

3. AGRICULTURE, FISHING AND FORESTRY

3.1 Production Trends

Agricultural output, which grew by 4.5 per cent in 1999, expanded further by 1.8 per cent in 2000, reflecting largely the significant increases in tea and coconut output. However, the rate of growth was low due to a drop in the output of paddy and rubber as well as a decline in output of some other field crops.

Tea production, after a record output in 1999, increased by a further 8 per cent surpassing the 300 million kg mark for the first time and reached a new peak output level of 306 million kg. Coconut output increased by 8 per cent to 3,055 million nuts, the highest production ever on record. The lagged effect of the favourable weather in 1999 and well distributed rainfall in 2000, coupled with an increased application of fertiliser in 1999, contributed positively to the improvement in coconut output. Rubber output, which has shown a declining trend over the years, declined further and reported the lowest output ever on record. Paddy production, which reached a peak output in 1999, declined marginally as the Yala harvest dropped by 4 per cent. A reduction was seen in the extent sown and harvested, though the average yield of paddy improved and reached the highest level ever achieved. Of the other field crops, potato production increased significantly by 78 per cent owing to the protection provided to potato cultivation by imposing a high tariff on imports. The output of most other field crops such as chillies, big onions, black gram, maize and green gram was less than in 1999. Sugar production decreased, while the production of milk and eggs increased compared to the previous year.

TABLE 3.1
Production and Price Changes of Major
Agricultural Items

| Item | Unit | Production | | % Change in | |
|---------|----------|------------|-------|-------------|--------|
| | | 1999 | 2000 | Production | Prices |
| Tea | kg.mn. | 284 | 306 | 7.7 | 17.7 |
| Rubber | kg.mn. | 97 | 87 | -9.9 | 21.1 |
| Coconut | nuts mn. | 2,828 | 3,055 | 8.0 | -31.1 |
| Paddy | mt '000 | 2,868 | 2,860 | -0.3 | -8.8 |
| Sugar | mt '000 | 66 | 64 | -3.0 | -7.5 |
| Fish | mt '000 | 307 | 323 | 5.0 | 11.2 |

Sources: Central Bank of Sri Lanka
Relevant Authorities

3.2 Agricultural Policy

The agricultural policy of the government focused on allowing greater participation of the private sector in production and marketing, while the government acted as a facilitator in the development of the sector.

Privatisation of the regional plantation companies, which began in 1995, progressed steadily through 2000. Under the divestiture plan, 51 per cent of the stock was sold to the management companies while 10 per cent of the stock in each company was gifted to the employees. Of the balance stock, 20 per cent was to be issued as an Initial Public Offering (IPO) and the remaining 19 per cent was to be sold through the stock market. At end 2000, the privatisation of 8 companies had been completed and all the shares were fully sold. In another 8 companies, 19 per cent of the stock is still with the government, while in 4 companies, 39 per cent of the stock is with the government.

During the year, Malwatte Valley Plantations Ltd, sold 20 per cent of its shares through an IPO and reduced the government stake further. Depending on market conditions, the balance shares will be sold through the stock market in the future. As the tea prices are good at present, the plantation companies should seriously think of building up a self-generated capital development fund for long-term investment in the sector. Such investment would make the companies resilient when the prices take a downturn.

In the domestic agricultural sector, six thrust areas have been identified for further reforms with the objective of improving productivity and increasing output. The areas identified were research, production promotion and extension, supply of seeds and planting material, private sector participation in commercial agriculture, marketing and institutional reforms.

Agricultural research will be re-organised in the form of demand driven research to resolve practical problems faced by farmers. Priority areas for agricultural research will be identified and coordinated through the Council for Agricultural Research and Policy (CARP) in order to optimise the usage of research funding.

Continuing with the National Seed Policy introduced in 1996, private sector participation in producing and marketing seeds and planting material was further strengthened during the year. Encouraged by progress at the Hingurakgoda seed farm, which was privatised in 1998, a major portion of the government owned Pelwehera farm was leased to the private sector. Along with the lease, moveable assets of the farm were also sold. Meanwhile, action has been taken to enact a Seed Act, so as to grant the Seed Certification Service legal authority to regulate the quality of locally produced and imported seeds and planting materials.

The Plant Quarantine Act has been revised and updated to suit a liberalised policy environment and will be

implemented soon. The Agrarian Services Act was also updated to regularise the ownership of land, create a land owning class of farmers, provide more authority and empower grass roots level organisations.

There is a need for adopting a consistent tariff policy in the agricultural sector in order to ensure a sustainable high growth rate in domestic agricultural output in the long run while minimising short-term fluctuation in agricultural produce and their prices. Ad hoc changes in tariffs, implemented with a view to either protecting farmers or consumers have generated long lasting unhealthy results. For example, the tariff on rice imports was reduced from 35 per cent to 10 per cent for the period 23 October to 31 December 1999, leading to the importation of a large stock of rice and a substantial decline in paddy prices after the Maha harvest in 2000. This led the government to intervene in the market through price setting. Accordingly, the government directed the Co-operative Wholesale Establishment (CWE) and the Co-operative Societies to purchase paddy at a minimum price of Rs.13 per kg. Both institutions were also provided with concessionary credit for this purpose through the state banks with a Treasury guarantee. The interest rate at the time of granting the loan had been fixed at 14 per cent and the Treasury had agreed to pay the interest. Although this intervention helped to arrest the deteriorating price of paddy to a certain extent, it jeopardised some of the forward contracts the farmers had entered into under the "Govi Sahanaya" scheme where the contract price was fixed at Rs.12 per kg. As the intervention was not sufficient, the government had to restrict the import of rice by bringing it under licensing requirement. Thus, rice imports have been under licensing since 17 July 2000. The CWE is still carrying a large stock of paddy, continuously making losses.

During the year, the government also increased tariff rates on edible oil and subsequently imposed a surcharge with a view to protecting the coconut oil industry. This was a reversal of the tariff reduction granted in 1996, in the wake of a shortfall in coconut production, that had been granted to facilitate desiccated coconut millers to purchase nuts at a lower price.

After strong lobbying by potato farmers facing difficulties in competing with low cost imports, the government imposed a 35 per cent surcharge on potato imports in August 2000 in addition to the existing tariff rate of 35 per cent on potatoes. Subsequently, in December 2000, this tariff was changed to a specific duty of Rs.20 per kg. As a result of the heavy protection, domestic potato production increased by 78 per cent at the expense of consumers as the all island average retail price of potatoes increased by 23 per cent, and remained high in 2000.

3.3 Export Crops

Tea

In 2000, tea production increased by 8 per cent over the peak production in 1999, continuing the upward trend experienced since 1993, reaching a record level of 306 million kg and surpassing the 300 million kg level for the first time. Favourable tea prices, increased fertiliser application and favourable weather were the major contributory factors for this increase in production. This record performance in production was mainly reflected in a notable improvement in the performance of low elevation areas whose output, accounting for 54 per cent of the total production, increased by 12 per cent in 2000 to 166 million kg. Production in high and medium elevations, with a share of 27 per cent and 18 per cent, respectively, increased by 3 per cent and 5 per cent respectively, in 2000.

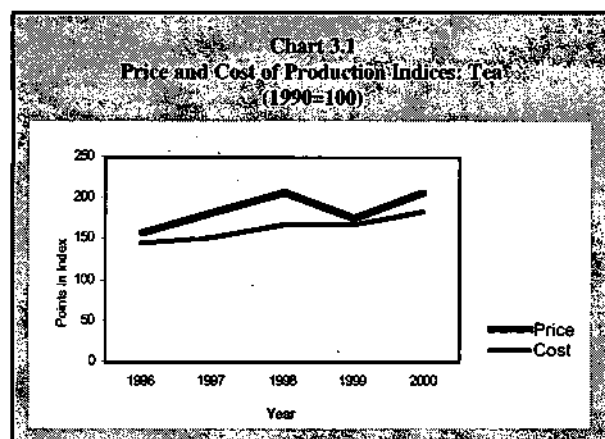
TABLE 3.2
Statistics of the Tea Sector

| Item | Unit | 1998 | 1999(a) | 2000(b) |
|-----------------------------------|---------------|--------|---------|---------|
| 1. Production | kg.mn | 280 | 284 | 306 |
| High grown | kg.mn | 76 | 81 | 84 |
| Medium grown | kg.mn | 54 | 54 | 56 |
| Low grown | kg.mn | 150 | 149 | 166 |
| 2. Extent (c) | | | | |
| Total extent | hectares '000 | 195 | 180 | 180 |
| Extent in bearing | hectares '000 | 180 | 173 | 173 |
| 3. Fertiliser used | mt '000 | 182 | 164 | 188 |
| 4. Replanting | hectares | 1,234 | 1,376 | 1,085 |
| 5. New planting | hectares | 400 | 415 | 263 |
| 6. Prices | | | | |
| Colombo (net) | Rs./kg. | 134.35 | 115.19 | 135.53 |
| Export (f.o.b) | Rs./kg. | 184.94 | 162.39 | 184.97 |
| 7. Cost of production (d) Rs./kg. | | 100.71 | 101.29 | 109.60 |
| 8. Exports | kg.mn. | 272 | 269 | 288 |
| 9. Export earnings | Rs. mn | 50,280 | 43,728 | 53,133 |
| | US\$ | 780 | 621 | 700 |
| 10. Value added as % of GDP (e) | | 2.7 | 2.2 | 2.6 |

- (a) Revised Sources: Sri Lanka Tea Board
 (b) Provisional National Fertiliser Secretariat
 (c) Based on a Tea Land Survey conducted in 1994/95 Central Bank of Sri Lanka
 by the Tea Commissioner's Division. Extent in 1999 onwards revised based on the estate sector survey conducted in 1999 (excludes abandoned tea lands)
 (d) Includes green leaf suppliers profit margin
 (e) In growing and processing only

The smallholder sector, accounting for 60 per cent of the total output, significantly improved its performance, recording an increase of 12 per cent in 2000 to 184 million kg. Plantation companies, which accounted for the balance in the output, recorded a growth of only 2 per cent. The yields in the smallholder sector improved by 2 per cent over the preceding year to reach a new record of 2,216 kg per hectare in 2000. The average national yield of tea was

1,618 kg per hectare. The yield in the estate sector is estimated to have improved by 6 per cent to 1,151 kg per hectare, mainly on account of improved management in estates under the privatised plantation companies. However, average yields in the estate sector remained well below the smallholder sector as a large extent of tea in the estate sector is still under low yielding seedling tea, compared to the high yielding vegetatively propagated (VP) tea of smallholders.



The production of cut, tear and curl (CTC) tea declined by 4 per cent to 17.5 million kg in 2000. Local CTC teas cannot compete with low priced competitors in the global CTC tea markets due to the high cost of production. As a result, CTC tea imports for blending and re-exporting amounted to 2.8 million kg in 2000, an increase of 67 per cent from 1999. However, the quantity of tea imported for blending accounted for less than 1 per cent of domestic tea production.

The annual average price at the Colombo Auctions improved by 18 per cent to Rs 135.53 per kg in 2000, continuing the trend that started in July 1999. The price increase was steeper during the second half of 2000. The main reasons for the price increase were a production shortfall in Kenya, the active participation of Russia at the Colombo Auctions and the depreciation of the rupee against the US dollar during the year.

The quantity sold at the Colombo Auctions increased by 6 per cent to 277 million kg in 2000. The volume of exports during the year increased by 7 per cent to 288 million kg. Combined with the improvement in prices, export earnings from tea rose by 22 per cent to Rs 53,133 million in 2000. Russia continued to be the largest buyer of Sri Lanka tea and accounted for 16 per cent of the export volume. UAE, Syria and Turkey were other leading buyers.

Bulk tea exports amounted to 183 million kg or 63 per cent of total tea exports. As in 1999, the share of value added tea exports remained at 37 per cent in 2000. The

share of tea in packs and tea bags was 30 per cent and 4 per cent, respectively, while other types accounted for the remaining 3 per cent.

During 2000, the Tea Small Holdings Development Authority (TSHDA) continued to assist the tea industry by implementing subsidy schemes for replanting and new planting, as well as by providing advisory and extension services. In addition, the TSHDA continued the implementation of the fertiliser credit scheme and supplied 15,317 metric tons of fertiliser through Tea Development Societies, recording a 28 per cent growth over 1999. Under the 'Development Fund' programme, smallholders were provided with credit facilities to purchase inputs through Tea Smallholder Development Societies. At end 2000, there were 1,172 Tea Smallholder Development Societies.

Rubber

Rubber production declined by 10 per cent to 87 million kg in 2000. This was the lowest production reported over the past 50 years. Smallholders accounted for 71 per cent of total production and plantation companies for the balance. Smallholder production dropped by 13 per cent to 61.8 million kg, production of plantation companies dropped by 7 per cent to 25.4 million kg in 2000.

The drop in production is due to both the lower extent under cultivation and lower yield. The extent under rubber cultivation has declined over the years as a result of competition for land from more lucrative other agricultural

TABLE 3.3
Statistics of the Rubber Sector

| Item | Unit | 1998 | 1999(a) | 2000(b) |
|---------------------------------|---------------|-------|---------|---------|
| 1. Production | kg.mn. | 96 | 97 | 87 |
| 2. Area (c) | | | | |
| Under cultivation | hectares '000 | 158 | 159 | 158 |
| Under tapping | hectares '000 | 125 | 128 | 125 |
| 3. Yield | kg./hectare | 768 | 755 | 694 |
| 4. Fertiliser used | mt '000 | 15 | 10 | 13 |
| 5. Replanting (d) | hectares | 1,160 | 643 | 793 |
| 6. New planting (d) | hectares | 515 | 218 | 251 |
| 7. Prices | | | | |
| Export (f.o.b) | Rs./kg | 67.72 | 53.90 | 66.15 |
| Colombo (RSS 1) | Rs./kg | 49.76 | 45.33 | 54.91 |
| 8. Cost of production | Rs./kg | 42.00 | 43.50 | 44.50 |
| 9. Exports | kg.mn. | 41 | 43 | 33 |
| 10. Domestic consumption | kg.mn. | 54 | 54 | 55 |
| 11. Export earnings | Rs.mn. | 2,808 | 2,305 | 2,179 |
| | US\$ mn. | 44 | 33 | 29 |
| 12. Value added as % of GDP (e) | | 0.5 | 0.4 | 0.4 |

Sources: Rubber Development Dept.
National Fertiliser Secretariat
Central Bank of Sri Lanka

- (a) Revised.
(b) Provisional.
(c) Based on a survey of Agricultural Crops and Livestock-1993. Dept. of Census and Statistics
(d) Extents covered by cultivation assistance schemes of the Rubber Development Department
(e) In growing and processing only.

crops and real estate development projects. The depressed prices over a considerable period of time led to the abandoning of tapping in some marginal lands as proceeds could not even cover the cost of tapping. This also led to poor management of smallholdings, which in turn led to lower production. Although local rubber prices improved during the latter part of the year, production did not respond immediately to improved prices owing to the degraded condition in some rubber lands. Yield per hectare dropped by 6 per cent to 712 kg in 2000. The yield in major rubber producing countries is almost twice the yield in Sri Lanka, indicating that if proper strategies are adopted, it would be improved considerably.

Domestic consumption of rubber in the industrial sector, which has steadily increased during the last few years, increased marginally to reach 55 million kg and accounted for 63 per cent of the domestic rubber production. Natural rubber exports declined by 23 per cent to 33 million kg in 2000. The cost of production of rubber increased by 2 per cent to Rs.45 per kg in 2000.

International prices for natural rubber remain low due to poor demand from rubber consuming countries. According to the International Rubber Study Group, natural rubber prices declined for all types and grades in all markets as the International Natural Rubber Organisation (INRO) took action to dispose of its buffer stocks. Prices at the Colombo Auction improved during the year. The annual average price for RSS1 and latex IX increased by 21 per cent and 29 per cent, respectively, over 1999. Despite the price increase, the profit margin available to the producer is still low, making rubber cultivation less attractive.

To arrest the unhealthy trend in production, the government initiated new development programmes, while providing support to existing programmes. The Rubber Development Department (RDD) implemented the 'Thurusaviya Scheme' to improve the lobbying power of smallholders to obtain better extension services, obtain help in selling their latex at a remunerative price and to obtain credit. By end 2000, 253 'Thurusaviya Societies' had been

established throughout the rubber growing districts. The RDD also conducted programmes to train 1,800 rubber tappers. New planting and replanting subsidy schemes continued in 2000. During the year Rs.58 million was disbursed for replanting and Rs.25 million for new planting. The declining trend in replanting of rubber, seen from 1996, reversed in 2000. According to the RDD the extent of newly planted and replanted areas have increased by 15 and 23 per cent, respectively, in 2000.

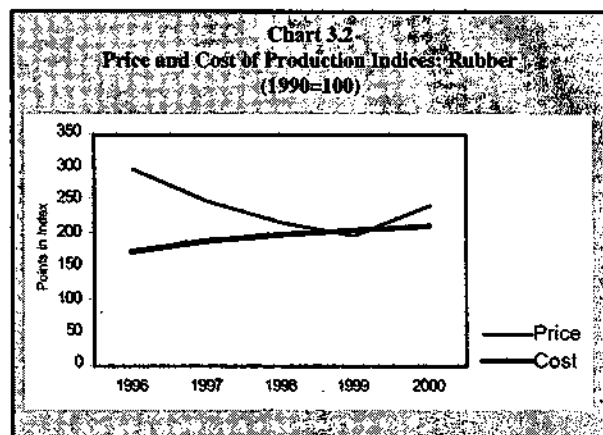
According to the Rubber Research Institute (RRI) of Sri Lanka, the natural rubber industry basically depends on two rubber clones, RRIC 100 and PB 86. In the event of a pest or disease affecting these two clones, the entire rubber industry could be in danger. To minimise these risks, RRI has recommended greater diversity in clones. A diversification plan has been prepared for implementation in the near future.

During the year, there had been some international attempts to arrest the deterioration in international rubber prices. After the collapse of the International Natural Rubber Agreement, Thailand and Malaysia formed a joint venture to buy some of the rubber in the INRO buffer stocks. Meanwhile Malaysia, Thailand and Indonesia announced a plan to set up a benchmark price for rubber exports and to stock-pile excess rubber to support prices. It is expected that the minimum export price would be flexible and would be reviewed periodically in order to reflect changing world prices.

Coconut

Coconut production in 2000, estimated at 3,055 million nuts, was the best output ever on record. This was an improvement of 8 per cent over the output in 1999. The increase in output was attributed to the well-distributed rainfall in 2000, as well as the lagged effect of favourable rainfall in 1999. Higher fertiliser application in 1999 also contributed to the improvement in output. However, increased nut supply resulted in a steep drop in the price of nuts.

In line with the increased nut production, the three major coconut based products also showed improvements. Desiccated coconut (DC), which reported a 50 per cent increase in the previous year, improved further by 32 per cent and recorded the highest quantity of DC ever produced. Almost all DC mills ran at full capacity and the industry nearly reached the full installed capacity of 90,000 metric tons. DC exports also reported a new high level of 83,000 metric tons, which indicated a 30 per cent increase from the previous year. Other kernel products also improved significantly. Coconut oil production increased by 27 per cent. Exports of copra, fresh nuts, coconut cream and milk powder increased by 30 per cent, 26 per cent and 20 per cent, respectively.



The price of DC, which remained attractive in 1999, fell due to increased global supply arising mainly from the Philippines and Indonesia. During the year, domestic prices for DC declined by 40 per cent from Rs.64.70 per kg in January to Rs.38.50 per kg in December. The average export price (fob) of kernel products declined by 26 per cent to Rs.7.35 per nut as against Rs.9.95 per nut in the previous year. Although the nut equivalent of the three

1999, declined by 54 per cent and fetched only US dollars 330 per metric ton in December 2000. In the local market, the price of coconut oil dropped by 30 per cent to Rs.38,571 per metric ton.

Low domestic prices for coconut were the combined result of increased production and the non-availability of sufficient absorption capacity in the oil industry. The domestic coconut oil industry was adversely affected by the surge in imports of edible oil into the country during the last few years, as a result of the concessionary rate of duty granted to edible oil in June 1998. This measure was taken to support DC millers who would benefit from the reduction in nut prices that would result from a decline in competition for nuts from the oil industry. The duty on edible oil other than coconut oil was reduced from 35 per cent to 5 per cent. This resulted in the import of large stocks of cheap

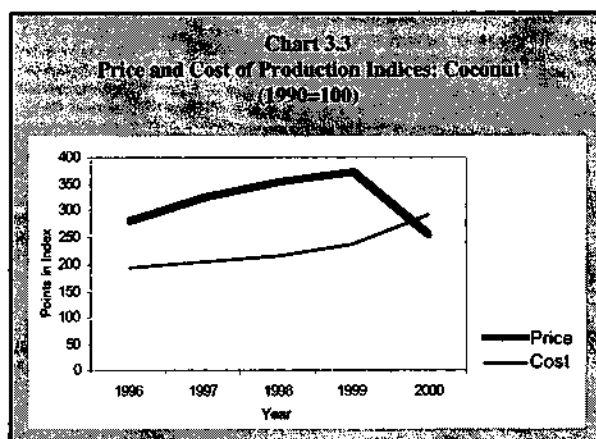
TABLE 3.4
Statistics of the Coconut Sector

| Item | Unit | 1998 | 1999(a) | 2000(b) |
|------------------------------------|---------------|-------|---------|---------|
| 1. Production (c) | nuts mn. | 2,552 | 2,828 | 3,055 |
| Dessicated coconut | nuts mn. (d) | 361 | 541 | 712 |
| Coconut oil | nuts mn. (d) | 334 | 309 | 387 |
| Copra (e) | nuts mn. (d) | 44 | 65 | 84 |
| Fresh nut exports | nuts mn. | 17 | 23 | 29 |
| Domestic nut consumption (f) | nuts mn. | 1,779 | 1,799 | 1,832 |
| 2. Total extent | hectares '000 | 439 | 439 | 439 |
| 3. Replanting/Underplanting (h) | hectares | 595 | 698 | 714 |
| 4. New planting (h) | hectares | 656 | 660 | 834 |
| 5. Fertiliser used | mt '000 | 38 | 39 | 37 |
| 6. Cost of production | Rs./nut | 2.40 | 2.68 | 3.27 |
| 7. Retail price of a fresh nut | Rs./nut | 11.17 | 11.95 | 9.15 |
| 8. Average export price f.o.b. (g) | Rs./nut | 8.31 | 9.95 | 7.35 |
| 9. Export earnings | Rs.mn. | 6,110 | 9,119 | 9,174 |
| | US\$ mn. | 94 | 129 | 121 |
| Kernel products (g) | Rs.mn. | 3,632 | 5,973 | 5,786 |
| | US\$ mn. | 56 | 84 | 77 |
| Other products | Rs.mn. | 2,478 | 3,146 | 3,388 |
| | US\$ mn. | 38 | 45 | 45 |
| 10. Value added as % of GDP (i) | | 2.9 | 3.2 | 2.2 |

- (a) Revised Sources: Coconut Cultivation Board
 (b) Provisional Coconut Development Authority
 (c) Estimated (breakdown does not add up to total production due to adjustments for changes in copra stock) National Fertiliser Secretariat
 (d) In nut equivalent - converted at 1 MT DC = 8,000 nuts
 1 MT Oil = 8,800 nuts
 1 MT Copra = 5,775 nuts.
 Note: Conversion rates have been revised in 1998 based on a study conducted by the CDA in 1996/97. 1997 conversion rates are as given in the Annual Report of 1997.
 (e) Exports only
 (f) Estimated on the basis of household per capita consumption of 94.8 nuts per year. Excludes industrial use.
 (g) Three major coconut kernel products only.
 (h) Extents covered by cultivation assistance schemes of the CCB.
 (i) In producing and processing only.

kernel products exported increased by 31 per cent, export earnings dropped by 3 per cent in rupee terms owing to the decline in international prices of these products. The price of copra declined during the first three quarters but improved during the last quarter due to a renewed import interest from Pakistan.

Both international and local prices of coconut oil declined during the year. Coconut oil, which fetched US dollars 727 per metric ton (c&f) in Europe in December



edible oil against which coconut oil could not compete. Consequently a large number of oil mills had to be closed down. The number of oil mills, which stood at 980 in 1987, came down to 156 by 1999. Of this, only 25 per cent or 38 mills were in regular operation. With sharply reduced capacity in the coconut oil milling industry, the excess nut production could not be absorbed, and there was a downward pressure on nut prices during 2000. This situation prompted the government to revise its tariff policy on edible oils. The duty waiver granted to edible oil was removed and the duty was fixed at 25 per cent in April 2000. Ultimately, to arrest the fall in nut prices further, the government decided to impose a 25 per cent surcharge in addition to the revised tariff on all edible oil imports.

Other Export Crops

Other export crops include spices such as cinnamon, pepper, cloves, cardamoms, nutmeg, mace, beverages such as coffee and cocoa, and other agricultural produce such as unmanufactured tobacco, arecanut, betel leaves, cashew kernels and essential oils. The growing of other export crops has increased considerably over the years and since

1990, earnings from these crops as a whole have surpassed earnings from coconut exports and rubber exports. In fact, since 1998, export earnings from these crops have exceeded the combined export earnings from rubber and coconut. Export earnings from other export crops in 2000 grew by 1.6 per cent in rupee terms to Rs.11,784 million but declined by 5.6 per cent in US dollar terms. All sub categories, excluding pepper, nutmeg, mace and essential oils, declined in export volumes.

Cinnamon, the most important crop in this category, contributed nearly 30 per cent of the total earnings from other export crops in 2000. Sri Lanka is the largest producer of cinnamon in the world, accounting for about two thirds of world production. Sri Lanka exports more than 90 per cent of its production mainly in the form of quills, featherings, bark oil and leaf oil. This is an area where Sri Lanka can move to greater value addition, as a very large proportion of cinnamon is still exported in bulk form as quills. Cinnamon powder and tablets have a high demand from consumers in South America and Europe. The area under cinnamon was 25,000 hectares. Production showed a marginal improvement in 2000. However, there was a decline in export earnings due to a drop in prices and quantity exported.

Pepper production, which has shown a steady improvement during the last few years, increased further by 15 per cent to 10,676 metric tons in 2000. This was due to the increase in new planting during the last few years under the Export Agriculture Assistance Scheme (EAAS) implemented by the Department of Export Agriculture (DEA). However, the price of pepper in the world market declined due to an increase in world supply. As a result, average auction prices and farm gate prices declined in 2000 compared to 1999. Despite the drop in prices, export earnings from pepper increased by 22 per cent to Rs 1,587 million in 2000 due to the increase in the volume of exports by 29 per cent.

The world market price of nutmeg rose in 2000 due to a supply shortage. The increase in quantity exported and higher prices contributed to increasing earnings from nutmeg and mace by 35 per cent.

Export earnings from coffee, arecanuts and cardamoms declined by 92 per cent, 89 per cent and 51 per cent, respectively, in 2000 due to a drop in export volumes. Earnings from cloves and betel leaves also declined in 2000 by 26 per cent and 6 per cent, respectively, due to a drop in export volumes.

During 2000, over 235 metric tons of essential oils were exported and export earnings increased by 6 per cent to Rs 290 million. Of the essential oils, cinnamon leaf oil and citronella oil were the main items.

Cultivation of foliage and cut flowers has expanded significantly in recent years and these have become more

TABLE 3.5
Production of Other Export Crops

| Crop | Metric Tons | | |
|-----------------|-------------|----------|----------|
| | 1998 | 1999 (a) | 2000 (b) |
| Coffee | 2,343 | 3,249 | 2,549 |
| Cocoa | 1,904 | 1,147 | 1,351 |
| Cinnamon | 10,813 | 13,466 | 13,494 |
| Pepper | 6,776 | 9,284 | 10,676 |
| Cloves | 1,744 | 4,181 | 1,722 |
| Cardamom | 60 | 74 | 62 |
| Nutmeg and mace | 1,257 | 1,221 | 1,126 |

(a) Revised
(a) Provisional

Source : Department of Export Agriculture

important as sources of export earnings. In addition to large-scale export-oriented cultivators, there are a large number of small-scale growers of foliage and cut flowers operating on a self-employment basis. Large-scale cultivation of foliage and cut flowers is done in the Nuwara Eliya, Gampaha, Kandy and Kurunegala districts. Large quantities of foliage plants, rooted and un-rooted cuttings and flowers such as carnations, orchids and anthuriums were exported during 2000. Thus, the export earnings from foliage and cut flowers increased by 9 per cent to Rs 624 million.

3.4 Domestic Agriculture

Paddy

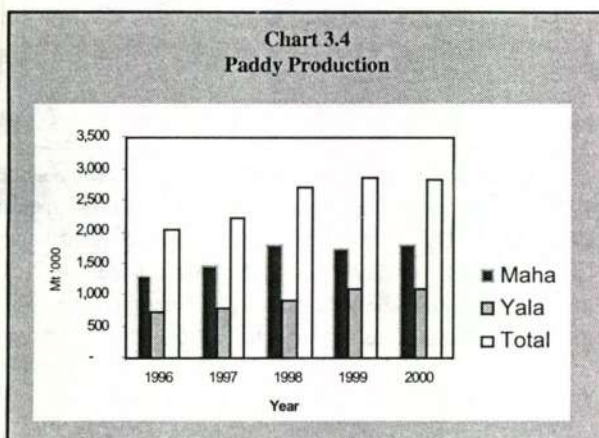
Paddy production during the 2000 cultivation year was 2.86 million metric tons (137 million bushels), a marginal decline of 0.3 per cent from the peak output in 1999. The decline in output reflects a 4 per cent drop in production during the Yala season and an increase of 2 per cent in the Maha season. Extents sown and harvested declined, while the average yields improved in spite of a drop in fertiliser application per hectare.

Output during the 1999/2000 Maha season increased by 2 per cent to 1.8 million metric tons. The improvement in the Maha harvest was achieved wholly on account of an improvement in the yield, as there was a drop in the extent sown and harvested.

The most notable improvements in production were reported from the districts of Kurunegala, Polonnaruwa, Anuradhapura and Jaffna. The Kurunegala District, which reported the best output during the Maha season, reported a 12 per cent improvement over the previous Maha season while the Polonnaruwa District, which reported the second best output, recorded a 15 per cent improvement over the previous season. These two districts together accounted for almost a quarter of the Maha output. In the Kurunegala District, production improved solely on account of a 14 per cent improvement in the yield while the net extent harvested dropped by 2 per cent. In the Polonnaruwa District, the yield and the net extent harvested improved by

7 per cent each. The Ampara District, which reported the highest output during the 1999 Maha season, reported a 17 per cent drop in production and was placed third. The five major paddy producing districts of Kurunegala, Polonnaruwa, Ampara, Anurathapura and Mahaweli 'H' area together accounted for more than half (53 per cent) the paddy output during the Maha season.

Paddy production during the Yala season, which reported the highest production ever achieved in 1999, declined by 4 per cent to 1.1 million metric tons during the 2000 Yala season. The net extent harvested during Yala 2000 declined by 8 per cent, while the average yield improved by 5 per cent.



Output in the districts of Ampara, Polonnaruwa, Anurathapura and Hambantota reported increases. However, the output in Kurunegala and the Mahaweli 'H' area suffered severe setbacks. The output in Kurunegala declined by 61 per cent while the Mahaweli 'H' area reported a 31 per cent drop. Both extent cultivated and yield in Kurunegala and the Mahaweli 'H' area declined due to inadequate irrigation water.

The Ampara District reported the highest Yala output for the seventh consecutive year and accounted for over one fifth of total Yala production. Ampara, Polonnaruwa and Hambantota together accounted for almost half the Yala output.

The increasing trend in annual average yields continued for the fourth consecutive year. The annual average yield increased by 5 per cent over the previous year and was 3,854 kg per hectare, the best annual average yield ever on record. The improvement in the average yield during both Maha and Yala seasons by 5 per cent each, contributed positively to the improvement in the overall average yield. The average yields reported for Maha and Yala turned out to be the best ever reported to the two cultivation seasons. The Maha yield of 3,798 kg per hectare surpassed the previous best yield for Maha reported in 1987 by 3 per cent. The average yield for Yala of 3,957 kg per hectare

was 4 per cent higher than the previous best reported in Yala 1998. Yield levels of the major and minor irrigated areas, which accounted for 82 per cent of the extent cultivated, improved during Yala 2000. The combined effect of this improvement in yield contributed positively towards the improvement in the overall yield, despite a decline in the yield in the rainfed areas.

The special 'yaya' demonstration programme organised by the Extension Division of the Department of Agriculture (DOA) to improve productivity by introducing a package of improved practices continued for the fifth consecutive year. Nearly 2,300 'yaya' demonstrations, benefiting about 54,000 farmer families were held during the year as against 1,700 demonstration benefiting 34,200 farmer families in the previous year. However, the total extent covered by demonstrations declined from 58,200 ha to 46,000 ha indicating that smaller farmers had been selected for the demonstrations during the year.

Farmers faced difficulties in marketing their paddy as a result of the import of rice under concessionary tariff rates that prevailed during the latter part of 1999. The reduction of the import duty on rice in the fourth quarter of 1999 resulted in a large quantity of rice, amounting to over two thirds of total rice imports during 1999, being imported to the country during this period. These imports adversely affected local millers and stockists of paddy who obtained financing from commercial banks for purchase of paddy. Some millers had to close down their mills. The ad hoc duty reductions and associated uncertainty made paddy millers and stockists reluctant to purchase and stock paddy on a large scale after the 1999/2000 Maha harvest, which resulted in declining the paddy prices. The adverse impact of this policy is felt even during the Maha harvest of 2001, where the farm gate prices were not very remunerative.

The situation prompted the government to intervene in the market through CWE and cooperative societies to stabilise paddy prices. However, during much of the year, the farm gate price of paddy was well below the purchasing price announced by the CWE. Cooperatives and the CWE purchased paddy at prices ranging from Rs.10 per kg upwards. Towards the end of the season, in April 2000, the government directed the CWE to purchase paddy from the farmers at Rs.13 per kg. During the Maha harvest, CWE purchased approximately 50,000 metric tons of paddy. Sales had to be effected at lower prices and the loss incurred by CWE in this operation is reported to be about Rs.75 million. During the Yala harvest, the government directed the CWE and the cooperative societies to purchase paddy at Rs.13 per kg. Both institutions were provided with concessionary credit. CWE purchases during the Yala season amounted to approximately 38,000 metric tons of paddy.

With a view to improving the domestic price of paddy, the government imposed a licensing requirement for the import of rice with effect from 17 July 2000. This import

TABLE 3.6
Statistics of the Paddy Sector

| Item | Unit | 1999(a) | | | 2000(b) | | |
|------------------------|---------------|---------|--------|---------|---------|--------|---------|
| | | Maha | Yala | Total | Maha | Yala | Total |
| Gross extent sown | hectares '000 | 551 | 345 | 896 | 549 | 329 | 878 |
| Gross extent harvested | hectares '000 | 542 | 332 | 874 | 526 | 306 | 832 |
| Net extent Harvested | hectares '000 | 483 | 298 | 781 | 469 | 273 | 742 |
| Production | mt '000 | 1,748 | 1,120 | 2,868 | 1,781 | 1,078 | 2,860 |
| | bushels '000 | 83,781 | 53,681 | 137,462 | 85,374 | 51,668 | 137,042 |
| Yield (c) | kg/ hectare | 3,618 | 3,760 | 3,672 | 3,798 | 3,957 | 3,856 |
| Credit granted | Rs. mn. | 208 | 110 | 318 | 256 | 118 | 374 |
| Rice imports | mt '000 | - | - | 214 | - | - | 15 |
| (Paddy equivalent) | (mt '000) | - | - | 306 | - | - | 21 |

Sources: Department of Agriculture
Ministry of Agriculture
Sri Lanka Customs
Central Bank of Sri Lanka.

(a) Revised.

(b) Provisional

(c) 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 net extent harvested.

restriction, coupled with a good domestic harvest, led to a sharp decline in the rice imports. Rice imported during 2000 amounted to approximately 14,900 metric tons compared to 214,000 metric tons in the previous year.

The depressed paddy prices that prevailed during the Maha harvest discouraged the application of fertiliser. As a result, fertiliser issues to the paddy sector declined by 14 per cent, especially during the Yala season.

Other Field Crops

The other field crops sector reported a mixed performance. The production of potato and ground nuts increased, while the production of big onions, chillies, black gram, green gram, sesame and maize decreased.

Potato production increased by 78 per cent. Both an increase in the extent cultivated and an improvement in the yield contributed towards the enhanced output. The extent under potato cultivation, which had declined since 1996 after the removal of the ban on potato imports, increased by 68 per cent to 3,642 ha. in response to the high protection provided by way of increased tariffs. The tariff rates were revised on 30 August 2000. A 35 per cent surcharge was imposed on top of the existing 35 per cent duty until 07 December 2000. Thereafter, the duty was revised once again and a specific duty of Rs. 20 per kg was imposed on 08 December 2000. Potato yields increased for the third consecutive year. During the cultivation year, potato yield improved by 6 per cent to 13.2 metric tons per ha.

Big onion output, which increased three-fold in 1999, declined by 42 per cent to 36,600 metric tons in 2000. The increased output in 1999, resulting in low prices and difficulties in disposing of their produce, discouraged production in 2000.

Chillie production that has declined consistently since 1993, reported a further 7 per cent drop to 14,000 metric tons in 2000. During this period the extent cultivated under chillie declined steadily and the extent cultivated in 2000 was less than half the extent cultivated during 1993. This decline has been more drastic after 1996 with the removal of the licensing requirement to import chillies. Further, CWE has reduced the local purchasing price of chillies significantly since 1998. Output of black gram and green gram also declined, by 19 per cent and 15 per cent, respectively, in 2000.

In the wake of a drop in production, imports of big onions and chillies increased by 40 per cent and 15 per cent, respectively. Meanwhile imports of black gram increased by 49 per cent, while green gram imports declined by 10 per cent.

The licensing requirement on the import of maize grain for the provender industry was removed in March 2000, and an import duty of 10 per cent was imposed as against the duty free imports allowed when the commodity was under licence. Maize accounts for almost a quarter of the total extent cultivated under other field crops. The biggest problem faced by maize growers was the marketing of their produce at a reasonable price. The majority of maize farmers do not apply any fertiliser. They also do not use high quality higher yielding seed varieties. Thus, the yields realised are much lower than the potential levels. During the year, 115,000 metric tons of maize grain to the value of over one billion rupees was imported for the provender industry. This is an area where the forward market mechanism could work well since maize goes into a processing industry, which uses it as a raw material for producing animal feed. Both the feed manufacturers as well as the farmers could benefit from forward contracts. If the

farmers are assured of the price that they would get before the commencement of the season, they could decide on whether to invest in intensive cultivation using better planting material and the application of fertiliser. Similarly, feed manufacturers could decide on their investment patterns if they knew in advance the price of their raw material.

Vegetables and Fruit

The Department of Census and Statistics estimates that vegetable production increased by 5 per cent to 580,000 metric tons in 2000. Production of both upcountry and low country vegetables is estimated to have increased by 5 per cent each, due to an increase in the extent under cultivation. However, prices of many vegetable varieties were relatively higher than in 1999. The average retail price of low country vegetables and up country vegetables was in the range of Rs 25.00 – Rs 35.00 per kg and Rs 28.00 – Rs 42.00 per kg, respectively.

Vegetables are exported both fresh and in processed form. Among vegetables, gherkins were the main item exported in semi-processed and processed form. Gherkins are grown on a commercial scale with buyback arrangements with the exporters. The exporter provides the technical know-how as well as the inputs and credit to farmers and buys back the produce at a guaranteed price. The volume of gherkin exports was 2.6 million kg in 2000 and export earnings Rs 179 million. Despite the decline in export volume by 8 per cent, export earnings increased by 20 per cent due to more value addition. Japan was the major market for gherkins. Leeks, capsicum and mixed vegetables in fresh form were exported in relatively small quantities to the Maldives, East Asia and Europe. Processed vegetable exports are still limited to very small quantities.

Commercial scale cultivation is practised in respect of only a few varieties of fruit such as pineapple, banana and rambutan. Among fruit exports, pineapple was the main item, accounting for 42 per cent of the total export volume of fruit. Mangoes, lemon and banana were exported in small quantities. To enhance exports of fresh fruit, commercial cultivation with high yielding new varieties is essential. During 2000, fresh and dried fruit (including tamarind) exports amounted to 6,000 metric tons and earnings amounted to Rs 339 million. The Maldives, East Asia and Germany were the major markets for fruit exports, while Pakistan and India were the major markets for tamarind. Processed products such as fruit juices, jellies, jams, marmalade and canned fruits were exported to these markets and earnings from them amounted to Rs 235 million.

It is reported that about 40 per cent of vegetable and fruits go waste between harvesting and marketing due to poor post harvest handling, storage and transportation. Reducing waste will reduce price levels while improvements

in processing and storage will reduce price fluctuations. To impart knowledge on good post harvest, storage and handling practices, the EDB, Department of Agriculture and Department of Export Agriculture carried out several awareness programmes for the benefit of growers. Provision of proper storage facilities, and containers suitable to pack the produce during transportation and conducting awareness programmes on the importance of careful handling are some important measures that could be taken to minimise post harvest losses in fruit and vegetables. A new institute, called the Institute of Post Harvest Technology (IPHT), was set up in Anuradhapura in 2000 to carry out research and develop new technologies to minimise post harvest losses in agricultural products. During 2000, Sri Lanka imported 41,000 metric tons of fruits to the value of Rs 1.2 billion. This was an increase of 13 per cent over the quantity imported in 1999. As in the preceding year, apples, oranges, dates and grapes were the main varieties of fruit imported. The trade deficit in fruit was Rs 834 million in 2000.

Sugar

Although the sugar industry in Sri Lanka has been in existence for over four decades, it accounted for only 10 per cent of total supply in 2000. Even though certain structural changes have taken place during this period, the development of the industry has been far below expectations and the anticipated targets have never been achieved. In recent years, the sector has shown a negative growth both in terms of cane and sugar production. The number of operational factories also decreased from four to two in the 1990s. Thus, the performance of the sugar industry has been disappointing, resulting in increased dependence on imported sugar. The factories in operation faced financial difficulties because of high cost of production and non-remunerative prices in the face of low international prices. The sugar industry at present is neither fully privatised nor fully public sector owned, which has resulted in a lack of direction and leadership. Unless certain corrective measures are taken in the sugar cane pricing policy and in the size of holdings of the allotments, sugar cane cultivation may not be an economically viable venture. At present, the payment for private cane purchases is based only on the weight, irrespective of the quality. As recovery rates are directly related to the quality of cane, a pricing system based on quality will act as an incentive to the supply of good quality cane.

Sugar production in 2000 declined by 3 per cent to 64,000 metric tons. Pelwatte, which accounted for nearly 63 per cent of the sugar output, reported an 18 per cent drop in production compared to the previous year. The output at Sevanagala improved by 41 per cent to 24,000 metric tons, but was not sufficient to record an overall

increase. The Hingurana factory was not in operation for the third consecutive year due to management problems.

The output of sugar depends on the quantity of cane crushed and the recovery rate. The cane crushed at Pelwatta dropped by 10 per cent to 500,000 metric tons, of which 63 per cent private cane purchases were from the allottees and out growers. Output at Sevanagala improved purely on account of an increase in the quantity of cane crushed, which grew by 49 per cent over 1999. Private cane purchases at Sevanagala were less than 1 per cent of the total cane crushed.

Overall sugar production for the year dropped, in spite of a 6 per cent increase in the total quantity of cane crushed, purely due to poor recovery rates. The sugar recovery rates at Sevanagala dropped from 8.6 per cent to 8.4 per cent, while at Pelwatta it dropped from 8.8 per cent to 8.0 per cent, resulting in an overall drop from 8.7 per

cent to 8.2 per cent. Sugar recovery rates achieved in Sri Lanka are far less than in other sugar producing countries such as India, where the recovery rates are over 10 per cent. Farmers prefer to grow the variety Co 775, which is highly adoptable to Sri Lankan conditions, though it is not a very high sugar yielding variety. As cane is purchased on weight basis, cane farmers prefer the cultivation of high cane yielding varieties at the expense of growing high sugar yielding varieties.

The average yield of sugar cane at Pelwatta dropped by 7 per cent to 52 metric tons per ha. although it reported a significant increase in 1999. The average yield at Sevanagala, which reported a 3 per cent decline in 1999, improved by 5 per cent to 83 metric tons per ha. The average sugar yield levels achieved in Sri Lanka are also below the levels achieved in other countries in the region. The yield in Sri Lanka is about 4.7 metric tons per ha while that of India is 7.2 metric tons per ha.

3.5 Fish and Livestock

Fish

Fish production as estimated by the Ministry of Fisheries and Aquatic Resources and the National Aquatic Resources Research and Development Agency (NARA), is reported to have increased by 4.9 per cent over 1999, to 322,737 metric tons. The production of coastal fish and aquaculture, according to the estimates of the Ministry of Fisheries and Aquatic Resources, reported an 8 per cent increase to 219,980 metric tons. In contrast, the deep sea and off shore production estimated by NARA reported a 1 per cent decline to 102,757 metric tons.

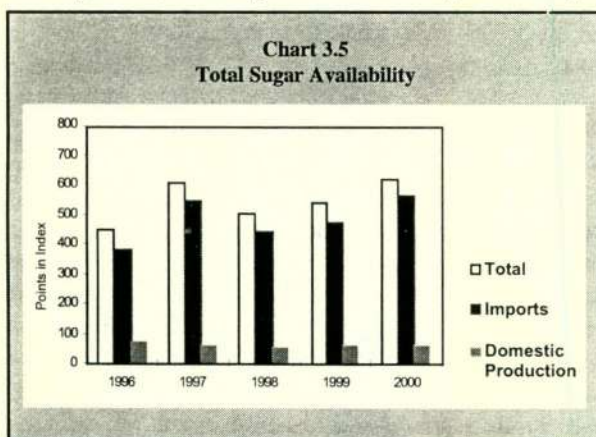


TABLE 3.7
Statistics of the Sugar Sector

| Item | Unit | Sevanagala Sugar Factory | | Pelwatta Sugar Factory | | Total (d) | |
|---|------------|--------------------------|----------|------------------------|---------|-----------|----------|
| | | 1999 (a) | 2000 (b) | 1999(a) | 2000(b) | 1999 (a) | 2000 (b) |
| 1. Total area under cane (with ratoons) (c) | hectares | 3,314 | 3,540 | 4,662 | 3,497 | 7,976 | 7,037 |
| 2. Area harvested (c) | hectares | 2,413 | 2,753 | 3,712 | 3,493 | 6,125 | 6,246 |
| 3. Cane harvested (c) | mt '000 | 190 | 286 | 209 | 183 | 399 | 469 |
| 4. Private cane purchased | mt '000 | 2 | 2 | 344 | 317 | 346 | 319 |
| 5. Quantity of cane crushed | mt '000 | 192 | 287 | 553 | 500 | 745 | 787 |
| 6. Average yield (c) | mt/hectare | 79 | 83 | 56 | 52 | 68 | 68 |
| 7. Sugar production (without sweepings) | mt '000 | 17 | 24 | 49 | 40 | 66 | 64 |
| 8. Sugar recovery rate (d) | % | 8.63 | 8.44 | 8.77 | 8.01 | 8.74 | 8.17 |

(a) Revised.

(b) Provisional

(c) Includes nucleus estates and allottees.

(d) Recovery rate = $\frac{\text{Sugar produced}}{\text{Quantity of cane crushed}} \times 100$

Sources: Pelwatta Sugar Industries Ltd.
Sevanagala Sugar Industries Ltd.

The marine sector consists of the coastal, deep sea and off shore sub sectors. This sector accounted for 89 per cent of total fish production and reported a 3.6 per cent increase to 286,000 metric tons. The improvement came entirely from a 6.6 per cent increase in the coastal sector while output from deep and off shore sectors declined.

Output of the Inland fishery and aquaculture sector, which accounted for 11 per cent of the total production, increased significantly by 16.7 per cent compared to 1999. Growth in this sector is attributed to the increase in the release of fingerlings to inland reservoirs, as well as improvements in the aquaculture sector, which recovered from the white spot and yellow head viral diseases, which hampered the prawn industry in 1999.

The Ministry identified over 180 rural tanks for aquaculture development. During the year, 60 tanks were stocked with fingerlings. Under the aquaculture development programme, nearly 5 million fingerlings were produced in 2000. Subsidies disbursed under various programmes to the inland and aquaculture sector, during the year, increased by 15 per cent to Rs.15 million.

Though the country has high potential to develop the marine fishery sector, a large area of the coastal belt is in the Northern and Eastern areas where the conditions are not conducive for fishing at present. Fishing activities are restricted in those areas due to the unsettled security situation. To exploit the marine fisheries, the government is encouraging deep sea fishing by using multiday boats. During the year, 59-multiday boats were issued under the producer subsidy scheme. The total fleet of multiday boats in operation at present is approximately 1,400. In addition to the multiday boats, 369 traditional crafts and 539 sets of fishing gear were also given to fishermen under the subsidy programmes.

During the year the total volume of fresh fish, salted fish and crustaceans exported more than doubled to approximately 18,000 metric tons. There is a heavy demand for skipjack and yellow fin tuna from Japan and this has resulted in an increase in the price of tuna locally.

TABLE 3.8
Fish Production

| Metric Tons '000 | | | |
|------------------|------|---------|---------|
| Sub-Sector | 1998 | 1999(a) | 2000(b) |
| Marine (c) | 240 | 276 | 286 |
| Aquaculture | 30 | 31 | 37 |
| Total | 270 | 307 | 323 |

Source: Ministry of Fisheries and Aquatic Resources Development
(a) Revised
(b) Provisional
(c) Coastal and deep sea sectors
National Aquatic Resources Research and Development Agency

The imports of fish, both dried and other, which includes canned fish, increased during the year. Dry fish imports increased by 13 per cent to 54,868 metric tons while other fish imports increased by 32 per cent to 25,655 metric tons.

One of the problems identified in the fisheries sector is the large-scale post harvest losses through spoilage due to poor handling. It has been estimated that about 25 per cent of the catch goes waste due to poor preservation. Hence, the Ministry of Fisheries and Aquatic Resources Development, with the help of the Swedish International Development Agency (SIDA) organised a pilot project at the Beruwala fishing harbour on modern methods of fish handling and preservation for fishermen who use multiday boats.

Breeding and export of ornamental fresh water fish is becoming popular. During the year, earnings from exports of ornamental fish increased by 6 per cent to Rs. 593 million. There is a very high demand for ornamental fish from Japan, the USA and Europe. Sri Lanka's share in the export market is very small and there is a potential for expanding this industry.

Livestock

The livestock sector, consisting mainly of dairy and poultry products, grew moderately in 2000. According to the estimates of the Census and Statistics Department, cow milk and buffalo milk production increased marginally to 263 million litres and 83 million litres, respectively. Domestic egg production increased by 3 per cent to 923 million eggs during the year. The poultry sector has been developing faster than the dairy sector. One of the main reasons for the faster development of the poultry sector may be the minimal intervention by the government in this sector. In the dairy sector, the government still has a high stake, which acts as a deterrent against large-scale private sector investment.

During the last few years there has been a gradual decline in the consumption of beef. The consumption of poultry meat has increased, replacing beef as a source of animal protein in the diet, according to the Consumer Finance Surveys conducted by the Central Bank. Poultry meat production increased by about 10 per cent to 62,700 metric tons in 2000 responding to attractive prices, profits and incentives. According to the Ministry of Estate Infrastructure and Livestock Development, production of layer and broiler chicken in 2000 has increased by 11 per cent and 19 per cent, respectively. Concessions granted for the import of equipment such as incubators, feed mills, poultry cages, brooders and feeding systems have helped the development of the poultry sector.

Milk collection by Kiriya Milk Industries of Lanka Pvt. Ltd., (KMILL), Nestle Lanka Ltd. (NLL), International

Dairy Products Limited (IDPL) and other processors amounted to 92.4 million litres, a 15 per cent decrease compared to 1999. The drop in collection is attributed to the industrial dispute that prevailed in the KMILL and the adverse security situation that prevailed in the Batticaloa and Valachchenai areas. Milk suppliers benefited from an upward revision of milk purchasing prices by KMILL since September 2000. The purchasing price of milk was increased by 6 per cent to Rs.14.77 per litre. However, according to the Ministry of Estate Infrastructure and Livestock Development, the price received by producers remained unchanged at Rs.13.56 per litre in 2000. The average cost of production of milk in 2000 increased by 1 per cent to Rs.5.84 per litre. The Indian National Dairy Development Board, which managed KMILL, had to leave the company in April 2000 and since then, the management has been undertaken by the Sri Lankan government. During 2000, milk and milk product imports increased by 6 per cent to 61, 194 metric tons valued at Rs.8,945 million.

The Council for Agricultural Research and Policy (CARP) has identified a few major constraints to dairy development in the country such as lack of pasture and fodder, marketing of milk, breeding, veterinary services and lack of properly constructed cattle sheds. To improve the veterinary facilities and extension services, 65 new Veterinary Officers (VOs) were recruited during the year. A special dairy development project was introduced in 2000, with a view to revitalising the dairy sector in up-country estates. The project period is 3 years and will initially be implemented in five estates on a pilot basis. The objective of the project is to increase milk production in estates by improving the management of existing dairy cattle and by increasing the dairy cattle population in the estates. Nearly 600 estate worker families will directly benefit from this project.

3.6 Inputs

Fertiliser

During 2000, the use of fertiliser declined by 5 per cent to 589,000 metric tons. The decline was mainly in the usage of fertiliser for paddy and coconut. Fertiliser application in paddy during Yala 2000, declined as a result of a reduction in the extent cultivated, as well as drop in the quantity applied per hectare. Fertiliser usage in paddy accounts for a major share of fertiliser used. As a result of low paddy prices that prevailed after the Maha harvest in 2000, the use of fertiliser decreased. The share of fertiliser issues to paddy, which stood at 56 per cent during 1999, decreased to 44 per cent in 2000. Fertiliser issues to the coconut sector also declined by 5 per cent in response to the decline in coconut prices. Fertiliser issues for other field crops and minor export crops sector also dropped. The attractive tea price that prevailed during the year encouraged

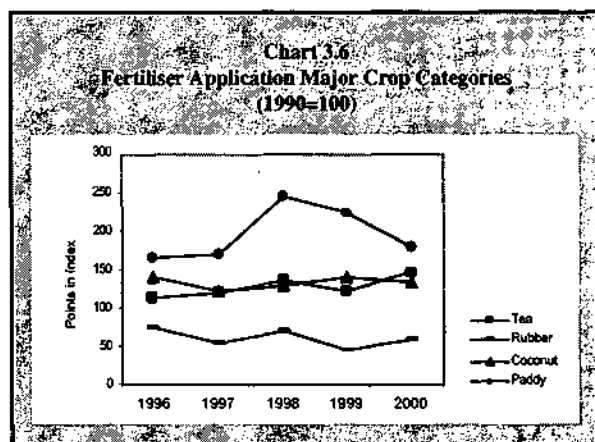


TABLE 3.9
Fertiliser Usage by Crops

| Crop | Metric Tons '000 | | |
|--------------------|------------------|---------|---------|
| | 1998 | 1999(a) | 2000(b) |
| Paddy | 252 | 321 | 258 |
| Tea | 182 | 164 | 198 |
| Rubber | 16 | 10 | 13 |
| Coconut | 38 | 39 | 37 |
| Other field crops | 44 | 43 | 41 |
| Other export crops | 11 | 10 | 8 |
| Others | 19 | 30 | 34 |
| Total | 561 | 617 | 589 |

Source: National Fertiliser Secretariat.

(a) Revised

(b) Provisional.

the application of fertiliser for tea, leading to an increase of 21 per cent.

The fertiliser subsidy, confined to urea since 1997, continued during the year. Urea is sold to the farmers at a price of Rs 350 per 50 kg bag. In response to fluctuations of fertiliser prices in the world market and the depreciation of the rupee, the fertiliser subsidy rate were revised several times during the year. The total expenditure on the fertiliser subsidy payment exceeded the initial budgetary allocation of Rs.1,500 million and amounted to Rs.1,733 million in 2000.

Seed

Encouragement provided to the private sector to participate actively in the production and sale of quality seeds were further strengthened during the year. The government handed over a part of the Pelwehera seed farm of the DOA to a private sector seed producing institution. The institution has commenced developing the centre to a seed and modern equipment sales cum demonstration centre for high technology agriculture.

In addition to the private sector and government seed farms, provincial councils, the Mahaweli Authority and co-operative societies are also engaged in the production of

seed paddy. The highest ever seed paddy production (13,000 metric tons) in the last decade was in 2000. Of the total seed paddy production, the private sector accounted for 45 per cent, while the cooperative sector and the public sector accounted for 34 per cent and 21 per cent, respectively.

Some of the large-scale private sector seed paddy producers are of the view that the seed paddy produced on government farms are priced below the cost of production. Seed paddy prices in the government sector have not been revised since 1997. The private seed producers allege that fixing the price of seed paddy at artificially low prices is acting as a deterrent to the development of the seed industry.

Agro-chemicals

According to provisional estimates of the Registrar of Pesticide the use of pesticides, which includes insecticides, fungicides and herbicides, decreased by 15 per cent during the year. A relatively higher drop of 28 per cent was reported in the use of insecticides.

The Department of Agriculture continued its Integrated Pest Management Programme (IPM) in 2000, to reduce the use of pesticides and thereby the cost of cultivation. During the cultivation year, approximately 54,000 farmers adopted the IPM package under the 'Yaya' Demonstration Programme covering an extent of 46,000 ha.

3.7 Forestry

The Forest Department (FD) carried out several projects for forestry related activities with special emphasis on conservation and environment management, with the assistance of foreign donor agencies. In line with the Forestry Sector Master Plan, the Forest Resource Management Project (FRMP) was implemented in 2000. The Project is funded by the ADB, and Rs 1.7 million was provided under the Project in 2000. Survey and demarcation of state forests, awareness programmes on forest conservation, commencement of the restructuring of the Forest Department architectural consultancy work and commencement of the revision of the Forest Ordinance were the activities carried out under this Project.

ADB provided Rs 60 million for the implementation of the Participatory Forestry Project and Rs 33.4 million for the Upper Watershed Management Project in 2000. Activities such as buffer zone enrichment, maintenance of buffer zone planting, homestead development, stream reservation planting, planting in public places and private lands, and maintenance of timber farms and nursery programme were carried out under that Project. During the year, Rs 2 million was spent under the World Bank funded Medicinal Plant Project. Under that Project, medicinal

plantations were established and maintained in Matale, Ritigala, Balangoda and Bibile. The United Nations Development Programme (UNDP) funded the Global Environmental Facility Project to procure equipment and to carry out awareness programmes in 2000.

Under forest inventory and management activities, 1,265 hectares of forest plantations were surveyed and five resin tapping leasing agreements related to 5,380 hectares of pine plantations were continued during 2000. Further, silvicultural treatment including thinning, pruning, weeding, application of fertiliser, application of fungicides and insecticides were carried out in respect of 5,900 hectares of forest plantations. Under forestry extension, 2 million seedlings were raised for tree planting programmes and 6,700 kg of seeds were collected for nursery programmes in 2000.

The FD continued to monitor the implementation of regulations relating to the transport of timber and carried out surveillance checks to restrict illegal deforestation in 2000. New regulations on timber depot registration were formulated and four Gazette notifications were issued in 2000. The volume of illicitly felled timber increased substantially to 5,662 cubic meters from 2,912 cubic meters and the recorded number of forest offences too rose to 4,626 in 2000 from 3,928 in 1999, reflecting a need for the intensification of surveillance activities on felling.

TABLE 3.10
Statistics on the Forestry Sector

| Item | Unit | 1998 | 1999(a) | 2000(b) |
|---------------------------------------|---------------|-------|---------|---------|
| 1. Total forest cover (c) | hectares 000' | 2,119 | 2,119 | 2,119 |
| Closed canopy forest (d) | hectares 000' | 1,583 | 1,583 | 1,583 |
| Sparse Forest | hectares 000' | 464 | 464 | 464 |
| Mangroves | hectares 000' | 8,687 | 8,687 | 8,687 |
| 2. Extent deforested (e) | hectares | - | - | 244 |
| 3. Extent reforested (f) | hectares | 571 | 556 | 828 |
| 4. Number of forest offences recorded | No. | 4,193 | 3,928 | 4,626 |
| Volume of timber detected | cubic meters | 2,589 | 2,912 | 5,662 |
| Value of timber detected | Rs. mn. | 29.7 | 28.7 | 56.0 |

(a) Revised Source: Forest Department

(b) Provisional

(c) Approximately 72,350 ha. of viable forest plantations are included

(d) Includes mangroves

(e) Estimates

(f) Excluding extents under Participatory Forestry Project

The State Timber Corporation, which is the major supplier of timber, recorded significant improvements in 2000. The total output of logs, sawn timber and firewood of the Corporation during 2000 amounted to 277,695 cubic meters, a 40 per cent increase compared to 1999, due to increased tree felling activities on both state and private lands.