the previous year. Ice production of the CFC at 6,026 metric tons was 10 per cent lower than the production in 1990. The work in respect of fisheries development projects, viz. the West Coast Fishery Development Project and the East Coast Fishery Development Project in 1991 was restricted to monitoring and maintenance activities since both projects were completed at the end of 1990.

Subsidy issues to the marine sector amounted to Rs. 33 million in 1991 as compared with Rs. 11 million in 1990. Under the various subsidy schemes, 679 boats, 1,527 traditional crafts and 408 motors were issued to the marine sector. Meanwhile, 134 additional multi-day boats were introduced for deep sea and off-shore fishing activities in 1991 with a view to exploiting untapped resources available in the deep sea and off-shore areas. During the year, the management of fisheries activities improved mainly through fisheries co-operative societies. The number of Fisheries Co-operative Societies (FCSS) formed in 1991 increased by 48 per cent to 787. As a result, the total membership of FCSS moved up from 60,000 in 1990 to 75,000 in 1991. Despite the increase in the level of production, the average prices of all varieties of fish increased during 1991.

According to provisional estimates of the Department of Census and Statistics, milk production is available only for 20 districts. Production statistics of the Killinochchi, Mannar, Vavuniya, Mullaitivu and Trincomalee districts are not available. On the basis of available data, milk production (including buffalo milk) in 1991 increased by 3 per cent to 281 million litres. The volume of milk collected by the Milk Industries of Lanka Company Limited (MILCO) was 68 million litres in 1991 registering an increase of 6 per cent compared to 1990. The combined milk collection of the MILCO and Nestle Lanka Limited at 93 million litres recorded a substantial increase of 12 per cent. The producer price of milk was raised from Rs. 6.77 per litre to Rs. 8.50 per litre with effect from 15th October, 1991, with a view to assisting the village based dairy farming sector.

TABLE 1.15 Fish Production 1987 - 1991

Mt. tons

Sub-Sector	1987	1988	1989	1990	1991(a)
Coastal	149,278	155,099	157,411	134,132	159,151
Deep Sea and Off-shore	4,259	4,425	8,155	11,666	15,080
Inland	36,465	38,012	39,720	31,265	23,832
Total	190,002	197,536	205,286	177,063	198,063

Source: Ministry of Fisheries and Aquatic Resources.

(a) Provisional.

The Department of Animal Production and Health and the National Livestock Development Board continued with their programmes of providing assistance and extension services to improve the national livestock population and strengthen animal breeding services. The Sri Lanka - ADB Livestock Development Project and the Sri Lanka - Netherlands Livestock Development Programme were completed in 1991 while the Agricultural Rehabilitation Project was in progress during the year. The number of artificial inseminations successfully carried out by the Department of Animal Production and Health increased from 46,997 in 1990 to 52,119 in 1991.

The Department of Census and Statistics has provisionally estimated egg production (excluding Killinochchi, Mannar, Vavuniya, Mullaitivu and Trincomalee districts) in 1991 at 844 million, showing an increase of 6 per cent over the previous year.

According to tentative data provided by the Ceylon Oils and Fats Limited, the British Ceylon Corporation Lanka Limited and the Ceylon Grain Elevators Limited, the combined animal feed production, declined by 8 per cent or 12,250 metric tons to 144,108 metric tons during 1991. This reduction in the manufacture of animal feed was a result of the suspension of production activities by the Ceylon Oils and Fats Limited from September to November 1991, due to a change of ownership.

### **FERTILIZER**

According to tentative data provided by the National Fertilizer Secretariat, the total quantity of fertilizer issued to the different crop sectors in 1991 increased by 2 per cent to 445,800 metric tons when compared with a 16 per cent decline reported during 1990. Fertilizer issues to all crop sectors increased except for tea and rubber. Issues to the paddy sector accounted for the largest share of 40 per cent of total issues. Details of fertilizer issues to different crop sectors are indicated under the respective crops.

The volume of fertilizer issued by private sector wholesalers increased by 26 per cent to 96,650 metric tons in 1991. In contrast, the volume of fertilizer issued by the public sector which accounted for 78 per cent of the total declined by 3 per cent to 349,149 metric tons during the year.

TABLE 1.16 Fertilizer Issues by Crops 1988-1991

'000 Mt.tons

1988	1989	1990	1991(a)
226.2	238.1	161.2	176.1
138.0	127.9	134.1	117.9
25.1	22.6	22.2	13.7
42.0	38.5	23.6	28.8
26.1	28.7	46.3	50.7
4.7	5.6	7.6	11.1
63.1	60.9	42.1	47.5
525.2	522.3	437.1	445.8
	226.2 138.0 25.1 42.0 26.1 4.7 63.1	226.2 238.1 138.0 127.9 25.1 22.6 42.0 38.5 26.1 28.7 4.7 5.6 63.1 60.9	226.2     238.1     161.2       138.0     127.9     134.1       25.1     22.6     22.2       42.0     38.5     23.6       26.1     28.7     46.3       4.7     5.6     7.6       63.1     60.9     42.1

(a) Provisional.

Source: National Fertilizer Secretariat.

The Ceylon Fertilizer Corporation (CFC) which has been the main fertilizer importer in the past continued to dominate fertilizer imports during 1991 as well. Annual fertilizer imports by different importers declined by 24 per cent or 122,712 metric tons to 385,019 metric tons in 1991. The importation of all ingredients except NPK compound fertilizer and Kiezerite declined in 1991. The import of Rock Phosphate recorded a substantial decrease of 80 per cent while NPK compound fertilizer imports increased by 59 per cent. Imports of Urea which is the most popular fertilizer item fell marginally to 181,352 metric tons in 1991.

The total stock of fertilizer available with the wholesalers which stood at 181,976 metric tons at the beginning of the year depleted to 149,147 metric tons by the 31st December, 1991. Increase in the fertilizer issues despite a drop in fertilizer imports, during the year resulted in the reduced stock position.

TABLE 1.17
Issues of Fertilizer by Wholesalers 1990-1991

			1990			1991(a)				% Change	
	Sector	Quantity (Mt. tons)		%		Quantity (Mt. tons)		%		in Quantity	
1.	Public Sector	360,494		82		349,149		78		-3.1	
	1.1 Ceylon Fertilizer Corporation		190,941		43		199,086		45	+4.3	
	1.2 Janatha Fertilizer Enterprise Ltd.		109,695	1	25		96,292		21	-12.2	
	1.3 Colombo Commercial Fertilizers Ltd.		59,858		14		53,771		12	-10.2	
2.	Private Sector	76,635		18		96,650		22		+26.1	
	2.1 A. Baur & Co. Ltd.		39,269		09	٠.	49,538		11	+26.1	
	2.2 Others		37,366		09		47,112		11	+26.1	
	Total	437,129		100		445,799		100		+2.0	

(a) Provisional.

Source: National Fertilizer Secretariat.